

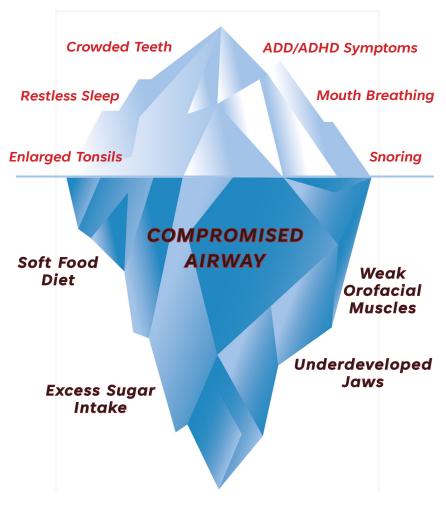


It's Not Just About Straight Teeth — It's About **Proper Growth** 

AirwayCenter.com



### **Looking Beyond the Surface**



What if the symptoms we're seeing are a result of a **deeper, underlying health issue**?

Have you considered your child's airway?

# Increasingly Common Childhood Health Issues

- · ADD/ADHD
- Bed Wetting
- Mouth Breathing
- Snoring
- Restless Sleep
- Nightmares and/or Night Terrors
- Daytime Drowsiness
- Dark Circles Under the Eyes
- Swollen Tonsils/Adenoids
- Chronic Allergies
- Crowded and/or Crooked Teeth

If left untreated, **Adults** may experience:

- Chronic Fatigue
- •TMJ/Headaches/Neck and Back Pain
- Sleep Apnea
- Memory Loss/Dementia





# Will My Child Grow Out of This?

The short answer is no. Not likely.

#### Growth Patterns with **No Intervention**







#### **Early Stages** (*left figure*)

Note the downward and backward growth pattern beginning in early stages.

#### Later Stages (middle and right figures)

Years later, the continuing downward and backwards development is obvious in the underdeveloped jaws and facial features.

This often results from poor oral posture associated with underdeveloped jaws.

# Mouth Breathing Isn't "Just a Habit."

Mouth breathing is often a red flag, or sign, from the body that the airway and jaws are being compromised in their development.

#### What the Science says...

- Up to 55% of children are mouth breathers at some stage during development (Abaeté study, 2008; Frontiers in Public Health, 2022).
- Mouth breathing is directly linked to narrowed palates and retruded jaws, often leading to crowded teeth, orthodontic problems, and facial underdevelopment (BMC Oral Health, 2021).
- Children with ongoing mouth breathing may have up to a **40-100% higher risk of behavioral issues** including hyperactivity, learning delays, and emotional challenges (Bonuck et al., Pediatrics, 2012).
- Poor jaw development contributes to reduced airway space, thus increasing risk for sleep-disordered breathing and even childhood sleep apnea (Guilleminault et al., 2013; Wang et al., 2012).



The Tanner Airway Appliance™

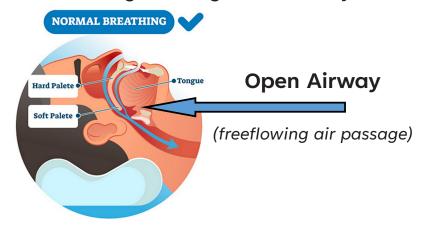
Creates space promoting both nasal breathing and proper tongue posture.





## **Normal Breathing**

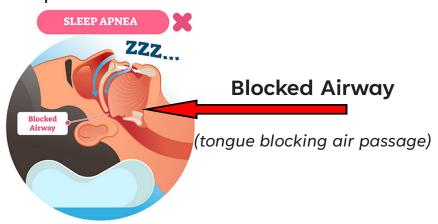
During sleep, air can travel freely to and from the lungs through the airways.



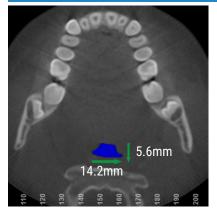
# Sleep Disordered Breathing

versus

The airway collapses, restricting air from traveling freely to the lungs and causing sleep disturbances.



#### Case 1

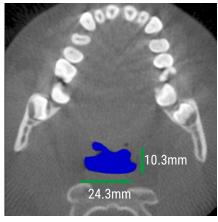


**BEFORE** 

Measurements of a restricted airway prior to treatment

Airway Measurements: 14.2mm x 5.6mm

(Airway indicated in blue)



#### **AFTER**

Measurements of the same airway after treatment

Airway Measurements: 24.3mm x 10.3mm

**Results After Forward Growth** 

Which airway would you rather breathe through?

331% increase in airway volume after Airway Center treatment

Increased air volume leads to improved oxygenation and lung function, boosting energy levels, vitality, and overall health. *Breath truly is life*.

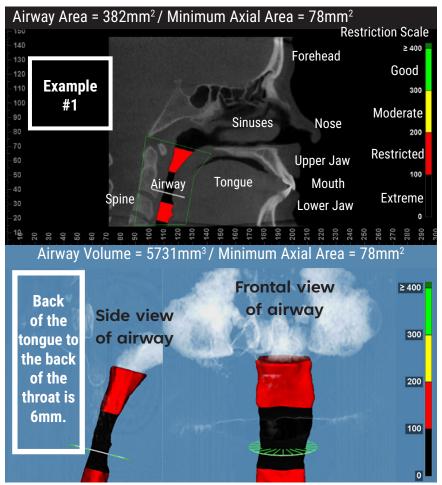




# CT Scans of Two Different Airways – A Comparison

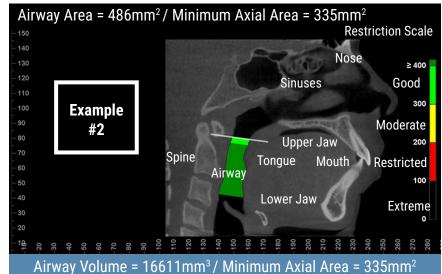
The red and black spaces below reveal a severely restricted breathing area or airway (6 mm).

A compromised airway can lead to disrupted sleep and other significant health issues.



The green space is a healthy airway, notice how much more breathing space there is (15mm).

This is an optimum airway with plenty of room for healthy nasal breathing and a decreased risk of snoring and sleep disordered breathing.



Back of the throat is 15mm.

Side view of airway

Side view of the throat is 15mm.

Airway Volume = 16611mm³ / Minimum Axial Area = 335mm²

Frontal view of airway

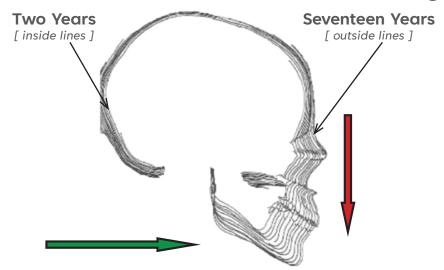
of airway

100





# Optimal Forward Growth Leads to Normal Breathing



Between the ages of 2 and 17, a child's jaw is meant to grow *naturally forward*.

Jaws growing **downward** instead of forward can lead to:

- Crowded teeth
- A smaller airway
- TMJ dysfunction
- Breathing and sleep issues

When the jaws grow *forward* it creates:

- More space for all the permanent teeth
- · A wider, healthier airway
- Better overall facial development

# Has Crowding and Crooked Teeth Always Been a Problem?

Why do so many people now have crowded teeth? Over a century ago, crowded teeth were

almost unheard of. Our forebears' diets of fibrous, whole foods encouraged the development of forward, broad jaws that easily accommodated straight, properly-aligned teeth.

#### What changed?

Modern diets consisting of processed, sugary and soft foods have significantly impacted jaw development. Today, people consume the equivalent of a year's worth of sugar in just two weeks.



#### What is our solution?

While traditional orthodontics main goal is creating

an esthetically pleasing smile, our focus is on creating space in the mouth for the teeth, a healthy airway, nasal breathing, a functional bite and a naturally beautiful smile!



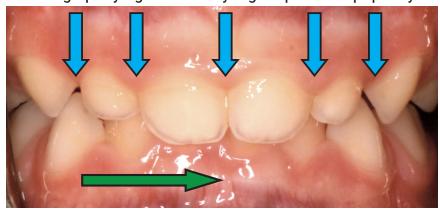


#### Case 2 - Before

Age: 2 years, 4 months



- Downward growth pattern
- · Lower jaw trapped behind upper
- Lack of space for adult teeth (blue arrows)
- Severe overbite the top teeth cover the bottom teeth (green arrow)
- · Waking up crying twice every night poor sleep quality

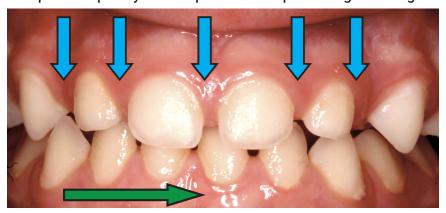


#### Case 2 - After

Age: 4 years, 8 months



- Improved head posture
- Plenty of space for adult teeth (blue arrows)
- Overbite is improved (green arrow)
- The upper and lower jaws are now growing forward, not downward
- Improved quality of sleep now sleeps through the night







#### Case 3 - Before

Age: 2 years, 4 months



- Downward growth pattern
- Crowded baby teeth
- Mouth breather
- Waking up, snoring, poor sleep quality

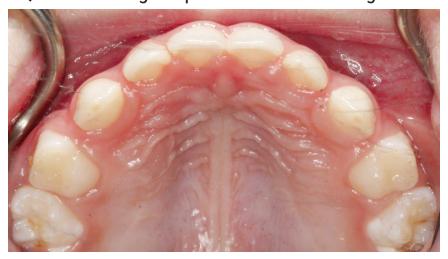


#### Case 3 - After

Age: 4 years



- · Plenty of space for adult teeth
- Overbite is improved
- · Improved quality of sleep
- Sleeps through the night
- Quiet breathing improved nasal breathing







#### Case 4 - Before

Age: 8 years



- Downward growth pattern
  - Crowding
- Narrow palate
  - Mouth breathing



Copyright 2022 Airway Center, LLC., Nathan M. Tanner D.M.D., LLC. All Rights Reserved.
Patent Pending #63300090

#### Case 4 - After

Age: 8 years, 10 months



- Plenty of space for adult teeth
- Beautiful wide arch
  - Improved facial balance







#### Case 5 - Before

Age: 6 years



- All baby teeth
  - No space between baby teeth
- Permanent teeth will be crowded when they come in
- Restless sleep



# Copyright 2022 Airway Center, LLC., Nathan M. Tanner D.M.D., LLC. All Rights Reserved. Patent Pending #63300090

#### Case 5 - After

Age: 7 years



- Used Tanner Airway
   Appliance to create
   forward growth and
   the space needed for
   permanent teeth
- Created more space for the tongue
- Significantly improved the airway

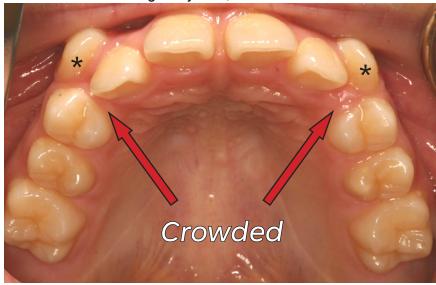






#### Case 6 - Before

Age: 9 years, 2 months

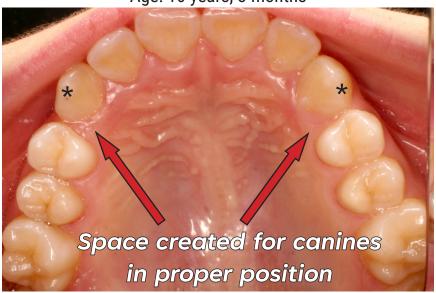


#### History:

The patient's previous orthodontic plan of treatment advised the extraction of four permanent premolars to create space for alignment.

#### Case 6 - After

Age: 10 years, 3 months



#### **Treatment:**

Treatment began with the Tanner Airway Appliance to facilitate forward growth and final alignment was achieved with braces.

No extractions were necessary.





#### Case 7 - Before & After

Age: 3 years, 9 months



- · Lack of space for adult teeth
- Behavioral issues
- Teeth are tilted inward due to restricted jaw growth

Age: 5 years, 4 months



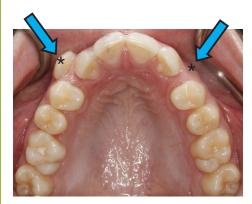
- Plenty of space for adult teeth (blue arrows)
- Bite is improved
- Upper and lower jaws are now growing forward, not vertically
- · Improved concentration and focus

#### Case 8 - Before & After



Age: 13
Before Treatment
• No space for canines
to erupt
(should be a tooth at
each red arrow)

Narrow palate



After 4 months
• Growth guidance is facilitating space for canine eruption. (blue arrows)

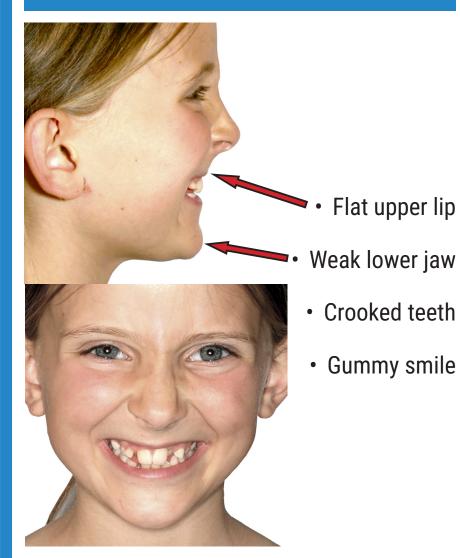


- After 12 months
   No extractions were required.
- All canines are erupted, with adequate space for alignment; (blue arrows)





#### Case 9 - Before



Without intervention, this vertical growth pattern impairs jaw development and can increase the risk of airway issues.

#### Case 9 - After



With the Tanner Airway Appliance, we performed successful upward and forward jaw growth guidance.





#### Case 10 - Before



- Mouth Breathing
- Lack of tongue space
- Downward growth pattern
  showing as a gummy smile.

If left untreated the patient's slowing growth trajectory will likely worsen their existing airway and sleep-related conditions.



#### Case 10 - After



- Broad and beautiful smile
  - Plenty of room for all teeth
  - Improved sleep
- Ceased mouth breathing and developed a better and natural airway
- Jaw forward and gummy smile reversed.

Final Result is Both Functional and Aesthetic







#### Case 11 - Before



- Underdeveloped upper jaw
  - Unhealthy bite Underbite
    - Flat profile



Case 11 - After



- Beautiful and broad smile
  - Proper bite
- Better facial balance

Final Result is Both Functional and Aesthetic







#### Case 12 - Before



• Downward growth pattern – showing as a gummy smile.

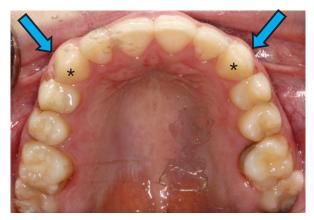


 Severe crowding – canine teeth are erupting on the outside

#### Case 12 - After



• Forward/upward development – no gummy smile

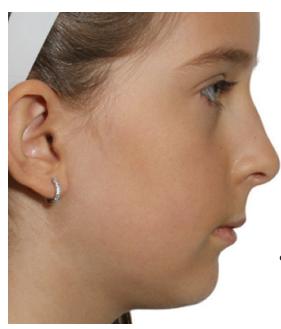


 Beautiful smile and plenty of room for all teeth!

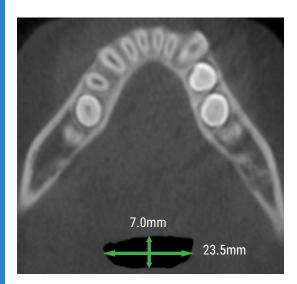




#### Case 12 - Before



- Downward facial growth with a retruding lower jaw
  - Mouth breathing
- Lack of tooth/ tongue space

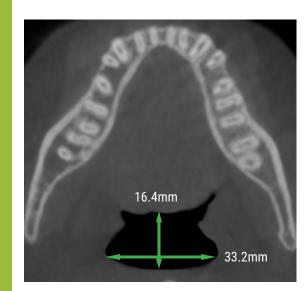


Initial imaging shows a narrowing of the airway, resulting in a reduced volume of air being received by the body. (green arrows)

#### Case 12 - After



- Beautiful and broad smile
- Plenty of room for all teeth
- Improved nasal breathing
- Improved facial balance



Imaging confirms optimal functional outcome following airway treatment, with a >100% increase in natural airway capacity. (green arrows)





#### Case 13 - Before



This patients downward pattern of growth and crossbite would likely lead to TMJ symptoms and further crowding

- Downward growth pattern
- Mouth breathing
- Crossbite
- Headaches



Copyright 2022 Airway Center, LLC., Nathan M. Tanner D.M.D., LLC. All Rights Reserved. Patent Pending #63300090

#### Case 13 - After



Final result after 5 months of jaw development through Airway Center treatment

- Healthy smile and proper bite
- · Room for adult teeth
- Cessation of mouth breathing and expansion of airway
- Improved facial balance



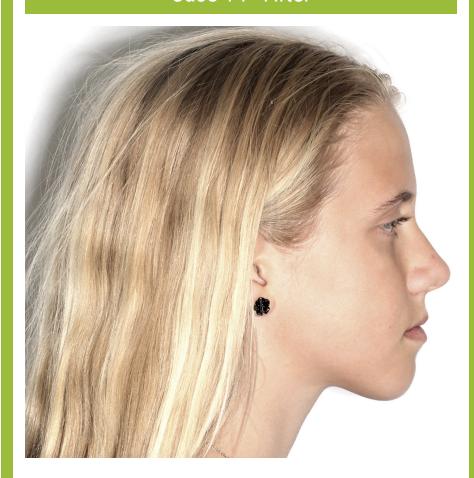


#### Case 14 - Before



- Had a hard time waking up in the morning
- Teeth grinding, snoring and mouth breathing
- Forward head posture

#### Case 14 - After



- Sleeping soundly through the night
- Stopped grinding, snoring and mouth breathing
- Radically improved head posture





#### Case 15 - Before



Despite three years of previous orthodontic treatment, the patient continued to experience:

- Crowded teeth
- Poor sleep quality
- Mouth breathing
- Compromised focus and energy due to underlying jaw and posture issues

#### Case 15 - After



Airway Center treatment produced comprehensive health benefits for the patient, resolving core functional issues. Outcomes included:

- Expanded dental arch development
- Significantly enhanced sleep quality
- Establishment of proper nasal breathing through a functional airway
- Correction of jaw and head posture





#### Case 16 - Before



Traditional orthodontic plan was to remove four permanent premolar teeth:

- · Canines were crowded out
- Excess downward growth
- Lower jaw trapped back

#### Case 16 - After



After 8 months of Airway Center treatment:

- Plenty of room for teeth
- Improved airway
- Upper jaw developed upward and forward
- No braces nor extractions were needed





## From Struggles to Smiles

What Parents Are Saying

**Before** treatment, this young patient struggled with low energy, poor sleep, and severe asthma attacks that often landed him in the ER — with oxygen levels dropping as low as 84%.

After just 6 months of Tanner Appliance Therapy, his mother noticed dramatic changes: Better sleep, more daytime energy. No more dangerous oxygen drops.

"His asthma has gotten a lot better. Even when he gets sick now, his oxygen doesn't drop like before."

— Grateful Mom

At just 7 years old, this young patient was recommended Ritalin for focus and behavior concerns. Shortly after beginning appliance treatment everything began to change. **His parents, beaming, reported:** 

"His teachers and coaches can't believe the difference — he's like a new kid. He's sleeping so much better. He used to get sent to detention all the time, and now he gets a gold star almost every day."

— Encouraged Parent

# **Airway Center Offices**

Treating the Root Cause — Not Just Symptoms

At the **Airway Center**, we are committed to helping individuals and families **tackle** challenges such as **TMJ disorders**, **headaches**, **behavioral issues**, **and sleep problems** as well as meet aesthetic goals.

"If we can make room for the tongue in the mouth, we may be able to eliminate the development of obstructive sleep apnea."

> Dr. Christian Guilleminault, renowned cofounder of modern sleep medicine

This is **precisely** what the **Tanner Airway Appliance™** does; it makes room for the tongue in the mouth.





The Tanner Airway Appliance™ is a custom-fabricated orthodontic device that promotes optimal jaw development and function by guiding forward jaw growth and improving the alignment of the maxilla (upper jaw) and mandible (lower jaw).



# Breathe Easy. Sleep Peacefully. Smile with Confidence.

Experience the difference our innovative approach can make in restoring dental health and well-being.



Airway Center pioneering healthcare professionals are expanding to locations all over the United States and Canada. Providers interested in learning more go to the following hyperlink or scan the OR code:

https://www.airwaycenter.com/acteam



Interested in discussing treatment options?

https://www.airwaycenter.com/Consultation

