# Understanding Imbalance of the Jaw:

What it can cause and how to correct it

# KEY FACTORS FOR HEALTHY JAW GROWTH AND STRAIGHT TEETH

- Genetics
- Nasal breathing
- Tongue and lip position
- Body postural alignment

- Chewing hard foods
- Stress resilience
- Receiving regular craniosacral therapy

# KEY FACTORS FOR UNHEALTHY JAW GROWTH AND CROOKED TEETH

- Food allergies and sensitivities causing mucous blocking the nasal passages
- Eating softer and pre-cut foods due to the introduction to tools and industrialisation
- Poor body postural alignment due to computer/tv use, slouching, overly supportive shoes, etc.
- Decrease in resilience due to increases in stress, environmental toxins and poor nutrition
- Non-optimal sleep environment often too warm and dusty room and soft bed

## NASAL VS MOUTH BREATHING

The sense of smell is tied directly to the limbic system of the brain and is an integral part of our survival mechanism. Smell and breath are intimately woven together; what we breathe through the nose informs us of our surroundings. Air taken in through the nose is warmed, moistened, and filtered, and small amounts of bactericidal nitric oxide, which may play a structural role in maintaining lung health, are added to the air before it goes to the lungs. **The breath should always be inhaled through the nose with the mouth closed if possible.** 

Mouth breathing can change the shape of a child's face and alter its appearance, resulting in long, narrow faces and mouths, less defined cheekbones, relatively small lower jaws, and "weak" chins. Mouth breathing can also lead to:

- Periodontal disease
- Poor sleep
- Daytime tiredness
- Halitosis
- Dry lips and mouth

- Snoring and open mouth while sleeping
- Chronic sinus and ear infections and colds
- Swollen and red gums that bleed easily
- Smiles that reveal a lot of gums and crooked teeth

### **BODY POSTURAL ALIGNMENT**

The alignment of the spine, pelvis and feet, strongly influence the proper growth and development of the cranium and should always be taken into consideration and corrected. Structure influences function.

# CHEWING

Chewing hard foods from a very early age exerts great pressure throughout the cranium via the masseter muscle. The masseter muscle is the strongest muscle in the body relative to its weight. This stress on the cranium and jaw stimulates the stem cells which are found within the cranial sutures, triggering growth. This helps to form a larger mandible, allowing for more space for the teeth to grow and a straighter occlusion.

- Bruxism (teeth grinding)
- Mouth breathing
- Poor oral position/posture
- Structural changes of the face and jaw
- Constricted airway
- Temporomandibular joint dysfunction
- Headaches
- Neck, shoulder and back pain
- Facial pain
- Periodontal atrophy
- Tinnitus
- Obstructive Sleep Apnea (OSA)

### SIGNS OF AN UNSATISFACTORILY DEVELOPED MAXILLA

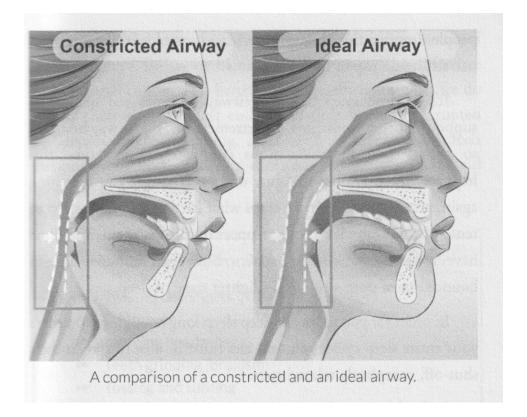
- High, thin, V-shaped palate Dental arch narrowing in children can increase risk of snoring and sleep apnoea symptoms
- Thin, long face (from the front)
- Lack of cheek bones
- Sunken midface or nose (from side-on profile view)
- Droopy or uneven eyes
- Crooked upper teeth (from age 7 plus)
- A lack of forward growth in the upper jaw

### SIGNS OF AN UNSATISFACTORILY DEVELOPED MANDIBLE

- Retruded chin
- Rounded jawline
- A lack of forward growth in the lower jaw
- A side profile with jawline that swings down and backwards into the airway

### **Other Signs:**

- Tongue thrust when speaking
- Lisp or speech impediment
- Tongue-tie This can prevent your child from achieving a high tongue posture.
- Lips not together 100% of the time when not talking or eating
- Flaccid lower lip rolled outward
- Accentuated short upper lip (Cupid's Bow)
- Dark spots underneath the eyes
- Lips not together, noisy breathing whilst sleeping
- Gasping for air A sign of sleep apnea. Children with obstructive sleep apnoea (OSA) are more likely than other children to have poor learning skills, behavioural problems, ADHD, brain injury, and depression. One of the main symptoms indicating that a child is headed for such problems is mouth breathing.
- Dysphagia or incorrect swallowing The most common form of incorrect swallowing is a tongue-thrust swallow. This is where the tongue comes forward between the teeth during swallowing instead of against the palate.



# CORRECTIVE PRACTICES FOR ACHIEVING IMPROVED MAXILLARY/MANDIBULAR POSITIONING WITHOUT SURGICAL INTERVENTION

- 1. Remove any foods from the diet that produce excess mucous which can interfere with nasal breathing.
- 2. Receive regular craniosacral therapy including work in and around the jaw
- 3. Chew all food well to liquify
- 4. Chew with the lips together
- 5. Chew hard foods regularly
- 6. Use a <u>Myomunchee</u> or a mouth/night guard to chew on. Each week build the time used.
- 7. For babies, breast feed and wean onto hard foods.
- 8. Breath through the nose with mouth closed at rest and with exercise. Start for 5-10 minutes at a time and add time every few days. You can use a piece of tape across your lips to help remind you as an option.
- 9. Rest your tongue on your palate with the tip of your tongue on the 'spot'. The 'spot' is just behind your upper front teeth. This is where your tongue should always rest when not speaking or eating/drinking. Teeth are gently touching in the resting position.
- 10. Sit and stand up straight. Be aware of neck posture while sitting, standing and lying down.
- 11. Use the Myofunctional Therapy Exercises to strengthen the muscles of the jaw (you can find these on YouTube.