

THE CAUSES OF CROOKED TEETH

“...I don't want to have teeth out!”



Habits like mouth breathing, tongue thrusting and incorrect swallowing cause crooked teeth and unattractive facial development, among other common problems.

The tongue and lips control dental position, and should be considered in conjunction with any orthodontic treatment.

ARCH SIZE IN RELATION TO TEETH



NORMAL UPPER ARCH



CROWDED UPPER ARCH

NOTE TOOTH SIZE HAS NOT CHANGED

A normal upper arch should appear like the image on the left. It forms this way because the tongue rests in the area between the upper teeth. The tongue counteracts pressure from the cheeks, which would otherwise push in the upper arch of the jaw. In cases

where a child sucks their thumb or breathes through their mouth, the tongue drops from the top of the mouth. This tongue movement will push in the upper arch, causing crowded and crooked teeth. For more information, visit www.myoresearch.com

EXAMPLE CASE: ELLA (7 YEARS OLD)

BEFORE



- Crowding caused by underdevelopment of lower jaw.
- Incorrect swallowing habits are the cause.
- Mouth breathing further reduces arch development.

AFTER



- Teeth straightened by developing lower jaw.
- Facial improvement by changing mode of breathing.
- Passive arch expansion – change in tongue position.

It is a myth that crooked teeth are caused by the teeth being too large for a child's jaw. Mouth breathing, incorrect swallowing and tongue position all affect the growth of the jaw and face. If these habits are not corrected at an early age (5 to 10 years old), the jaw becomes narrower, the teeth become crowded and the face does not develop correctly.^{1,2}

Neither the use of braces nor the extraction of teeth during teenage years is the right solution because the crowding can return once the braces and retainers are removed.³ In fact, the face often looks worse after orthodontic treatment.⁴

TRADITIONAL ORTHODONTICS

From around age five, a child's new teeth are commonly crooked because the jaw has not developed correctly. The face often looks narrow with the lower jaw back. Although parents are aware that something is wrong, they are given the advice to do nothing until their child reaches an age ranging from 12 to 15. Orthodontic treatment involving braces and extractions is the only treatment offered. This is the "system" they are told.

You do not have to wait. It is better to correct bad habits early and make a permanent improvement to the development of a child's

jaw and teeth. For braces to work on a long term basis, it is essential that the underlying causes of crooked teeth are addressed. Research shows that in some cases, a child's teeth relapse once the braces and retainers are removed because their bad habits have not been corrected.^{5,6}

The Pre-Orthodontic TRAINER or **Trainer for Kids (T4K™)** was developed by **Dr Chris Farrell BDS** to provide early, preventive treatment for these problems while a child is still rapidly growing between ages 6 to 10.

EXAMPLE CASE: TYLER (7 YEARS OLD)

BEFORE



- Upper front teeth appear to "stick out".
- Child is a mouth breather, resulting in impaired jaw growth.
- The lower jaw has grown down and back because of mouth breathing and tongue position.

AFTER

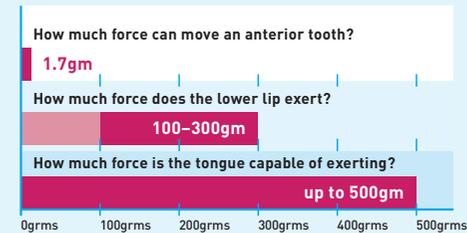


- After 18 months of T4K™ use he now correctly breathes through the nose.
- Jaw growth is forward making a better looking face.
- The teeth are now correct in Class I as the permanent teeth move into place.

The T4K™ was designed to provide early and immediate treatment to growing children (from age 6) who are developing orthodontic problems. Discrepancies regarding crowding and the jaw are rarely inherited – in most cases they are acquired. The major causes stem from habits such as mouth breathing, reverse swallowing and thumb sucking.

The T4K™ is a brace that helps to correct these habits while it aligns the developing teeth. It will lessen the complexity of future orthodontic treatment and reduce the need for extractions. If the T4K™ is used correctly, before all the permanent teeth appear, braces are often not needed.

FACIAL FORCE CHART



The accompanying chart has been published in many dental and orthodontic journals around the world. The chart clearly illustrates how even the most minimal amount of force can move teeth. It also highlights the forceful capabilities of the lips and tongue when subject to incorrect habits.

THE T4K™

APPROVED BY DENTISTS WORLDWIDE

Removable orthodontic appliances have been used throughout Europe for over one hundred years. Older models were individually made from hard acrylic and wires, and they produced unpredictable results. Since these appliances were more expensive than braces, they were also inaccessible to many.

T4K™ is a modern, universally sized, computer-designed appliance made from soft medical grade silicone. The T4K™ eliminates the problems associated with older appliances, and works much more effectively. It is the preferred early treatment appliance for many Dentists and Orthodontists throughout Europe, the USA, Japan and Australia.

The T4K™ works by retraining of the oral musculature, correcting the bad habits that can cause crooked teeth and poor jaw development. It also features an inbuilt tooth aligning system that ensures the proper alignment of the front teeth as they grow. Published research provides medical proof of the T4K™'s effectiveness, but the simple results are straighter teeth and a better looking face.^{7,8,9}



Parents should be informed about what CAN be done NOW for their child so that their informed decision includes effective modern alternatives.

Close professional and parental supervision is essential for success when using the T4K™. The child is required to wear the appliance for a minimum of one hour daily plus overnight to achieve dental and facial corrections.

T4K™ APPLIANCE FEATURES



- 1 **TOOTH CHANNELS**
ALIGNS ANTERIOR TEETH
- 2 **TONGUE TAG**
ACTIVELY RETRAINS THE TONGUE
- 3 **TOOTH GUARD**
STOPS TONGUE THRUSTING
- 4 **LIP BUMPERS**
DISCOURAGE OVER-ACTIVE MENTALIS
- 5 **EDGE TO EDGE CLASS I**
SIMILAR TO FUNCTIONAL APPLIANCES
- 6 **AEROFOIL BASE**
DECOMPRESSES TM JOINT

Covered by patents: 5,624,257; 5,259,762; other patents worldwide. The T4K™ is made from either medical grade silicone or polyurethane. Contains no PVC or Latex.

SYMPTOMS

HOW TO TELL IF YOUR CHILD NEEDS HELP

The first signs that are easy to detect at age five include a narrow jaw, no spaces in the first teeth and an overbite where the lower jaw is back from the upper. Another sign is when there is a lot of lip activity during swallowing. If the child is a chronic mouth breather, the mouth will remain open for most of the time, with the tongue lowered in the mouth and the face growing long and narrow.

When the second teeth begin to come in, they are crooked while trying to find space in the narrow jaw line. The upper jaw tends to be V-shaped, and the lower arch forms flattened at the front where the teeth crowd and overlap. The solution is not to extract the teeth, but to treat the bad habits so that the development can proceed normally.

An early switch to regular treatment with the T4K™ will help to achieve more successful and permanent outcomes.

If your child demonstrates any of the following symptoms, ask your Dentist or Orthodontist about the TRAINER System™:

- mouth breathing
- thumb sucking
- tongue thrusting
- overactive lips
- reverse swallow
- large overbite
- teeth crowding
- crooked teeth
- protruding teeth

ONLY AVAILABLE FROM YOUR LICENSED DENTAL PROFESSIONAL

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THE TRAINER SYSTEM™ BY MYOFUNCTIONAL RESEARCH CO.

“Do I need braces?”



CROOKED TEETH?



Thousands of children walk out of Dental practices every day without the treatment they need. They have crooked teeth and poor facial development that can be treated NOW!