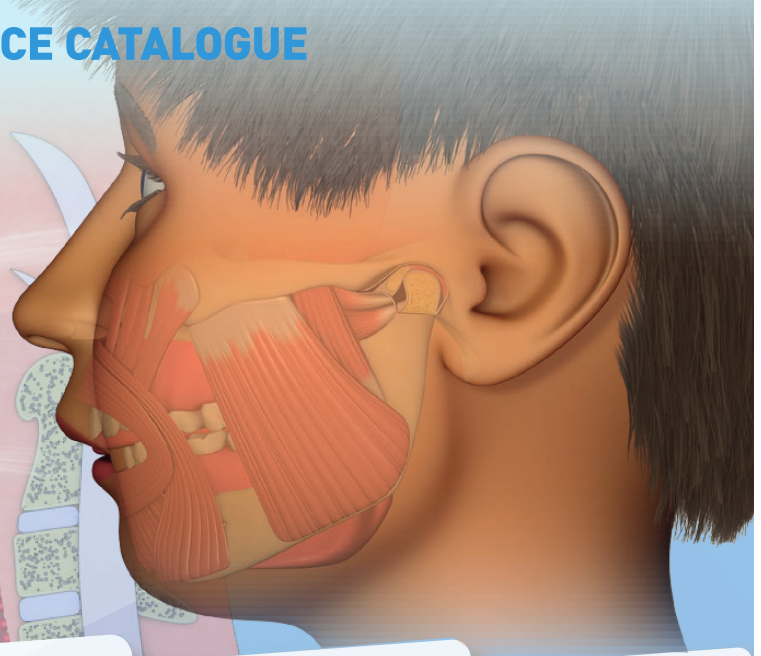


myobrace®

MYOFUNCTIONAL ORTHODONTICS APPLIANCE CATALOGUE

Airway Dysfunction
Craniofacial Development
Dental Alignment



Look for the 'M' shaped box

The Myobrace® System, by Myofunctional Research Co. (MRC), is a highly developed Myofunctional Orthodontic System which combines habit correction, arch expansion and dental alignment into one integrated system. It satisfies the demand from parents for a less invasive way to straighten teeth without braces, while also allowing children to develop to their genetic potential.

www.myoresearch.com

It is not always possible to achieve all treatment goals. Treatment success is heavily dependent on the patient's compliance to Myobrace® treatment, their biological ability to change habits as well as growth patterns. Starting treatment early increases the chance of an optimum result.

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myobrace®

MYOFUNCTIONAL ORTHODONTICS

Myofunctional Orthodontics

For more than 27 years, *Myofunctional Research Co.* (MRC) has recognised breathing disorders as the major cause of malocclusion, poor jaw growth and TMJ disorder. By effectively changing the way orthodontics for children is performed, the *Myobrace®* myofunctional orthodontic system, by MRC, fundamentally delivers airway and habit correction to resolve orthodontic problems.

"The paucity of our present knowledge of etiology in orthodontics compels us to attack the cause and effect relationship from the wrong end - that of effect. By working backward we shall undoubtedly arrive at the beginning, someday. How nice it would be to approach it from the other end."

Graber, T. M. (1962) *Orthodontics; Principles & Practice*, Chapter 6, *Etiology of Malocclusion - Extrinsic or General factors*.

75% of growing children have malocclusion and incorrect facial development. Soft Tissue Dysfunction is the major cause.

What causes orthodontic problems

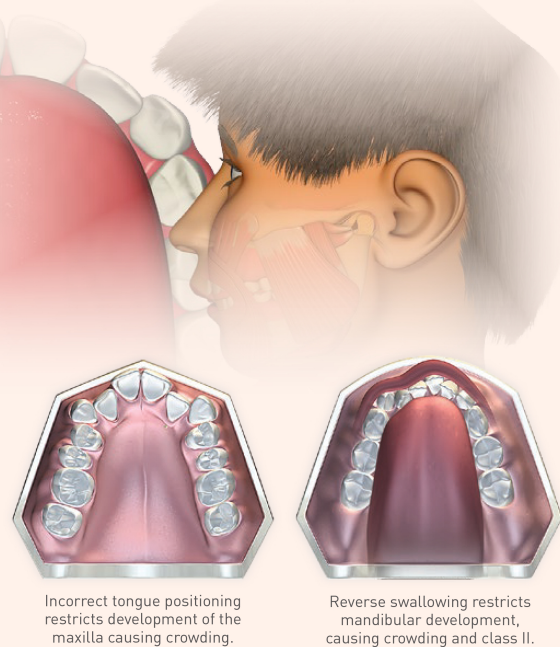
The majority of children now have crooked teeth, which is evident from three to five years of age and is often attributed to hereditary factors. However, rather than blame genetics for crooked teeth and poor jaw development, modern research has produced evidence that points to other causes.

Mouth breathing, incorrect tongue positioning, reverse swallowing and thumb sucking – known as incorrect myofunctional habits – are the real causes of malocclusion and poor cranio-facial growth.

If a child breathes through their mouth during the day or while sleeping at night, the tongue drops to the bottom of the mouth, which results in upper and lower jaw development problems.

This restricted development limits the space available for erupting teeth and prevents them from emerging into their ideal natural position.

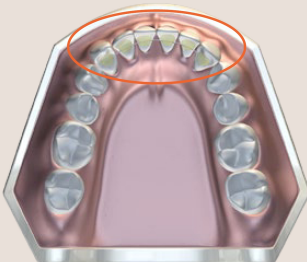
"You start treatment when you discover the poor oral habits that are going to create problems and you address the habits, not the teeth." Dr Barry Raphael – Orthodontist (Clifton, New Jersey, USA)



Limitations of orthodontic treatment with braces

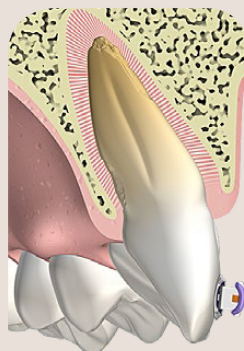
The orthodontic profession now recognises that although braces can effectively align the teeth, maintaining this alignment requires permanent retainers for life. In addition, research has found that damage to the roots (root resorption) occurs in virtually every case (*Darendeliler, May 2011*). Parents are increasingly questioning the effectiveness and safety of orthodontic treatment with braces.

RELAPSE - up to 90%. *Relapse occurs in up to 90% of cases when retainers are removed.* Little, R, et al. Vol 93, Issue 5, *American Journal of Orthodontics*, May 1988.



RETENTION - for life.

The only way to ensure continued satisfactory alignment after treatment is through the use of fixed or removable retention for life. Little, R, et al. Vol 93, Issue 5, *American Journal of Orthodontics*, May 1988.



ENAMEL DAMAGE

When the braces are removed, the surface of the enamel can be permanently damaged.

Lovrov, S, et al. Vol 68, Issue 5, *Journal of Orofacial Orthopedics*, Sep 2007.

ROOT DAMAGE - 100%.

100% of cases can expect root resorption of up to 4mm.

Darendeliler, A, et al. Vol 139, Issue 5, *American Journal of Orthodontics*, May 2011.

The Myobrace® System

Myofunctional Research Co. (MRC) fills the need for less mechanical and more biologically based, myofunctional pre-orthodontic treatment by offering a wide range of modalities that address the underlying causes of malocclusion and airway dysfunction. The Myobrace® myofunctional orthodontic system packages airway and habit correction, arch expansion, and dental alignment into a comprehensive treatment system ideally suited to treat children aged 3-15 years. By focusing on the aetiological factors that cause malocclusion, the appliances aim to correct the poor myofunctional habits affecting the teeth, jaws and facial development, offering patients a more natural orthodontic solution.

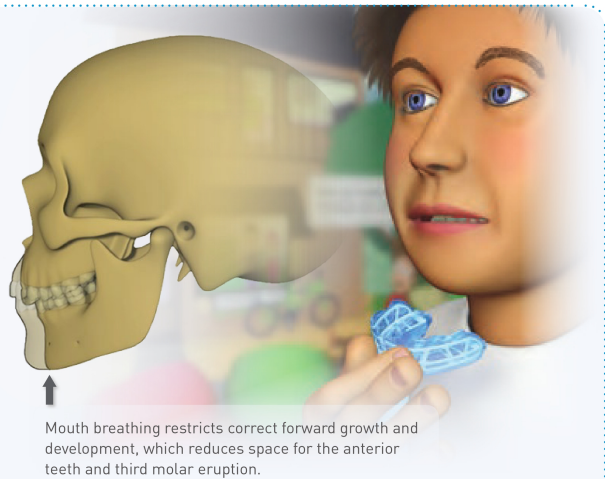
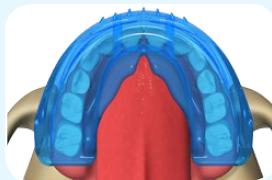
How Myobrace® Appliances Work

Since 1989 MRC has pioneered the use of single-sized, pre-fabricated appliances using myofunctional habit correction while the child is still growing to improve jaw development. This allows the teeth to align correctly without the need for braces and has added health benefits as well.

The fundamental keys to this treatment are obtaining correct nasal breathing, correcting tongue resting position, and retraining the oral muscles to function correctly. Along with habit correction, Myobrace® appliances apply light forces to the teeth to assist the teeth to align into their natural position, usually with no need for braces or extractions. The appliances are worn for just 1-2 hours each day, plus overnight while sleeping. A successful treatment outcome requires good patient compliance.

There are 3-4 stages of appliances that are designed for each dentition, which are specific to that age group. Myobrace® appliances effectively train the tongue to position correctly in the maxilla, retrain oral musculature and exert light forces to expand the jaws and align the teeth.

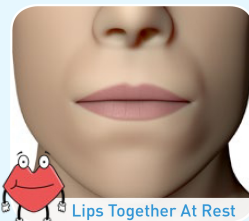
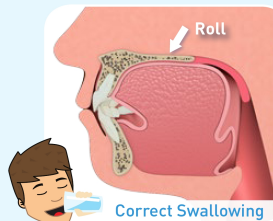
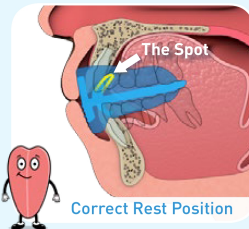
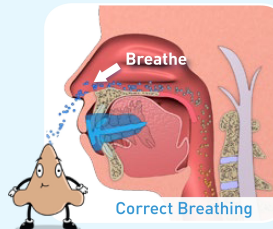
The effect of the correct tongue position and patented *DynamiCore™* develops the arch form, allowing better arch length and improving dental alignment.



Mouth breathing restricts correct forward growth and development, which reduces space for the anterior teeth and third molar eruption.

Treatment Goals:

- Correct nasal breathing.
- Correct function of oro-facial musculature.
- Correct arch form and tooth alignment.



"What Myobrace does is treat the underlying causes of malocclusion - teaching children to breathe through their nose, put the tongue on the roof of the mouth and keeping the lips together, so the jaws can grow to their genetic potential, then there is plenty of room for the teeth to come in straight with the jaw relationship in Class I." Dr Chris Farrell (Myofunctional Research Co. CEO and Founder)



Above: Case study using the Myobrace® for Teens appliance series with the BWS™ and lip trainer - see appliance selector on myoresearch.com. The Myobrace® routinely improves arch form, gains space and aligns the anterior teeth into a stable position. Class II correction with Myobrace® completed by correcting breathing and tongue position. More cases on www.myoresearch.com