myobrace®

MYOFUNCTIONAL ORTHODONTICS

Myofunctional Orthodontics

For more than 29 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

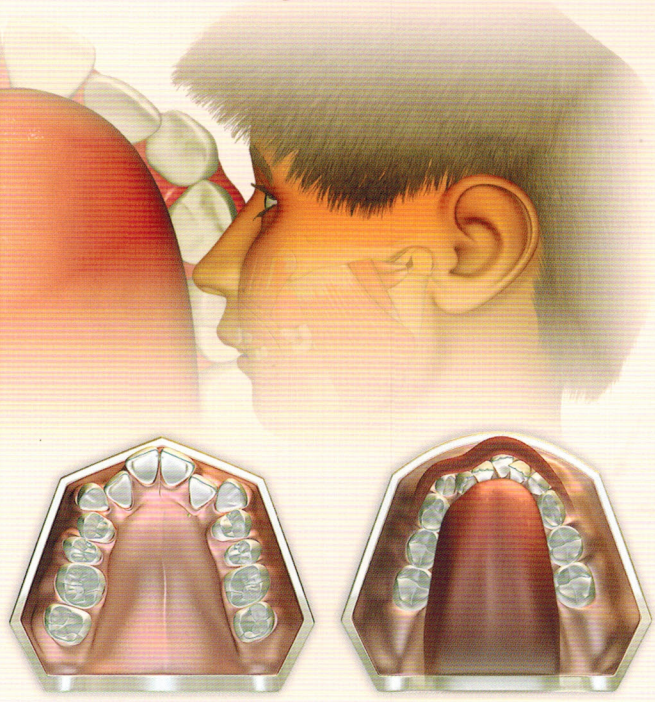
The majority of children now have crooked teeth, which is evident from three to five years of age and is often attributed to hereditary factors. However, rather than blame genetics for crooked teeth and poor jaw development, modern research has produced evidence that points to other causes.

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)*



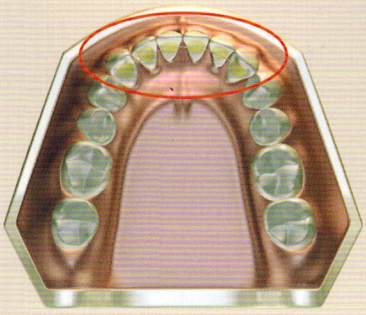
Incorrect tongue positioning restricts development of the maxilla causing crowding.

Reverse swallowing restricts mandibular development, causing crowding and class II.

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.