

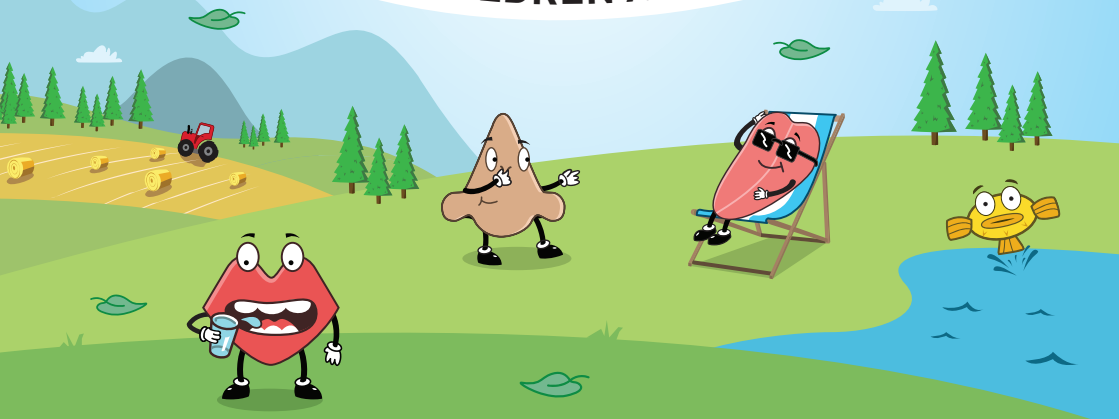
IMPORTANT INFORMATION FOR ALL PARENTS

myobrace®

STRAIGHT TEETH THE NATURAL WAY



FOR CHILDREN AGED 5 TO 15 YEARS



Mouth breathing, incorrect tongue position and poor swallowing habits stop a child's teeth, jaws and face from developing correctly. Early evaluation and treatment can prevent the need for orthodontic treatment with extractions and braces.

CROWDED TEETH ARE A SIGN OF A DEVELOPMENTAL PROBLEM



Most children now have crooked teeth, which is evident from three to five years of age and is often attributed to hereditary factors. However, modern research points to other causes which could be restricting natural development.

Teeth do not become crooked by chance and the most up to date evidence reveals the majority of orthodontic problems are the result of incorrect jaw development. This restricted development, which can be detected at any early age, limits the space available for erupting teeth.

The children pictured above are only four to five years of age and you can already see their baby teeth are crowded. Consequently, there won't be enough space for all the permanent teeth to correctly align. In addition, two of the children have a 'gummy smile' indicating the jaws are growing down and back, which will result in incorrect facial development.



Traditional orthodontics overlooks these causes and only focuses on forcing the teeth to be straighter. A lack of sufficient space has led to the common practice of healthy, permanent teeth being extracted, which can result in a sunken-in facial profile and in time the appearance of ageing more than expected.

This detrimental approach often leads to the orthodontic crowding returning, unless a wire is glued permanently onto the teeth, because the underlying causes have not been addressed.

THE EFFECTS OF MOUTH BREATHING AND REVERSE SWALLOWING ON JAW AND FACIAL GROWTH

If a child breathes through the mouth during the day or while sleeping at night, the tongue drops to the bottom of the mouth, which results in poor upper and lower jaw development problems. This means there is not enough space for the adult teeth to come in straight later in life. It affects not only how the jaw and face grow but can also affect the child's breathing.



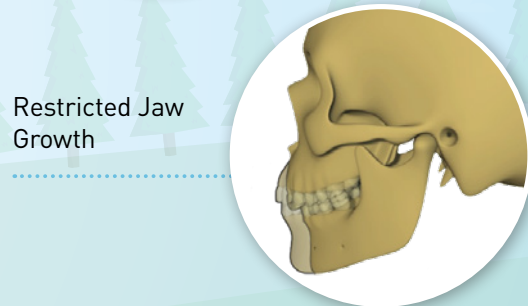
More dentists, orthodontists and medical practitioners are now recognising the need for earlier evaluation to detect the signs of poor jaw development, which is no longer just an orthodontic problem and can be treated before the child is fully grown.

Young children who breathe through the mouth will not develop their jaws and face correctly. Observe your child sleeping as this is the first sign of problems. Night-time snoring is a sign of Sleep Disordered Breathing (SDB). Mouth breathing and incorrect swallowing habits restrict natural forward growth of the jaws. This means the permanent front and back teeth (wisdom teeth) will not have enough space to move into their correct position.

The result is a narrow upper jaw, with teeth trying to grow into a small jaw where there is not enough room. This restricted jaw growth also affects the facial development.



Poor Facial Development



Restricted Jaw Growth

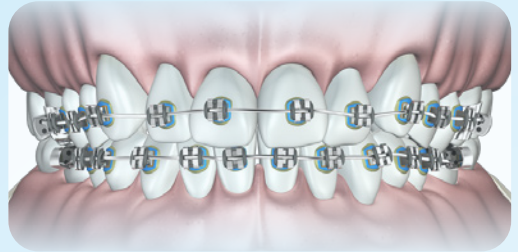


Narrow Jaw and Crooked Teeth

LIMITATIONS OF ORTHODONTIC BRACES: THEY DO NOT TREAT THE PROBLEM

Why not just put on braces when all the permanent teeth come in?

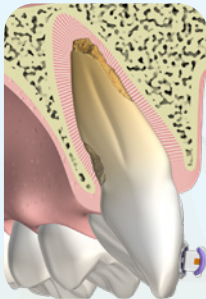
Orthodontic treatment with braces has been used for decades to straighten teeth in early teens, however there are now well-documented disadvantages.



Enamel Damage

occurs when braces are bonded onto the teeth. This means the teeth are more difficult to clean and the enamel can

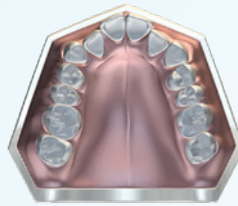
decay around the braces, which can cause white spots and stains. When the braces are removed, the surface of the enamel can be permanently damaged in the process.



Root Damage

occurs in nearly 100% of orthodontic treatments with braces, according to research from University of Sydney. This means part of the roots are dissolved, making

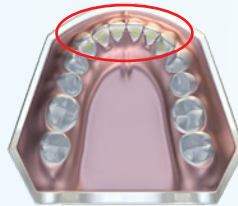
them shorter. This could result in some of the front teeth being lost later in life.



Relapse

can occur if braces are used with or without extractions. There is a 90% chance of the teeth

returning to their original positions or becoming worse than before treatment, according to extensive research from the University of Washington, USA.



Permanent Retention

is recommended after ALL orthodontic treatment but still does not guarantee the

teeth will remain in their positions. Newer treatments with clear aligners have the same problem of relapse and also require lifetime maintenance.

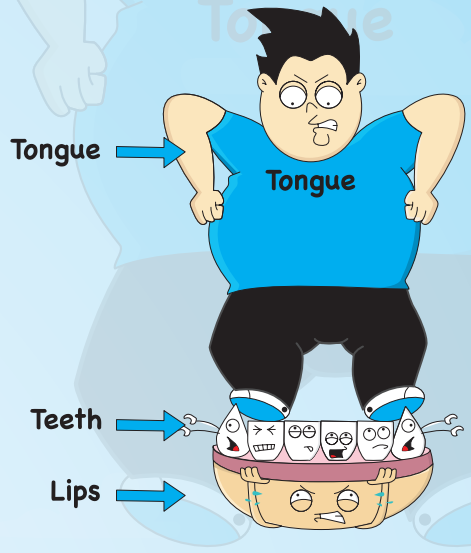
MYOBRACE®: AN ALTERNATIVE TO BRACES

Removable appliances like *Myobrace*® do not cause root resorption because treatment involves intermittent use. Although *The Myobrace*® System can still be combined with braces, they are required in fewer cases and are fitted for a much shorter time with lighter forces.

What causes orthodontic problems?

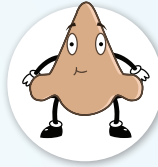
Historically, it was common belief that crowded teeth, incorrect jaw development and other orthodontic problems were due to hereditary factors. For example, large teeth in small jaws. It is now recognised that this is rarely the case and teeth are incorrectly placed because poor breathing, tongue, swallowing and/or lip habits are present. Correcting these habits can help children achieve straighter teeth the natural way.

Having control of the tongue plays a crucial role in the positioning of the teeth because it only takes 1.7 grams of force to move a tooth and the tongue can exert up to 500 grams of force alone.

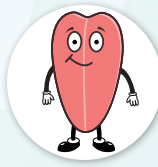


Myofunctional habits

Breathing: When a child breathes through the mouth, the jaws become narrow and develop downwards rather than forwards. This means there is not enough room for the teeth to align and the face can become narrow.



Tongue Position: The tongue resting position determines the shape and size of the upper jaw and should always rest in the roof of the mouth, unless eating or speaking. If the child habitually has a low tongue position, the upper teeth will not have enough space and the lower jaw is forced back and down.



Swallowing: An incorrect (reverse) swallowing pattern takes place when the tongue pushes forward and the lips push back. This habit restricts forward growth of the jaws, preventing the face from developing to its genetic potential.



Lip Function: Poor muscle tone or incorrect control of the lip and cheek muscles can make it difficult for the child to seal their lips and results in over-reactive facial muscles when swallowing. These incorrect lip habits cause the lower teeth to be crowded and restrict correct forward jaw growth.



MYOBRACE® CORRECTS BAD ORAL HABITS

Myofunctional Orthodontics with the *The Myobrace® System* evaluates and treats the underlying causes first, developing the jaws to their correct size and shape. Aligning the teeth is usually corrected by the final stage of *Myobrace®* treatment.

TREATMENT WITH THE MYOBRACE® SYSTEM

What is The Myobrace® System?

Myobrace® is a series of intra-oral appliances that are worn for one hour each day plus overnight while sleeping. Separate appliances are used depending on the child's age.



**For
Juniors**



**For
Kids**



**For
Teens**

Primary
dentition

3-5 years



mixed
Dentition

6-10 years



DEVELOPING
PERMANENT DENTITION

11-15 years

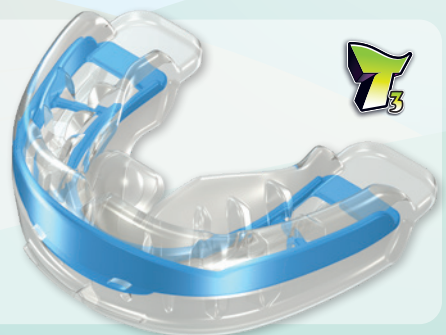


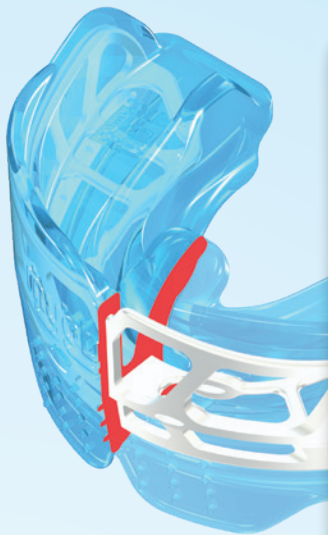
Myobrace® treatment works by focusing on correcting the poor oral habits which are the underlying causes of orthodontic problems. The treatment is designed to deal with incorrect oral habits by teaching children to breathe through their nose, rest the tongue

correctly in the roof of the mouth and continue widening the jaws so they grow to their full and proper size. This results in sufficient room for the teeth, allowing them to come in naturally straight and often without the need for braces.

T3 appliance

If the teeth need further alignment, braces can still be used for a much shorter period of time. However, *The Myobrace® System* includes the *Myobrace® for Teens - T3* appliance, which will mostly align the teeth without the need for braces if compliance is satisfactory.





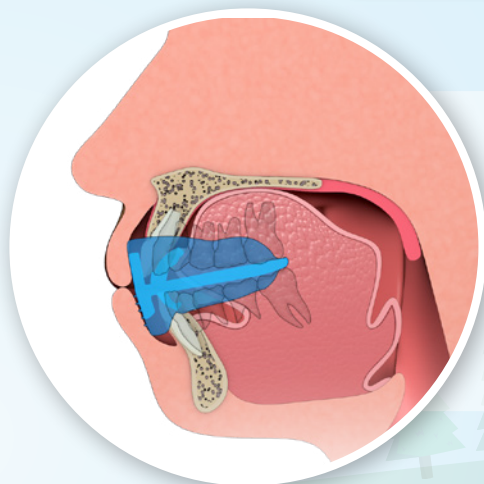
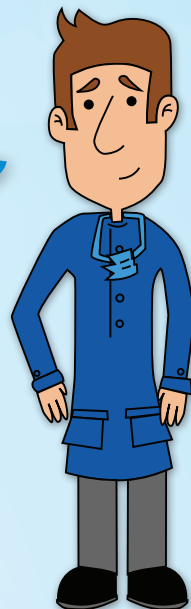
What the *Myobrace*® treatment does:

- Corrects poor oral habits
- Develops & aligns the jaws
- Straightens teeth
- Optimises facial development
- Improves overall health
- Promotes healthy eating habits

How does it do this?

By helping the child:

- Breathe through the nose
- Correct tongue resting position
- Swallow correctly
- Keep the lips together



For *The Myobrace*® System to work, it must be used EVERY DAY for 1-2 hours plus overnight while sleeping.

It also relies on the child's willingness to correct their poor myofunctional habits. This takes time and varies with each individual child.

Myobrace® Activities

In addition, there are exercises called *Myobrace*® Activities that are performed twice daily in conjunction with wearing the *Myobrace*® appliance. See the *Myobrace*® Activities app or booklet for more information.

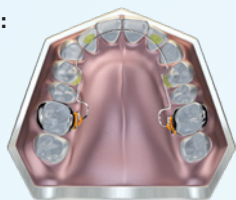


ADDITIONAL ARCH AND JAW DEVELOPMENT

When a child is over eight years of age or has severely underdeveloped jaws, additional jaw development is required to speed up the *Myobrace*® treatment process. Various arch and jaw development techniques can be used:

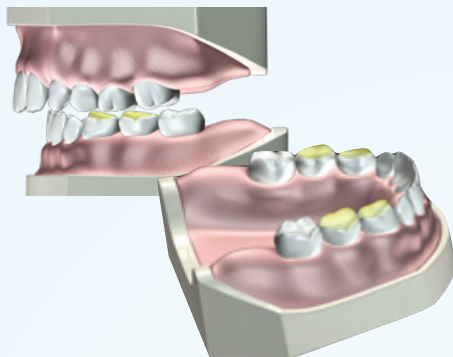
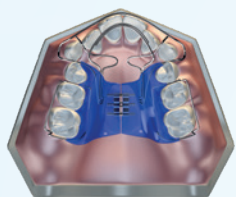
BENT WIRE SYSTEM:

The preferred option is *The Farrell Bent Wire System*™ (BWS). It is used simultaneously with the *Myobrace*®.



BIOBLOC: The

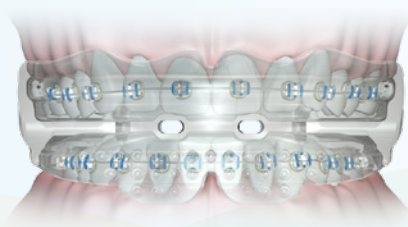
Biobloc technique can be used for both expansion and jaw alignment in more severe cases. Your treating doctor will evaluate your child and select the appropriate series of appliances that best suit their requirements.



MYOLAY™: In addition, the *Myolay*™ system is used in conjunction with *Myobrace*® appliances for younger children (less than eight years of age) to obtain better development and alignment of the jaws, reducing the need for additional appliances later.

MYOBRACE®: The goal of *The Myobrace*® System is to obtain natural development of the teeth and jaws.

This is often achieved in the final stage of *Myobrace*® treatment, which is dental alignment. Sometimes with poor compliance, more complex cases or treatment with older children, the alignment of the front teeth is not satisfactory. In these cases, braces can be used for a short time to achieve better dental alignment as braces are a very efficient way to align teeth. However, braces do not correct breathing, swallowing or tongue and lip function.



When braces are fitted, the *Myobrace*® for Braces series is used to continue correcting poor oral habits. Because of the inherent problems associated with braces, they are used for a minimal amount of time and retainers need to be used long-term if the habits are not fully corrected.

MYOBRACE® TREATMENT AND ACTIVITIES



HABIT CORRECTION



ARCH EXPANSION



TOOTH ALIGNMENT



RETENTION

Myobrace® treatment starts with habit correction and works through a series of three or more appliances to correct the causes of orthodontic problems and align the teeth as they grow into the mouth. Treatment begins as soon as the poor oral habits are recognised. This can be as early as three years of age and as late as 15 years old.

However, older children have had more time for the incorrect habits and wrong growth patterns to establish, which can require extra effort for a successful treatment outcome. With good compliance, excellent results can be achieved.

The Myobrace® System requires maximum compliance of the child. In addition to using the Myobrace® appliance daily for a minimum of one to two hours plus overnight while sleeping, your doctor will recommend a series of myofunctional exercises called Myobrace® Activities.

These are performed daily for two to four minutes in conjunction with wearing the Myobrace®. The activities are in groups and directed at each of the causes of the development problems.

The Myobrace® Activities will be introduced to the child two to four weeks after they start their treatment. The activities start with breathing exercises and finish with lip strengthening. Every exercise is linked, which means the order and emphasis may vary with the needs of the child and treatment progress. It is very important that your child understands they have the greatest influence on their treatment outcome and the goals they need to achieve during their treatment.

Extra effort can produce extraordinary results. Poor compliance can unfortunately mean no result. This will all be explained directly to the child in a series of interactive videos and a Myobrace® Activities workbook.



Nasal Breathing



Correct Tongue Rest Position



Correct Swallow



Correct Lip Function

DIET AND NUTRITION - TREATING THE CAUSES

In the 1930s, Dr. Weston A. Price, a dentist from USA, travelled around the world to discover the causes behind tooth decay, which was then affecting nearly every child in North America. He studied numerous races that had moved from their primitive diets to the 'modern diet' of the time.

The races on their traditional diets had NO tooth decay and the same races introduced to the 'modern diet' had tooth decay in abundance. He also noted that the next generation had smaller jaw development and crowded teeth.

He attributed this to both the hardness of the food and its nutritional value being up to 10 times lower, as well as believing mouth breathing was caused by allergies and bottle feeding. The research suggests that the cause of tooth decay and orthodontic problems has a strong association with the 'modern diet'.

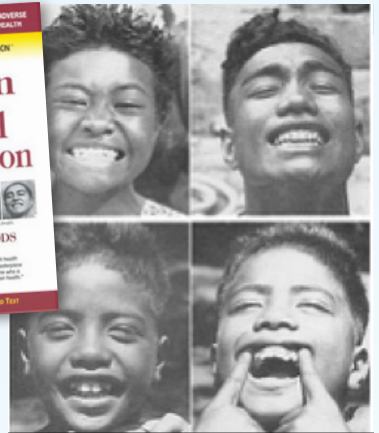
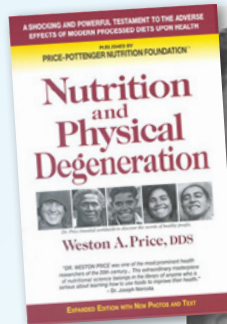
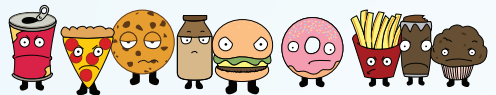


FIG. 36. Note the marked difference in facial and dental arch form of the two Samoan primitives above and the two modernised below. The face bones are underdeveloped below causing a marked constriction of the arches with crowding of the teeth.

Ref: Nutrition and Physical Degeneration by Weston A. Price



'Modern Diet'

Nutrition & Tooth Decay Program

The *Myobrace*® System also provides a series of videos that explain the importance of good nutrition in order to lead a healthy lifestyle and maximise growth potential. Tooth decay and restricted jaw development have become increasingly common problems for today's youth and are often the result of poor dietary habits. High levels of sugar in processed meals and consumption of empty foods are mostly to blame for the growing prevalence of tooth decay. *Myobrace*® treatment aims to address these concerns by emphasising the importance of implementing healthy dietary habits to prevent tooth decay and improve jaw development.



GOALS OF MYOBRACE® TREATMENT



1. Breathing through the nose



6. Correct jaw relationship



2. Correct tongue rest position



7. Straight teeth



3. No lip movement on swallowing



8. No retainers (if possible)



4. Lips together at rest



9. Minimal or no use of braces



5. Optimal facial development



10. Good diet for optimum health

It is not always possible to achieve all of these goals. It depends on the child's compliance and their biological ability to change habits and growth patterns. Generally, earlier treatment allows for more successful outcomes. Good compliance gives the best results for the growing child aged 3-15 years.

Patient compliance habits for treatment effectiveness

1. Use the **Myobrace®** appliance every day for 1-2 hours and while sleeping (regular use is essential for successful treatment)
2. **Myobrace®** appliance stays in every night
3. Complete at least one of the **Myobrace® Activities** every day
4. Mouth closed when not eating or speaking
5. Tongue resting in the upper jaw at all times
6. Regular monthly visits to a **Myobrace®** practitioner
7. A good diet for optimum health

Once this is clear, you are ready to start the journey to straight teeth naturally, better development and improved health.

EVALUATING YOUR CHILD

In 1989, Dr. Chris Farrell founded *Myofunctional Research Co.* and discovered the real causes of orthodontic problems in children.

This was based on the discoveries of many orthodontists over the past 100 years; like Dr. Edward Angle, Dr. Rolf Frankel, Dr. Thomas Graber and Dr. John Mew. He also discovered from the publications of a dentist, Dr. Weston A Price, that most of the problem was due to our modern diets, which have less nutrition, more sugar and require less energy to chew.

Dr. Farrell developed a 10-point evaluation that enabled every child to be screened, as early as possible, for signs of the main causes of poor jaw and facial development.

The evaluation looks at the way children breathe, their posture, mouth and tongue, plus the way they swallow. These are called myofunctional habits and greatly affect the way jaws develop. Correcting poor myofunctional habits allows children to grow to their genetic potential and live healthy lifestyles later in adulthood.

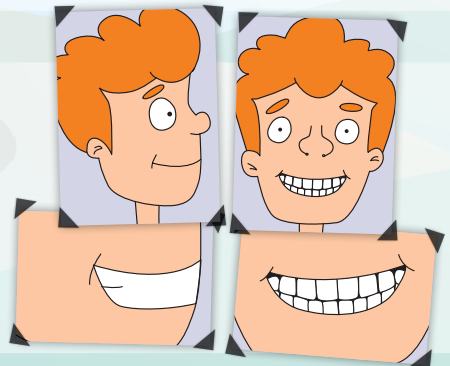
**HERE IS THE EVALUATION - MOST OF THIS YOU CAN OBSERVE FOR YOURSELF.
THE SOONER IT IS SPOTTED AND TREATED, THE BETTER.**

Teeth
Arch Form
Occlusion (Bite)
Facial Development
Habits
Breathing & Posture
Tongue Position
Swallowing
Lip Posture & Function
Jaw Problems



Record taking

In order to properly evaluate the child, a practitioner will require study models, photographs, x-rays and possibly videos of the teeth, face and posture.



HOW TO GET STARTED

Visit
Myobrace.com



2
Evaluate
your child.



3
Make an
appointment
for a consultation
with a **Myobrace®**
practitioner.



6
Have a full
treatment plan
put together by
a **Myobrace®**
practitioner.



4
Have your
child evaluated
by a **Myobrace®**
practitioner.



7
Fully evaluate
the commitment
for your child and
yourself.



5
Get records,
photos, study
models and x-rays if
recommended.



8
Remember:
Braces do not correct
the poor oral habits
that can cause crooked
teeth.



9
Start as soon as the
problem is recognised
- the earlier, the better
(3-15 years of age
is ideal).



10
Implement a
healthy, balanced
diet for optimum
health.



Tick when each
step is completed



**Early evaluation and treatment can prevent the need
for orthodontic treatment with braces and extractions.**

myobrace®

Improving dental and facial development...
...of growing children from ages 5 to 15 years.

ESTABLISH
CORRECT
POSTURE

GOOD
NUTRITION

ESTABLISH CORRECT
NASAL BREATHING

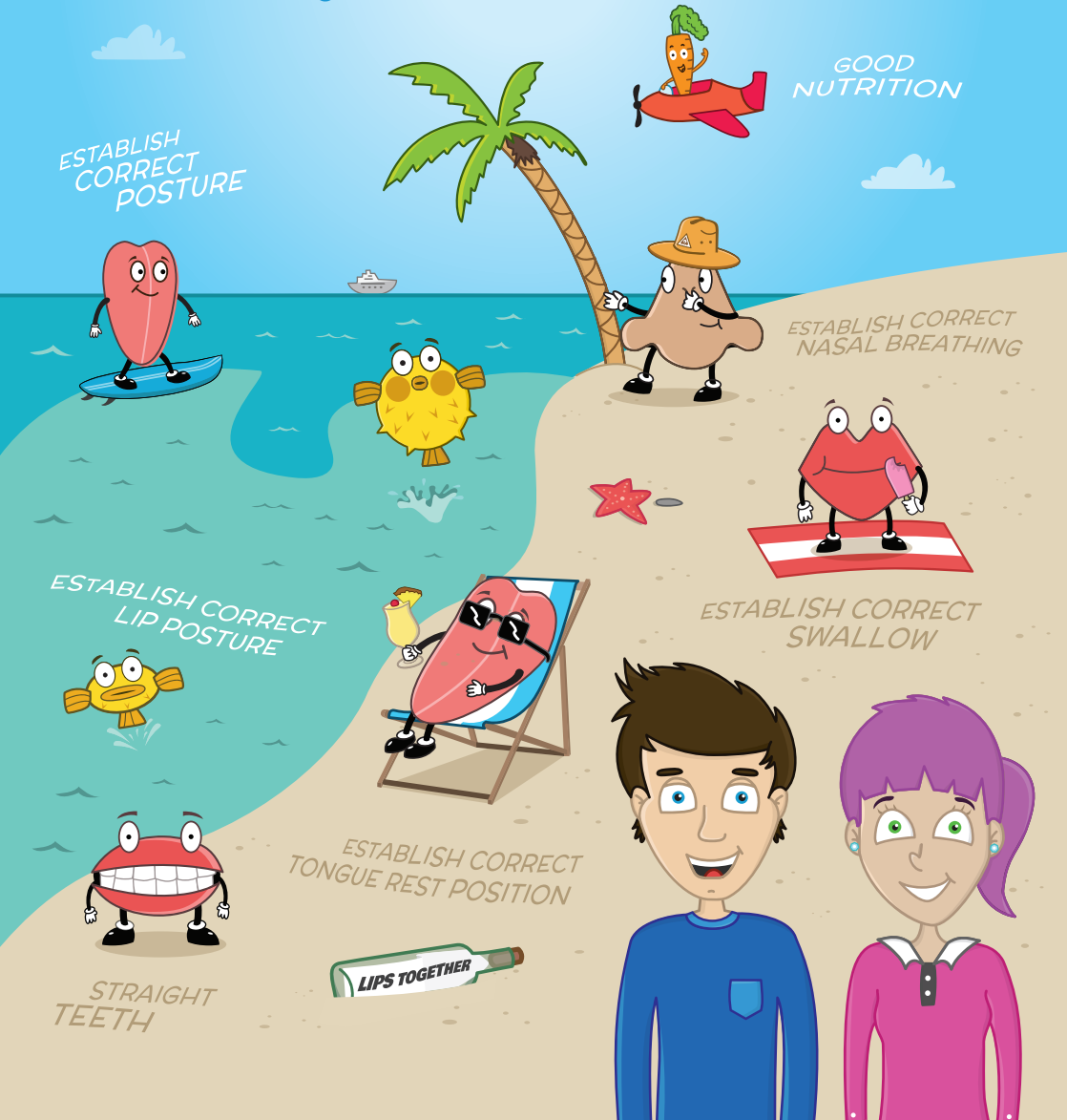
ESTABLISH CORRECT
SWALLOW

ESTABLISH CORRECT
LIP POSTURE

ESTABLISH CORRECT
TONGUE REST POSITION

STRAIGHT
TEETH

LIPS TOGETHER



COMMON QUESTIONS



How long does Myobrace® treatment take?

It is heavily dependent on the child's compliance to *Myobrace*® treatment and their biological ability to change habits, as well as growth patterns. Generally, the earlier treatment is started, the higher level of success. Suggested treatment time with good compliance is generally two to three years, providing there are no other significant health concerns limiting treatment results.

Will my child still need braces after treatment?

Myobrace® pre-orthodontic treatment assists your child's teeth and jaws to grow naturally and accommodate all their adult teeth. Treatment is aimed at achieving natural dental alignment in harmony with the body. Braces are sometimes used at the end of treatment for a short period if perfect 'picket fence' alignment is desired.

My child doesn't have many adult teeth, is he/she too young?

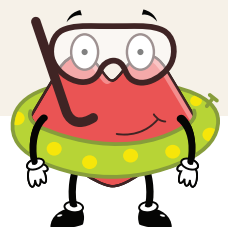
The best time to start *Myobrace*® treatment is between 5-10 years old and therefore it is normal to only have a few adult teeth. Because *Myobrace*® treatment works by promoting correct facial development and jaw growth through removing bad oral habits, the best and most stable results are often achieved early while the child is still growing.

When treatment is complete, will the teeth crowd up again?

Over the course of *Myobrace*® treatment, the practitioner will closely monitor the stability of treatment. Generally, if the myofunctional problems are corrected, the teeth will stay in their positions.

Are there any harmful side effects with Myobrace® treatment?

There have been no reported harmful effects with *Myobrace*® treatment. The appliances used are flexible and exert light intermittent forces that assist in retraining the muscles and mode of breathing.



Will treatment be painful?

No. There may be a small amount of sensitivity in the first few days of treatment, but should cease.



myobrace®

STRAIGHT TEETH THE NATURAL WAY

For more information visit
www.myobrace.com

