

The Myotalea® range by MRC presents a comprehensive collection of active myofunctional appliances to assist in improving the stretch, strength and tone of the orofacial and airway muscles. Myofunctional appliances are valuable tools that are proven to enhance myofunctional treatments by improving patient compliance and implementation. The Myotalea® appliances can either be used as an adjunct to MRC's other treatment systems or applied by myofunctional therapy providers as part of their usual treatment plans.





INTRODUCING A NEW PARADIGM IN MYOFUNCTIONAL THERAPY



"Myofunctional therapy is an important part of treating orthodontic, TMJ, sleep, breathing, speech and other disorders. Using the *Myotalea*® appliances to enhance the delivery of therapy will minimise the chances of repeating the mistakes of the past surrounding implementation." - Dr Chris Farrell (CEO & Founder of MRC)

WHAT ARE MYOFUNCTIONAL DISORDERS

Myofunctional disorders are disorders in the resting position and function of the oral and facial muscles. There are numerous causes, but the major one is a transition from nasal breathing to mouth breathing. This causes the lips to part, a low tongue position, and incorrect swallowing pattern. Myofunctional disorders may

influence breastfeeding, craniofacial development, chewing, swallowing, speech, occlusion, the temporomandibular joint (TMJ), orthodontic stability, and more. Due to the wide range of issues affected, myofunctional disorders are of interest to numerous professions.

CURRENT TREATMENT OPTIONS

The rehabilitation of these disorders (known as myofunctional therapy) may be used by orthodontists, dentists, dental hygienists, speech language pathologists, and others who work in the orofacial area. Myofunctional therapy was used in the early 1900s² by the orthodontic profession to improve their results. Since then, enthusiasm dissipated as the professions came to terms with the realities of complex, unpredictable therapies that were difficult for patients to undertake and practitioners to implement.

Thanks to an influx of modern research, 3.4.5 awareness of myofunctional disorders and their associated treatments have regained popularity. With the resurgence of such an important intervention as myofunctional therapy, it is more important than ever before to re-evaluate the way in which treatments are delivered to avoid the mistakes and frustrations of the past.



Mouth breathing causing myofunctional disorders.



Nasal breathing with correct myofunctional habits.

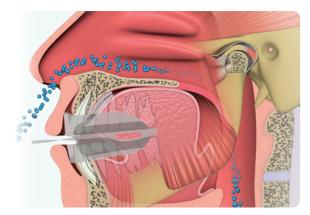


Modern research is seeing a resurgence in rehabilitating dysfunctional orofacial muscles using myofunctional therapy.

THE MYOTALEA® APPLIANCE RANGE

The Myotalea® range by Myofunctional Research Co. (MRC) is a series of active myofunctional appliances that practitioners can integrate seamlessly into their current practices. These appliances allow greater precision and ability to target the orofacial muscles while enhancing patient implementation and the resulting improvement of their myofunctional disorders.

Appliances and tools have been used for decades in myofunctional therapy and are known to achieve better outcomes, alleviating the difficulties in compliance and patient comprehension. The *Myotalea* range of appliances can be used on their own as tools in the armamentarium of myofunctional practitioners or combined with *MRC* so ther treatment systems, *Myobrace* and *Myosa*.



The *Myotalea*® *TLJ* appliance incorporates design features to strengthen and tone the lip, tongue and jaw muscles.

REFERENCES: 1. What is Myofunctional Therapy?, Academy of Orofacial Myofunctional Therapy, No date; https://aomtinfo.org/myofunctional-therapy (accessed 7 February 2023). 2. Mills, C. International Journal of Orofacial Myology, 2011;37(1):5-25. 3. Carrasco-Llatas, M. et al. International Journal of Environmental Research and Public Health. 2021;18(14):7291 4. Melis, M. et al. CRANIO, 2022;40:1,41-47. 5. Rueda, J-R. et al. Cochrane Database of Systematic Reviews, 2020;11:Art. No.:CD013449. 6. Huang, Y-S. et al. Sleep Medicine, 2019;60:,69-74.



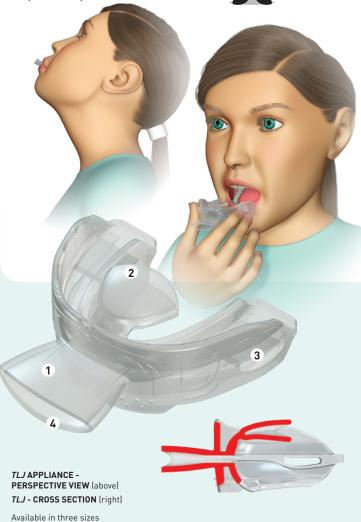
TONGUE, LIP & JAW APPLIANCE (TLJ)

The *Myotalea® TLJ* appliance is the world's first active intraoral myofunctional appliance, designed to specifically strengthen the tongue, lip, jaw, pharyngeal and suprahyoid muscles. With the advent of the *Myotalea® TLJ*, an option now exists for practitioners who are looking to improve the strength of the oropharyngeal and airway muscles as well as transition patients to nasal breathing in one easy to use, integrative appliance.

DESIGN FEATURES

The TLJ has numerous features that aid in the correction of dysfunctional soft tissue habits, including:

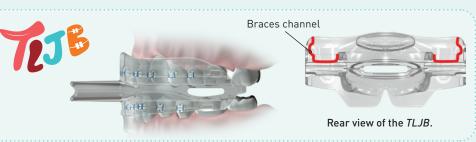
- Habitual mouth breathing
- Lips parted at rest
- Low tongue rest posture
- Lack of strength in the throat and airway muscles
- An incorrect swallowing pattern
- 1 Lip press tube strengthens the lip muscles, improving lip seal and the transition to nasal breathing.
- **2 Tongue press tube** improves tongue strength and position.
- **3 Air springs** improve function of the jaw joints and muscles.
- 4 The Myo Variable Opening Sleep Aperture (Myovosa®) helps to transition the patient from mouth to nasal breathing.



STRENGTHENS TONGUE, LIP AND JAW MUSCLES

ALSO AVAILABLE FOR USE WITH BRACES

The *TLJ* for *Braces* (*TLJB*) includes all of the *TLJ* features, plus a channel to accommodate for braces.



INSTRUCTIONS FOR USE

The *TLJ* should be used for **ten minutes**, **twice a day**.

Tongue Press

Compress the tongue press tube against the roof of the mouth with your tongue and either release the tube immediately or hold it for three breaths, then release.



Lip Press

Press your lips together to compress the lip press tube and either release the tube immediately or hold it for three breaths, then release.



Jaw Press

Bite together with the appliance in place to compress the air springs and either release immediately or hold for three breaths, then release.

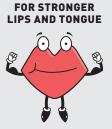


Head Tilt Variation (Advanced Technique)

Once you can comfortably perform the tongue, lip and jaw activities, repeat them with the head tilted backwards to target the muscles of the throat and airway. There should be no discomfort in the head, neck and/or jaw during this exercise. Speak to your practitioner for more information.

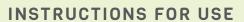




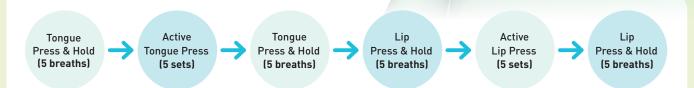


TONGUE & LIP PRESS (TLP)

The $Myotalea^{\otimes}$ TLP was the precursor to the TLJ appliance and works in a similar way, minus the TMJ exercise. Practitioners who are not licensed to prescribe intraoral appliances can still use the TLP during various phases in their therapy to target the lip, tongue and pharyngeal muscles. The TLP is less effective and more difficult to use than the TLJ. Although the TLJ appliance is preferred to the TLP, the TLP can still be used as an alternative and when access to the TLJ is not available.



As advised by your practitioner, these exercises can be combined to form an exercise flow sequence as follows:



HEAD TILT VARIATION (ADVANCED TECHNIQUE): Repeat the steps with the head tilt posture. There should be no discomfort in head, neck or jaws during this variation.

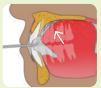
APPLIANCE FEATURES

- **Press tube** strengthens the tongue and lips, allowing for improved muscle function.
- **Handle** to hold the appliance while the other end is being used.
- **Strap tether hole** can be used to attach to other devices.

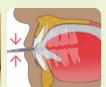
APPLICATIONS

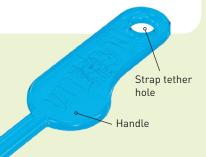
- ✓ Can be used for all the same indications as the TLJ except for jaw joint exercises.
- ✓ Can be used as an adjunct appliance to myofunctional therapy.
- ✓ Suitable for practitioners who cannot use intraoral appliances.











TONGUE PRESS

LIP PRESS

TWO STRENGTH LEVELS

TLP-S (SOFT VERSION)
For patients who have difficulties completing exercises with the TIP-H.

TLP-H (HARD VERSION)
Patients progress to the harder *TLP-H* to further increase tongue and lip strength.





LIP TRAINER™ (LT)

The *Myotalea® Lip Trainer™* is designed to achieve an adequate lip seal and strengthen lip muscles. Many patients show signs of lip incompetence and poor muscle tone around the orbicularis oris muscles. The *Lip Trainer™* improves lip seal and also strengthens and stretches lip muscles to eliminate mentalis overactivity when swallowing. It can be used at any stage of *Myobrace®* or *Myosa®* treatment. It is of particular importance to finalise lip seal and nasal breathing correction at the end of *Myobrace®* treatment and all throughout *Myosa®* treatment.

INSTRUCTIONS FOR USE

The $\textit{Lip Trainer}^{\text{TM}}$ should be used for 5 minutes, twice daily.

- 1. Attach the strap to the $Lip\ Trainer^{TM}$ by pushing it upwards through the hole on the $Lip\ Trainer^{TM}$ tab.
- 2. Then push it downwards through the hole on the strap. Pull on the end of the strap to secure it in place.
- 3. Insert the $Lip\ Trainer^{TM}$ with the lip bumpers on the lower side.
- 4. Close lips over the *Lip Trainer*[™], hold the strap and pull on it horizontally while keeping the lips squeezed together tightly.
- 5. If the $Lip\ Trainer^{TM}$ falls out, place it back into the mouth and use just enough force for the lips to hold the $Lip\ Trainer^{TM}$ in place.
- 6. Vary the exercise by pulling the strap slightly upwards and then slightly downwards to strengthen the upper and lower lips individually.
- 7. Repeat this exercise for 5 minutes.

IMPORTANT: Keep the tip of the tongue on 'the spot' and slightly fill the mouth with air to ensure that the $Lip\ Trainer^{TM}$ does not 'suction' to the teeth as this will work the wrong muscles!

APPLIANCE FEATURES

• **Ideal arch shape** perfectly adapts to the orbicularis oris and helps strengthen the muscle when combined with the strap tether.

LIP STRENGTH

- Strap tether allows patient to pull the appliance in multiple directions and enables individual lip muscle training.
- **Lip bumper** provides feedback to the lower lip muscles so that the mentalis muscle does not activate when a patient swallows.

APPLICATIONS

- ✓ Suitable at any stage of *Myosa*® or *Myobrace*® treatment, particularly to finalise treatment.
- ✓ Helps strengthen the orbicularis oris.
- ✓ Helps deactivate the mentalis muscle when patient is swallowing.
- ✓ Suitable for patients with incompetent lips to establish lip seal.
- ✓ Aids in the transition to nasal breathing by addressing lip incompetence.
- Can be used as an adjunct appliance to myofunctional therapy.



Lip Trainer™

Strap tether has dual purpose when used as a *Lip Seal Trainer*

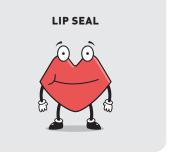
Ideal arch shape

Lip bumper

Lip Seal Trainer







LIP SEAL TRAINER (LST)

The *Myotalea® Lip Seal Trainer* is an attachment that comes with the *Lip Trainer* TM and attaches to the strap tether so that the patient can pull the *Lip Trainer* TM in various directions for perioral muscle training.

It can however serve as a standalone appliance used to improve lip seal and strength. It features the lip seal spade and training board in the one appliance. By holding either the lip seal spade or the training board between the lips, the patient trains their habitual lip posture to be sealed. It can also be used in conjunction with a *Myobrace®* or *Myosa®* appliance for added difficulty. Once a patient can easily hold the training board between their lips, they can attempt to hold the lip seal spade between their lips, which requires extra tone and strength for advanced training.

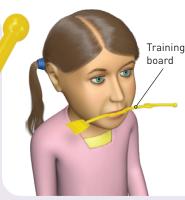
INSTRUCTIONS FOR USE

It is recommended that the *Lip Seal Trainer* is first used in combination with a *Myobrace*® appliance.

 Place the Lip Seal Trainer between the lips touching the Myobrace® appliance, then lightly close the lips enough to hold it in place. Continue this for 10 minutes while you are wearing the Myobrace® appliance.

 Remove the Myobrace® appliance and use the Lip Seal Trainer on its own for another 2 minutes. Combine with 5 minutes of Lip Trainer™ use, twice daily, or as instructed by your practitioner.

These instructions may vary based on your individual needs as indicated by your practitioner.



Lip seal spade

APPLIANCE FEATURES

- **Training board** is a beginner feature to train lip seal posture.
- **Lip seal spade** is an advanced feature to train lip seal posture.
- Can be combined with the *Lip Trainer™* for added lip strength and posture training.

APPLICATIONS

Dual use:

Acts as a strap

tether for the

Lip Trainer™

Lip Trainer™

Training board

Lip seal spade

- ✓ Used to ensure the lips are closed while Myobrace® or Myosa® appliance is in place.
- ✓ Also suitable to train habitual lip seal posture without a Myobrace® or Myosa® appliance.
- ✓ Helps deactivate the mentalis muscle during lip seal.
- ✓ Can be used as an adjunct appliance to myofunctional therapy.

COMES WITH EVERY *LIP TRAINER™* APPLIANCE





MYOCHEW™ ORTHODONTIC CHEWING BRUSH

THE PROBLEM

Many modern children mouth breathe and have poor strength and function in their orofacial muscles, which raises their risk of developing orthodontic and sleep breathing disorders. Mouth breathing and poor oral hygiene also contribute to the development of dental decay. Special needs children are particularly susceptible to the problems mentioned above and, sadly, difficulties with patient management leads them to suffer to a greater extent.

Decades of poor treatment outcomes have helped us to understand the value of prevention over delayed treatment of these conditions. To address this problem, *MRC* have created a simple solution to help future generations of children.

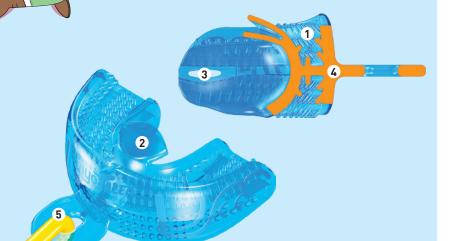
THE PREVENTIVE APPROACH

The *Myotalea® Myochew*TM is designed for children aged two to eight and actively promotes chewing in order to improve the strength of the jaw muscles, while encouraging nasal breathing and exercising of the tongue. It also incorporates bristles to help improve oral hygiene. The *Myochew*TM appliance is simple for patients to use, yet is packed with many beneficial features. It is especially useful for children with special needs and can also be used as a substitute for pacifiers.



DESIGN FEATURES

- **1 Bristles** to assist in cleaning the teeth and improving oral hygiene.
- **2 Tongue tube** to strengthen the tongue and improve its position.
- 3 Air spring base to strengthen the jaw muscles and stimulate development.
- **4 Double arch** to prevent mouth breathing and encourage nasal breathing.
- 5 **Strap tether** attaches to a strap that doubles as a *Lip Seal Trainer*.



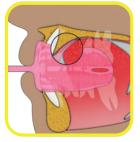
INSTRUCTIONS FOR USE



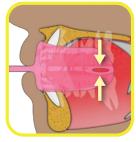
Place the *Myochew*™ appliance into your mouth.



Keep your lips together and breathe through your nose.



Squeeze the tongue press tube with your tongue repeatedly.



Gently chew and compress the air spring base repeatedly.

About Myofunctional Research Co. (MRC)

MRC is the global leader in the development of intraoral appliance technology for the treatment of conditions related to breathing and myofunctional disorders, including malocclusion, TMJ dysfunction, sleep breathing disorders, snoring, bruxism, and more. Since the company was founded in 1989, it has consistently innovated new appliance systems coupled with state-of-the-art digital resources to improve patient compliance and acclaimed educational programs to help practitioners understand the most effective and efficient ways to implement this type of treatment into their modern practices. Join the countless practitioners in over 100 countries who have gained a new perspective on providing healthcare by using MRC's treatment systems today!

Start using MRC's appliance systems in three simple steps!







1 Visit our website

At www.myoresearch.com you can find online courses, appliance information and much more!

Contact an MRC representative

We will answer your questions and guide you at each step during implementation.

3 Continue learning

We offer in-person seminars and advanced online courses to enhance your clinical skills.

Have You Seen MRC's Other Appliance Systems?

Since 1989, MRC has been innovating cutting-edge prefabricated intraoral appliances to empower practitioners to treat the breathing and myofunctional disorders that underpin malocclusion, TMJ and sleep breathing disorders. View some of our other systems below:





The Myobrace® System packages breathing and habit correction, arch development and dental alignment into a simple and effective prefabricated appliance system.





Myobrace® for Braces provides simultaneous habit correction with braces, simplifying treatment, improving stability and providing numerous other benefits.





The Myosa® appliances are designed to treat breathing and myofunctional disorders to improve the symptoms of TMJ and sleep breathing issues in both children and adults.

FOR MORE INFORMATION VISIT WWW.MYORESEARCH.COM





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