MYOFUNCTIONAL SLEEP APPLIANCE





USE FOR 1 HOUR EVERY DAY & WHILE SLEEPING





STAGE 1
MOUTH BREATHER
HYBRID VERSION

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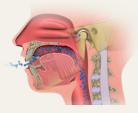
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# Understanding the problem

Sleep and jaw joint disorders (TMJ/D) affect a large number of the population all around the world. Most suffering patients are undiagnosed or incorrectly treated since the wide range of symptoms can make it difficult to establish the causes and appropriate treatment. Symptoms such as headaches, neck pain, night-time snoring and daytime fatigue may seem unrelated, however, they can all be a part of a single health problem. Quite often these problems occur simultaneously because two of the causes of TMJ/D are mouth breathing and incorrect swallowing habits.

#### Normal nose breathing vs mouth breathing

Mouth breathing is abnormal and is one of the causes of Sleep Disordered Breathing (SDB) problems. If a child breathes through the mouth, the jaws will not develop forward correctly. Adults who have SDB will usually have underdeveloped jaws, which cause the tongue and lower jaw to restrict the airway. Therefore, it is important to learn how to breathe correctly through the nose at all times in order to maintain an advanced position of the lower jaw and tongue, as well as keeping the airway open.



MOUTH BREATHING Lowered tongue



NOSE BREATHING Elevated tongue

# Treatment with Myosa® appliances

The *Myosa*® program involves evaluation, diagnosis and specific appliances in three treatment phases. The goal of the program is to treat temporomandibular joint (TMJ) and breathing disorders. The first appliance in the *Myosa*® treatment program is the *Stage 1 Hybrid* (*S1H*). This may be combined with the *S1 Mouldable* (*S1M*) at night for better retention for more severe mouth breathers.

The S1H combines features of MRC's Myotalea® appliance to establish a better airway day and night, transition to light nasal breathing, improve lip, tongue and throat muscle strength, as well as decompress and exercise the TMJs. The next stage is then the Myosa® Stage 2 (S2) which combines with the Myotalea® TLJ appliance and other treatments like Myolay™ or TMJ aligner as recommended by your health practitioner.

The Myosa® S1H is used for 1 hour daily with active exercises for 15 minutes and then used while sleeping with the Myosa® S1 Mouldable (S1M) or continued to be used at night if it can be retained.



CAUTION: Intra-oral appliances may change the position of teeth and alter the jaw relationship. Unlike rigid Mandibular Advancement Devices (MADs), the *Myosa®* appliances are flexible and minimise the potential to cause pain in the jaw joints or permanently change the bite.

### Myosa® Activity 1

#### Light breathing awareness:

If you breathe too fast at night, the airway is more likely to collapse. With the *Myosa*® *S1H* in place, take a few fast, deep breaths through your mouth. You will notice that the lip and tongue tubes close and restrict your breathing when you breathe heavily and quickly. This is what happens to your airway at night with breathing dysfunction. Now take several slow, light breaths through your mouth. Note that the tubes remain fully open. Practise light breathing as slowly and as lightly as possible to train yourself not to collapse your airway.

## Myosa® Activity 2

#### Breathing awareness and transitioning to nasal breathing:

Breathing through the nose is an essential goal for correcting breathing and TMJ Disorder (TMJ/D).

With the Myosa® 51H in place, close down on the lip tube. You should be aware of your mouth breathing habit now and are forced to breathe through the nose. Another way to test for this is to push up on the tongue tube. This also cuts off mouth breathing and makes you breathe through the nose. This is the correct way to breathe, with the lips together and the tongue placed in the roof of the mouth. Do not become breathless and breathe too quickly on the next breath as this collapses the airway. It also keeps the jaw and the tongue forward, opening the airway. Time how long you can comfortably close the lip or tongue tube and breathe just through your nose. With practise, the length of time you can do this should increase each day.

In time, this will transition you to nasal breathing if there is no obstruction. If the time that you are able to lightly and comfortably nasal breathe does not increase and you find this to be very difficult, you will need to investigate the blockage with an ENT physician. You should also report this to your health practitioner.

## Myosa® Activity 3

#### Lip and tongue strengthening:

Place the *Myosa*® *S1H* into the mouth. Compress and close the lip tube for three breaths, then release. Repeat this 10 times. Next do the same with the tongue tube. Compress for three breaths then release. Repeat this 10 times. Once you are familiar with the exercise, practise the lip and tongue exercise simultaneously. Complete this exercise twice daily.

### Myosa® Activity 4

#### Throat muscle strengthening with head tilt:

Repeat the above exercise with your head tilted backward. This exercises the throat muscles, which control the airway patency. Strengthening these muscles has been shown to assist in preventing airway collapse along with light breathing exercises. See graphic below for demonstration.

## Myosa® Activity 5

Jaw joint exercise:

Lightly bite down on the air spring base of the Myosa® S1H. Hold for three breaths, then release. Repeat 10 times. Practise this exercise twice

daily. Increase the number of breaths and the number of sets as the strength of your muscles improve. Perform all activities under the direction of your health practitioner.



# Myosa® S1H - Hybrid

Myosa® for TMJBDS® S1H is a hybrid appliance which combines the benefits of passive and active myofunctional orthodontic treatment. The S1H's large breathing aperture at the front of the appliance allows for oral breathing without interference from the tongue or lips to help with transitioning to nasal breathing, while the lip tube serves as an active lip strengthening feature. Simultaneously, the tongue tube guides the tongue forward and allows air to pass directly into the mouth without obstruction from the tongue and the tongue tube adds an active tongue strengthening feature to the appliance.



- 1 High sides provide good retention without moulding.
- 4 Tongue elevator holds the tongue in an upward and forward position.
- 7 Lip and tongue tubes for active breathing and muscle strengthening exercises.

- 2 One large breathing aperture to maintain oral breathing without interference from the tongue and lips.
- 5 Soft and flexible medical grade silicone material optimises comfort with no fitting required.
- 3 Patented tongue tag guides tongue forward and allows air to pass directly into the mouth unobstructed by the tongue.
- 6 Multiple air spring base opens airway while providing comfort for the jaw joints (TMJ) and assists in alleviating TMJ disorders and clicking.

### Indications for use

Prior to using the *Myosa*® device, the practitioner may refer the patient to a medical practitioner for assessment of sleep disorders that have medical implications. The *Myosa*® intra-oral appliance provides treatment for patients with symptoms of TMJBDS and is to be used during the day until comfort is achieved. Once accustomed, it should be used for 1 hour per day and overnight while sleeping.

## Instructions for use



**Step 1** – Hold the *S1H* appliance with the tongue tube facing up.



Step 2 – Place the S1H into the mouth.



**Step 3** – Close down on the *S1H*.

# Do not chew on *Myosa*® appliance

Initially use the S1H during the day for 1 hour and include 15 minutes with active exercises.

## Hybrid myofunctional treatment

A hybrid is an offspring which resulted from combining two unique elements. Treatment with the Myosa® S1H combines active muscle strengthening and toning exercises with static stretching of the muscles and passive retraining of the mode of function to reposition the jaw and tongue. By combining these elements, the S1H mixes the proven benefits of the Myosa® and Myotalea® passive and active treatment ranges.



Lip compression tube



Tongue compression tube

Cleaning your Myosa®: Clean your Myosa® S1H (Hybrid) appliance under warm running water every time you remove it from your mouth. Use *Myoclean™* tablets to correctly clean twice every week. Ask your doctor about *Myoclean*™, the recommended cleaning agent for all Myosa® appliances.

#### **IMPORTANT: CONSULTATION WITH A MEDICAL** PRACTITIONER IS ESSENTIAL TO CORRECTLY **EVALUATE YOUR CONDITION.**

Lifetime use: 6 months based on everyday wear. Replace after 12 months regardless of wear time.



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