

#### Jaw motion rehabilitation system™



- Clinically proven to be effective in treating trismus
- Provides anatomically correct jaw motion
- Improves muscle strength and endurance
- Exercise programs encourage continuity and compliance
- Adult and pediatric sizes available





## What is trismus?

The lower jaw incorporates important muscles, joints and teeth vital for chewing, speaking, swallowing and making facial expressions. Reduced ability to open the mouth or pain when opening the mouth may be a sign of trismus.

Trismus is a frequently overlooked but serious condition that may appear at any age and can progress slowly. Early detection and rehabilitation can help counter this restrictive condition and prevent sometimes costly complications which may compromise quality of life and health.



#### Who is affected?

Trismus can be divided into two types: one where the soft tissues or muscles are damaged and one where the bones or joints are affected. Possible causes of this condition include, but are not limited to, the following:

- Head and neck radiation
- Scarring resulting from head and neck surgery
- Complications from surgery
- Temporomandibular Joint Disorders (TMJD)
- Other muscle disorders
- Joint fixation (ankylosis)

- Joint inflammation (arthritis)
- Trauma (e.g., fractures)
- Stress-induced disorders (e.g., clenching and grinding of the teeth, bruxism)
- Stroke
- Burns

People suffering from trismus can be found within many clinical disciplines, including speech-language pathology, radiation oncology, maxillofacial surgery and prosthodontics, otolaryngology, physical therapy and dental surgery.

#### Why is trismus a problem?

Trismus can make it difficult to eat, speak, yawn, laugh or clean teeth. These difficulties can occur at a time when proper nutrition and oral hygiene are particularly important for recovery. The absence of joint movement can lead to inflammation, causing the joint to stiffen and gradually lose its function. If not treated promptly and properly, this hidden disability can seriously affect recovery, health and quality of life.



#### What can be done?

Trismus is unlikely to get better spontaneously. With the condition slowly worsening over time, it is important to start rehabilitation as soon as possible. If rehabilitation is delayed, trismus becomes more difficult to treat and reverse.

Studies show that stretching, combined with passive motion, is an effective way to improve jaw mobility. Passive motion nourishes the joint without activating painful muscles. The joint can also remain completely relaxed while an external force moves the jaw through its natural range of motion. Exercise with the TheraBite system provides both stretching and passive motion.

Rehabilitation for trismus focuses on stretching the damaged tissues. The expected rehabilitation outcome is an increased jaw opening of 1 – 1.5mm per week.

#### How do I know if I have trismus?

The average mouth opening in adults is around 45mm. Check with your clinician who can assess your mouth opening. The simplest way to screen for trismus is to insert three fingers between the upper and lower teeth or dentures. If this can be done without pain or discomfort, jaw mobility is most likely normal. If you can only manage one or two fingers, it could be that you have trismus. For more precise measurements, the TheraBite® Range of Motion Scale is an excellent tool that is easy to use.



# Benefits of using the TheraBite system

The TheraBite jaw motion rehabilitation system and TheraBite ActiveBand are clinically proven to be effective in treating trismus and in improving muscle strength and endurance of the muscles of mastication, respectively. Both offer a home rehabilitation program, encouraging continuity and compliance.



#### **Anatomically correct**

A unique feature of the TheraBite system is its ability to follow the naturally curved motion of the jaw. The curved track of the TheraBite Jaw Mobilizer guides the mandible along an anatomically correct pathway.

#### User controlled

When using TheraBite, the user is in control. Speed and opening range can be adjusted directly by the user, using manual force or the Fine Adjustment Knob. This feature helps to reduce anxiety levels and improve compliance.

#### **Portable**

TheraBite is durable and lightweight. It can be conveniently stored in the Carrying Bag provided to continue the rehabilitation program on the go.

#### Load-bearing comfort

The mouthpieces are attached to the Jaw Mobilizer and are designed in such a way that the load-bearing forces of stretching spread across the teeth. This, together with the Bite Pads, promotes a comfortable and even stretch while protecting the teeth.

#### **Effective**

Passive motion and stretching exercises with the TheraBite Jaw Mobilizer are clinically proven to be an effective form of jaw therapy. It has been used successfully by thousands of people suffering from more than 30 different conditions, ranging from postradiation trismus to orofacial pain.

#### For all ages

The TheraBite jaw motion rehabilitation system is available in both adult and pediatric versions. The pediatric version has smaller mouthpieces that are more suitable for those with a smaller mouth.



#### TheraBite Jaw Mobilizer

The TheraBite Jaw Mobilizer provides the user with an anatomically correct jaw motion.

# Pediatric TheraBite Jaw Mobilizer





The position of the Range Setting Arm can be adjusted to 25-45mm and is used to determine maximum opening appropriate to each stage of rehabilitation.

Upper and Lower — Mouth Pieces

# Adult TheraBite Jaw Mobilizer

## Fine Adjustment Knob

The Fine Adjustment Knob can be used to adjust opening distance, if needed.



## **Range of Motion Scales**

The disposable Range of Motion Scales allow the user and his/her clinician to monitor the progress of the treatment.



The self-adhesive
Bite Pads spread the force across
the teeth and can be trimmed for
customized protection. The Bite
Pads come in adult, pediatric and
edentulous (toothless) versions.



#### Hand-Aid

The Hand-Aid assists the user in maintaining constant opening during stretching or strengthening programs.



## **Exercise Log**

The daily and monthly Exercise Log enables the user and his/her treating clinician to log daily and monthly progress.



An addition to the TheraBite system that provides resistance to mouth closure. The intended use of the device is to increase muscle strength and endurance of the muscles of mastication (masseter muscle, temporalis muscle, medial and lateral pterygoid muscle).



# TheraBite therapy

Numerous clinical studies have demonstrated the benefits of the TheraBite system, which is designed to accomplish two treatment objectives:





# Increasing the range of motion of the jaw

#### Stretches connective tissue

Fibrous scar tissue causes tightening of muscle and joints and requires stretching to realign the collagen fibers. Passive and repetitive stretching can help to lengthen and reform these fibers in an anatomically correct fashion.

### Strengthens weakened muscles

Muscles that have suffered from disuse atrophy require strengthening across the full range of motion. Using passive range of motion exercises, TheraBite can help to increase muscle mass and endurance. The device can also be squeezed gently to provide resistance while closing the mouth to strengthen the muscles.

#### **Mobilizes joints**

Joints that are immobilized can undergo degenerative changes in a matter of days. Passive repetitive motion, such as that provided with the TheraBite system, can help to mobilize the temporomandibular joint across its full range of motion via passive motion.





### Pain reduction

### **Reduces joint inflammation**

Immobilized joints lead to thickening of the synovial fluid and thinning of cartilage. This stiffening of the joints ultimately leads to inflammation and pain. Passive motion of the joint, such as that provided with the TheraBite system, can activate anti-inflammatory agents that promote joint lubrication and reduce inflammation and pain.

#### Reduces muscle pain

Muscle pain (myofascial pain) is usually caused by inflammation, which creates abnormal pressure on nerves, muscles and bones. This inflammation process can be corrected through passive motion exercises. Passive motion and stretching with the TheraBite system has been proven to reduce joint and/or muscle pain in as little as two weeks of therapy.



## **Testimonials**

"We think that TheraBite is a good medical device, as it enables an even pressure on the bite and jaw during use. Thereby, we can feel safe to start training the jaw flexibility earlier after surgery, already after about two weeks instead of six weeks. The use is easy to explain to our patients and good instructions are included, both for us as doctors, who hand it out and for the patients.

We get very good results with TheraBite, especially for patients who had radiation therapy and reconstructive surgery."

Dr. M. Bengtsson, Jaw / Maxillofacial Surgeon, and Margaretha Nilsson, Dental Hygenist, Jaw Surgery, Skåne University Hospital, Lund, Sweden

"While treating patients with radiation for head and neck cancer, we have noted a meaningful number of cases of trismus. We have tried many different approaches to the treatment of this condition but are most impressed with the results of the TheraBite System. It is easy for patients to use, and offers consistently positive results."

Prof. W. Mendenhall, Department of Radiation Oncology, University of Florida Health Science Center, Gainesville, FL, USA

"I have used the TheraBite device in a variety of patients, including patients suffering from postsurgical and post-radiation trismus, as well as on TMJ patients. The typical patient responds well to the device, showing significant improvement in function. While rehabilitation does take some time and effort, it is encouraging to many patients who find that they can resume eating and speaking properly."

Dr. B. Stack, Department of Otolaryngology, Head and Neck Surgery, University of Arkansas Center for Medical Sciences, Little Rock, AR, USA

"TheraBite is very much utilized at our center by patients who suffer from limitations in mandibular opening following surgery and cancer. The experience with TheraBite is very good, especially because the patients can exercise at their own pace."

Dr. A.P. Slagter and Dr. C.H.G. Beurskens, Special Care Dentist, The Netherlands



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# Ordering Information

TheraBite Jaw Motion Rehabilitation System	Quantity	REF#
Adult TheraBite Jaw Motion Rehabilitation System	1	TH001
Pediatric TheraBite Jaw Motion Rehabilitation System	1	TH002
TheraBite ActiveBand	1 pc	8260
TheraBite Range of Motion Scales	150 pcs	SC001
TheraBite Bite Pads, Regular	4 pcs	PA001
TheraBite Bite Pads, Edentulous	4 pcs	PA002
TheraBite Bite Pads, Pediatric	4 pcs	PA003

TheraBite Jaw Mobilizer: Non-sterile, reusable. TheraBite Bite Pads: Non-sterile, for single patient use.

Adult system includes: Jaw Mobilizer, 4 Regular Bite Pads, Hand-Aid, 30 Range of Motion Scale, Carrying Bag, Instructions for Use, Exercise Log

Pediatric system includes: Jaw Mobilizer, 4 Pediatric Bite Pads, Hand-Aid, 30 Range of Motion Scale, Carrying Bag,

Instructions for Use, Exercise Log



## Contact us for more information

If you want to learn more about TheraBite, please contact us. We are always here to help you.

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