

# The Moses® Bite Technique Using Manual Muscle Testing

Tips on how to determine the correct maxillo-mandibular relationship using manual muscle testing and The Moses Bite Shims.

[View video at www.themoses.com/bite](http://www.themoses.com/bite)

Capturing the correct maxillo-mandibular relationship is the essential first step to attaining high efficacy use of The Moses® appliance. Clear shims are 1.5 mm and blue shims are 2.0 mm. The vertical dimension can be increased in increments of 0.5 mm.



- Minimum number of shims: Recommended opening is at least 3.0 mm (2 clear shims) to allow ample room for the advancement screw on The Moses® appliance.
- Maximum number of shims: Recommended that the patient's lips can comfortably close without strain.

## Shim Measurements

3.0 mm = 2 clear	5.5 mm = 1 clear & 2 blue
3.5 mm = 1 clear & 1 blue	6.0 mm = 3 blue or 4 clear
4.0 mm = 2 blue	6.5 mm = 3 clear & 1 blue
4.5 mm = 3 clear	7.0 mm = 2 clear & 2 blue
5.0 mm = 2 clear & 1 blue	7.5 mm = 1 clear & 3 blue

# The Moses®



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The first step is to test your patient for muscle resistance before introducing any shims.

**1.** First have them stand with their lips together, teeth comfortably apart, and tongue in the roof of their mouth. Then have them extend their right arm. Push down on arm for 1 to 3 seconds. Most people will test facilitated.



**2.** Then have them stand with their lips together while biting or clenching on their back teeth, and repeat the test. Most people will test inhibited.



**3.** Lastly, have them stand with their lips together, teeth apart, and tongue in the roof of the mouth again, but this time have them step on a small pad. In step 1 this was a position of facilitation. By introducing a postural imbalance, most people will now test inhibited.



Next, repeat the muscle test with the introduction of shims.

**4.** Muscle test with 2 clear shims and lips together. Increase in increments of 0.5 mm until you find the position of maximum facilitation. For example, if patient is facilitated with 3.0 mm, test 3.5 mm. If facilitated with 3.5 mm opening, increase to 4. If patient is not facilitated at 4, 3.5 mm would be the vertical opening for your patient.



**Patient MUST be able to close their lips with the stack of shims in place.**

**5.** Separate shims and put smooth side to smooth side. Hold between your thumb and index finger. Extrude a thin ribbon of bite registration material on top and bottom of shims, insert into mouth and ask patient to bite together. When set, this will allow the patient to be able to slide their jaw in all directions.



Lastly, test to establish facilitation and complete the bite registration.

**6.** In order to demonstrate facilitation and inhibition to your patients, move the jaw in any direction and test in each position. Dr. Moses asks his patients to slide to the right side 1 mm and then to the left side 1 mm and muscle tests. Most patients test inhibited in these 2 positions.

**7.** Ask patient to find their midline and muscle test. Ask the patient to protrude and retrude until you find the most facilitated position. This is known as THE LOCK.

**8.** Extrude bite registration material in the posterior areas and connect to the shims. Be sure to extrude material into the keyholes on the shims and overlap bite material onto the facial over the cuspids. This bite is referred to as the masseter dominant bite. The temporalis muscle is limited in closure by the shims. The masseter muscles are not as limited and can exert more closure force.



## If you are uncertain that there is a lock . . .

1. Keep shims in place in the anterior of the mouth in the most facilitated bite possible. Extrude bite registration material in the molar area and do not connect to the shims. At this time add a glob of bite registration material over the area of the upper and lower central incisors. When the bite registration material is COMPLETELY set in the molar area, remove the shims by asking the patient to open ever so slightly, just enough to take the shims out. Have the patient close down and make sure the bite registration material is firmly in place in the posterior area.
2. Manual muscle test the patient while biting on the molar stops that you have created. If they are more facilitated in this position, extrude bite registration material from the posterior of one side to the posterior of the other side, overlapping your molar stops. Your bite registration will be one solid arch-shaped piece. This is called the distraction bite or the temporalis dominant bite. In this position, the masseter muscles are limited by the bite registration material in the posterior area. When the shims are removed from the front and the patient is biting on the posterior stops, the muscle forces change.
3. If the patient is less facilitated in this position than with the shims in the anterior area, take out the posterior stops, put the shims back in place and return to the masseter dominant bite. In our practice, Dr. Moses uses the masseter dominant bite 95% of the time. Trim off all soft tissue before sending your case to the lab.

