

Tongue and Cheek

Sleep-inducing mini-move By Michael Krugman

1. Introduction / Additional information added by Marie-Paule

Please note the additional information is optional and in more detail than you need to know. Sometimes more information gives us a better understanding and awareness of the movements. Note also that we are all individuals and we move in different ways.

First a little about the anatomy and physiology of the tongue.

The sucking reflex starts developing at 32 weeks while in the womb and is fully developed at 36 weeks. There are some ultrasound images of the fetus sucking their thumb as early as 10 weeks. From the moment we are born we use the muscles of the tongue called the “sucking reflex”. The muscles of the tongue are connected to the mouth, lips face, jaw, neck, shoulders and eyes.

Muscles of the tongue

There are two types of muscles:

- the muscles **in** the tongue (Intrinsic) that **change the shape** of the tongue
- the muscles that **attach** the tongue to bones (Extrinsic) ie the **lower jaw**, **Hyoid bone** between the chin and the thyroid, the **styloid temporal bone** just below the ear, and the **palatine hard palate**

The link below shows 4 min video describing the muscles of the tongue and their function.

<https://www.youtube.com/watch?v=Zz3cO2MhwhQ>

Nerves of the tongue

The 12th cranial nerve (hypoglossal nerve) controls the movements of the tongue.

Innervation of the Tongue Cranial Nerves - <https://www.youtube.com/watch?v=i5QdYrEkJ64>

Hypoglossal nerve: course and branches (preview) - Human Neuro-Anatomy | Kenhub <https://www.youtube.com/watch?v=i-r96yEnjaw>

Function of the tongue:

The tongue has many functions:

- chewing and swallowing during eating,
- taste
- speaking (with the help of the teeth and lips), singing.

Studies have shown that your tongue moves continuously in the day and during sleep.

Some studies show during the REM it was observed that the lack of tone of the genioglossal muscle attached to the tongue could obstruct the breathing passage. (The **genioglossus muscle** is muscle of the tongue that starts at the chin and attaches to the entire length of the tongue, from the tip to the base.)

The cranial and vagus nerve control the movement of the tongue (involuntary movements), but we can also voluntarily move the tongue, the lips and jaw.

In this **sleep-inducing mini-move**, the movement of the tongue is voluntary but gentle and it allows the lips, jaw and tongue to relax. These gentle effortless movements combined with your natural breath emit the relaxation response throughout our whole body.

How is the tongue positioned naturally in it's resting position and noting that this may be different depending on habits, injuries, and genetics.

What has been observed in some studies is that the tongue in it's resting or relaxed state sits gently on the roof of the mouth. It is slightly a bit away from the teeth. The lips are closed and the teeth are slightly separated.

What can happen if the tongue doesn't rest naturally and has lack of tone or too much tone?

This may be seen in Apnea, in TMJ which affects the jaw, overbite of the teeth, or vision issues. It has been noted that if the tongue lies flat against the roof of the mouth it can decrease jaw and neck pain and improve sleep.

The Tongue and Cheek

My version with all of **Michael's steps**.

1.Positioning:

- can be practised in sitting
- lying on you back or your sides
- Get comfortable with props or pillows

2. The process:

Listen to your natural breath without changing it.

Sense the gentle rise and fall of your chest.

Do you notice certain areas in your lungs filling more than others.

What other areas do you feel when you breath in and breath out naturally.

If you have aches, pains or areas of tension, for a moment, with your intention breath in to that area.

When you breath out visualize the area softening, releasing and letting go of whatever is not needed.

Do this for 2-3 breaths then listen again.

a) Movements of the tongue

As you breath in, begin taking your tongue a bit back.

A small move in the direction of the throat.

If you have difficulty taking your tongue back, swallow and you will feel the tongue going back.

On the exhale relax your tongue.

Do this move several times.....notice what happens to your tongue, the jaw, the inside of the mouth.

Rest.

As you are resting listen to what the tongue is doing. The tongue makes small involuntary movements during rest or sleep.

b) Extending or lengthening your tongue (to various areas of the cheek).

Which cheek to take your tongue to.

If you are laying on your back choose either the right cheek or the left cheek.

If you are laying on your left side, take your tongue to the right cheek.

If you are laying on your right side take your tongue to the left cheek.

(Why is this? Explore for yourself later. You may notice that the side you are laying on the cheek is a bit compressed and it may affect the way the tongue lengthens or relaxes. Or not)

Listen and visualize first, then do the move.

Using your natural breath, take your teeth apart slightly.

Inhale, and on the **exhalation** take the tongue to the inside corner of the lower and upper lip inside of the cheek.

Gently touch the inside of the cheek (press a bit).

On the inhale relax the tongue in it's resting state.

Repeat the gentle movement several times (about 2- 3), pausing for one breath cycle before the next movement.

Rest the tongue for 2-3 breathing cycles. Notice any changes, different sensations you may feel on the tongue, the lips, the face, cheeks, jaw, throat, neck and eyes.

Note for teacher

Repeat the above instructions as they do the movement of lengthening the tongue.

Now explore other areas of the cheek repeating the same process as above. eg. more to the middle of the cheek, a little more upward, downward etc.

At this time you may give the students the choice of exploring 2-3 other areas or you may direct the areas to move to.

Rest

You may do more areas if you are still awake, but if you are tired allow yourself to sleep.

You may repeat the process exploring the opposite cheek if you are on your back.

If your were laying on your side, you may want to turn on the opposite side and repeat the process.

You may also repeat the process by exploring taking the tongue to each area pressing gently on the **inhalation** and relaxing the tongue on the **exhalation**.

Have a restful sleep.

End of process

More links

Relax your Way to a good night's sleep Dr. Richard Shane

https://www.huffpost.com/entry/the-joy-of-sleep-relax-yo_b_481611

Muscles of the tongue (preview) - Human Anatomy | Kenhub

https://www.youtube.com/watch?v=6t7mJi11q_U&t=58s

Mouth exercises

<https://www.sleepfoundation.org/snoring/mouth-exercises-to-stop-snoring>

Article from a dentist on tongue positioning

<https://www.ladydentistanchorage.com/tongue-positioning-what-it-is-and-how-it-helps/>

Re-LEASE YOur JAW toDAY using the FELDENKRAIS Method and FUN!!!

<https://www.youtube.com/watch?v=OvmqDgD5zF8>

Tongue Touching Teeth: Mini-Feldenkrais lesson to calm your nervous system w/ Tiffany Sankary

<https://www.youtube.com/watch?v=LAIFC8CrYck>

Feldenkrais Tongue Exercise

https://www.youtube.com/watch?v=Rqu_6KSsLoc

Giraffe's version but called **Tongue in Nose**



Giraffe's tongue