

The eustachian tube is the opening that connects the space behind the ear drum (the middle ear) with the back of the nose (an area called the nasopharynx). **Eustachian tube dysfunction** is a very common condition, wherein that tube does not work properly. This leads to a difference in pressure between the middle ear and the surrounding atmosphere, causing intermittent pain, fullness and pressure. This can be made worse by fluctuations in pressure, such as while flying, scuba diving or driving through the mountains.

Treatment includes optimizing the health of the sinuses (such as through high volume saline irrigations i.e. Neil Med Sinus Rinses), and treatment of chronic sinus diseases such as chronic rhinosinusitis. Topical and oral decongestants can also be helpful, but the use of these should be discussed with your GP or ENT. Learning the techniques below can help open the tube, and allow for equalisation of the pressure behind the ear drum and the outside air.

### **Methods of Equalisation (opening of Eustachian Tube)**

Note: there are many videos on YouTube that will teach these maneuvers, simply search for the names below.

#### ***Valsalva Maneuver***

PINCH YOUR NOSE, CLOSE YOUR MOUTH AND GENTLY TRY TO BLOW AIR UP THE BACK OF THE NOSE.

Be sure to do this gently. A forceful Valsalva can be painful, and even damage the hearing bones (ossicles). Use this with extreme caution will scuba diving.

#### ***Voluntary Tubal Opening***

TENSE YOUR THROAT AND PUSH YOUR JAW FORWARD

Tense the muscles of the soft palate and the throat while pushing the jaw forward and down as if starting to yawn. These muscles pull the Eustachian tubes open. This requires a lot of practice, but some patients can learn to control those muscles and hold their eustachian tubes open for continuous equalization. This is very helpful while flying or scuba diving.

#### ***Toynbee Maneuver***

PINCH YOUR NOSE AND SWALLOW

Take a deep breath in. Now, pinch your nostrils closed and swallow. Swallowing pulls open your Eustachian tubes, while pushing air into the middle ear.

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*In collaboration with:*

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## ***Frenzel Maneuver***

PINCH YOUR NOSE AND MAKE THE SOUND OF THE LETTER "K"

Close your nostrils, and close the back of your throat as if straining to lift a weight. Then make the sound of the letter "K." This forces the back of your tongue upward, compressing air against the openings of your Eustachian tubes.

## **Lowry Technique**

PINCH YOUR NOSE, BLOW AND SWALLOW

A combination of Valsalva and Toynbee: while closing your nostrils, blow and swallow at the same time.

## **Edmonds Technique**

PINCH YOUR NOSE AND BLOW AND PUSH YOUR JAW FORWARD

While tensing the soft palate (the soft tissue at the back of the roof of your mouth) and throat muscles and pushing the jaw forward and down, do a Valsalva maneuver.