



Jennifer M. Roe D.D.S, MAGD
OFFICE: 512-847-8934 * FAX: 512-847-6262

NIGHT TIME NASAL BREATHING PROTOCOL

When you think of your nighttime routine, taking a shower, brushing your teeth, changing into pajamas come to mind. In fact, taping your lips has most likely never even been a consideration. Recent studies have shown that nasal breathing alone and not breathing through your mouth increases overall health and produces more restful sleep. Adults and children can safely use tape to gently seal, and keep, their lips together during the night in order to maintain nasal breathing.

To do this, we begin each night with unblocking the nasal passages to decrease nasal congestion and allow for continuous nasal breathing. Follow this up by the mouth taping exercise. This technique is designed to evaluate your ability breathe nasally during sleep and to determine if continual nighttime nasal breathing improves your dental signs/symptoms. Wimberley Dental Center did not invent this procedure. We are simply following the guidelines of the Buteyko Breathing Clinic as outlined on pages 66-68 of the book Close Your Mouth by Patrick Mckeown. It is also recommended that daytime breathing behavior therapy be instituted in conjunction with this protocol in an effort to reduce daily stress and breathing dysfunction.

OVER THE COUNTER SUPPLIES NEEDED:

- ❖ Xlear nasal spray
- ❖ NeilMed Sinus Rinse or Neti Pot
- ❖ Flonase
- ❖ Claritin or Zyrtec
- ❖ MUTE nasal dilator
- ❖ 3M Micropore gentle paper tape (1 inch in diameter)

Please follow the steps outlined below for cleaning and decongesting the nasal passages followed by night time mouth taping.

STEPS FOR NIGHT TIME NASAL CLEANING AND DECONGESTING

1. **Blow nose gently**, one nostril at a time.
2. **Xlear nasal spray** – found over the counter - 2 sprays in each nostril. (Xlear washes away airborne contaminants and pollutants, protects and moisturizes sinuses, nasal passages, and is soothing to irritated or inflamed tissue. It contains Xylitol and can be used up to 5 times a day).
3. **Blow nose gently again**, one nostril at a time.
4. **Nasal rinse/lavage** with either **NeilMed Sinus Rinse** bottle or **Neti Pot** – found over the counter - use according to manufacturer instructions.

5. **Nasal unblocking exercise**

INSTRUCTIONS FOR NASAL UNBLOCKING EXERCISE

- a. Take a small, silent breath in through your nose and a small, silent breath out through your nose.
- b. Pinch your nose with your fingers to hold your breath.
- c. Move your head side to side with your breath held. Try to build up a medium to strong air shortage, without overdoing it.
- d. When you resume breathing, do so only through your nose. Try to calm your breathing immediately.
- e. After resuming your breath, your first breath will probably be bigger than normal. Make sure that you calm your breathing as soon as possible by suppressing your second and third breaths.
- f. You should be able to recover normal breathing within 2 to 3 breaths. If your breathing is erratic or heavier than usual, you have held your breath for too long.
- g. Wait 1 or 2 minutes before repeating the breath hold.
- h. In order to prepare yourself for the longer breath holds, go easy for the first few repetitions, increasing your paces each time.
- i. Repeat for a total of 6 breath holds, creating a fairly strong need for air.

6. **Flonase** (Fluticasone propionate) over the counter – 2 sprays each nostril. Should be used twice daily (at night and in the morning).

INSTRUCTIONS ON HOW TO ADMINISTER NASAL SPRAY

- a. Stay in an upright position with the head tilted forward slightly.
- b. Insert the tip of nasal spray into one nostril while gently pressing closed the opposite nostril.
- c. Aim the nozzle away from the septum (midline) of the nose, direct the angle of the nozzle towards the inside corner of your eye on the same side.
- d. As you spray, breathe in gently through your nose while pressing the applicator down firmly between your fingers and thumb.
- e. Remove the nozzle from the nostril and breathe out gently through mouth.
- f. Switch nasal inhaler to other hand and repeat these steps on the other side.

*****Your nasal inhaler spray will come with instructions in the package. Always check the package insert for any specific instructions*****

7. **Claritin** (loratadine) or **Zyrtec** (Cetirizine) over the counter – once daily as instructed by manufacturer. Take only if having daily allergy symptoms (itchy, runny, sneezing), and if you have never had a reaction to these medications.
8. Insert **MUTE nasal dilator** as directed on box – This product is manufactured by Rhinomed and can be found over the counter or on-line. Select your size according to manufacturer recommendation.

*****If you have completed the above steps, you may proceed with the mouth taping instructions*****

STEPS FOR MOUTH TAPING

1. Use 1 Inch 3M Micropore gentle paper tape. If your skin is sensitive to the adhesive, you can try 3M Sensitive Skin tape. An alternative is LipSeal tape which is available at lipseal.com or Chin-Up strips at chinupstrip.com
2. Cut or tear the strip into an appropriate sized piece for you. Fold a tab on both ends for easy removal.
3. Apply the tape horizontally across the lips. Make sure you are able to comfortably breathe through your nasal passages.
4. Now you are ready for bed. Any nighttime ritual, reading, or meditation can be accomplished as usual. Concentrate on slow, rhythmic nasal breathing and you will be assured to fall asleep.
5. In the morning, remove the mouth tape by gently pulling the tab from one side. Do not rip off quickly. Wash your face with warm water to remove the adhesive residue completely.

If you wake to find that the tape has been removed during the night, try this exercise again. If after multiple nights you find the tape removed, this could be a sign that you continue to over-breathe and daytime training may be required. We recommend a 14 day breathing retraining program provided in an app that can be downloaded on to your smart phone. This app is called "Address Stress". The training exercises are meant to reduce your breathing rate and reduce your breathing volume while it resets the brainstem to proper levels of retained CO₂. Try the mouth taping again at the completion of that 14 day program. Continued failure, blocked nasal passages, and continued snoring may indicate an ENT referral if you have not had one already. Retraining your body to breathe properly at night may take at least six months. Many patients feel more comfortable with the tape than without well beyond the six month treatment period.

Know that your physician will be initially surprised by this concept. Buteyko mouth taping has been used in a number of studies focused on improving asthma in children. Additionally, sleep physicians have been doing this for years with chin straps as a supplement for CPAP treatment of sleep apnea.

References to Share with your Physician:

Effect of addition of chin strap on PAP compliance, nightly duration of use, and other factors. Knowles, et al. J Clin Sleep Med. 2014 Apr 15; 10((44)):377 - 383.

Novel Porous Oral Patches for Pts. with Mild OSA and Mouth Breathing: Pilot Study. Huang & Young, Otolaryngology - Head and Neck Surgery: 2015 Vol. 152(22) 369 - 373.

Towards Restoration of Continuous Nasal Breathing as Ultimate Goal in Pediatric OSA. Guilleminault & Sullivan, Pediatrics & Neonatal Biology: 2014 Vol. 1(11) 1 - 6.

The Nose and Sleep Disordered Breathing. White Paper: What We Know, Don't Know. Rappai, et al. Chest 2003;124(66): 2309 - 2323.

Comparative study on oxidative stress role in nasal breathing impairment and OSA syndrome. Passali, et al. Acta Otorhinolaryngol (Italy) 2016; 36:4490 - 495.