

Breath: The New Science of a Lost Art by James Nestor

CHEWING

Overview

- Industrialized (processed) food is shrinking our mouths, and this has been a pattern for centuries.
- Faces are changing due to the lack of chewing and the stress that is supposed to be caused by that movement.
- $\frac{3}{4}$ of modern humans have a deviated septum which causes the airways of the nose to be off center.
- **Sleep apnea, snoring, asthma, and ADHD** are all linked to an obstruction in the mouth.
- If sinus surgery ever occurs, there is an increased risk of sleepless nights, panic attacks, anxiety, loss of appetite and chronic depression.
- 90% of breathing obstructions originate around the tongue, soft palate and/or tissues around the mouth.
- The **smaller the mouth, the more likely** the individual is to have **breathing problems**.

Ideal Anatomy/Posture

- The **deeper the uvula hangs** in the throat, the **higher the chance of an airway obstruction**
- Mouths that are the least susceptible to airway obstruction have a uvula that appears high and is visible from all angles of the mouth.
- **Correct Oral Posture:** hold the lips together with the teeth lightly touching your tongue on the roof of the mouth. Make sure that the head is up and perpendicular to the body so there is not a kink in the neck.
- The spine should form a **J-shape**, which is when the alignment is perfectly straight until the small of the spine, which naturally curves outwards. If the spine **follows this pattern**, there should be **no issue with breathing** through the nose and into the abdomen.

Impairments

- When the tongue overlaps the molars or has “scalloping” teeth indentations on its side, that is a sign that the tongue is too large for the mouth and is more likely to clog the throat when laying down.

- Men with a **neck circumference of 17+ inches** and women with a **neck circumference of 16+ inches** are significantly more likely to have risks of airway obstruction. This is because the more weight someone gains, the higher the risk of suffering from snoring and sleep apnea. This is seen in **fat gain**, as well as **muscle gain**.
- Many people have **S-shaped spines** now not only due to inactivity but also because their tongue does not appropriately fit in their mouth.
- The average person usually has a sloping head which stresses back muscles and leads to back pain. In addition, a kink in the neck leads to additional pressure on the brainstem which triggers headaches.

Orthodontics

- The earliest orthodontic work wasn't intended to straighten teeth, it was intended to widen the mouth and open the airways
- In the past, "**Monobloc**" or "**expanders**" helped widen the mouth to make room for more efficient breathing
- Today, expanders help with straightening crooked teeth by creating more room in the mouth for the teeth to grow in straight.
- The problem with orthodontic work is that **removing teeth and using braces** just makes initially too small of mouths, smaller. This causes stress on the temporomandibular joint, causing the face to look different.

Chewing at Infancy

- Chewing starts during infancy
- The chewing and sucking stress that is required for breastfeeding allows infants to **develop strong facial muscles**. This helps develop good airways so they can breathe better throughout life.
- In addition, the chewing/sucking motion stimulates **more stem cell growth and stronger bones**
- Babies that breastfeed for longer amounts of time have **lower levels of crooked teeth, snoring and sleep apnea**

Strong Gum Recommendations

- **Falim:** tougher than shoe leather, each piece lasts for around an hour. The Sugarless Mint flavor is the most recommended
 - Found on Amazon for \$6.50
- **Mastic Gum:** cultivated in the Greek Islands and does not taste great but offers a good jaw workout
 - Found on Amazon for \$15