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Breathing's Important...Right?

The Nose Knows

What is the first thing that we do as humans when we are born?

What is the last thing we do as humans before we leave this earth?

BREATHE!!!!

Breathing is the most fundamental of needs. It trumps the need for food and water. Some might argue that your beating heart or brain function is more important. The reason you have a heart is for the purpose of pumping blood throughout the body. Blood provides oxygen to your organs, oxygen obtained by breathing. Your brain will not function if deprived of oxygen for more than 6 minutes. Where does this oxygen come from? Breathing! It all comes back to breathing.

If breathing is SO essential, shouldn't you be doing it correctly? This might seem like a ridiculous question given that breathing is something we, as humans, do automatically. However, most of us DO NOT breathe correctly.

By not breathing correctly, you are not optimizing oxygen consumption. This might sound like a silly question, but why is oxygen important? It comes down to every cell in your body. They must have oxygen—if they don't, they die.

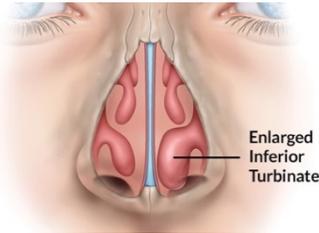
So what does proper breathing look like? If you are breathing properly, then you are breathing comfortably through your nose with your lips together, teeth apart, with your tongue at the roof of your mouth. It also includes using your diaphragm, as well as your back and stomach, not your shoulders and neck. Sounds simple right? Unfortunately, many people do not breathe in this manner.

Let's dissect a breath. Sit, or stand tall and pay attention to your posture. Now breathe in, making sure that your lips are together, your teeth are apart, and your tongue is touching the roof of your mouth. After focusing on your mouth position and breathing through your nose, focus on your upper body. When you breathe in, make sure your stomach, lower back, and chest expand. When you breathe out, make sure these areas contract. DO NOT breathe in by raising your shoulders or extending your neck. This qualifies as shallow closed breathing and does not optimize your air intake.

Feels good, right? Breathing in this manner gives you a feeling of relaxation—every yoga instructor out there encourages you to breathe this way. So, why is it that most people don't? It's not your fault. There are many

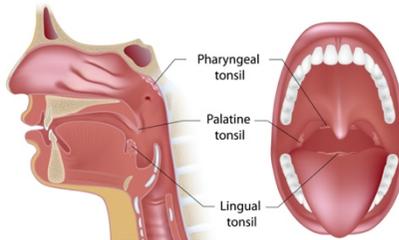
anatomical and/or genetic characteristics that prohibit healthy breathing. Let's discuss them.

1. The nose contains ridges called turbinates (we will discuss their function shortly.) If these turbinates or ridges become enlarged due to chronic inflammation or poorly positioned turbinate bones, they will obstruct airflow into the nose which will promote mouth breathing.

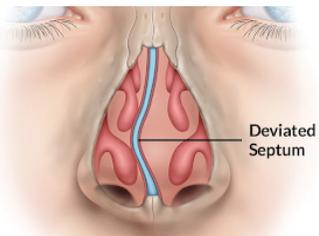


2. Allergies cause sinus congestion, which makes it difficult to breathe through the nose and will lead to mouth breathing.
3. Chronic sinus infections will lead to mouth breathing.

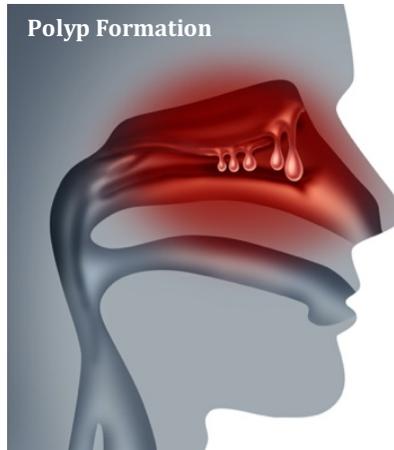
4. Large tonsils and/or adenoids (also called the Pharyngeal tonsil) decrease the ability to get air from the nose to the lungs.



5. If the middle of the nose is shifted to the left or right (called a deviated septum) this obstructs one side of the nose and decreases the ability to breathe properly.



6. Polyp formation in the nasal passage decreases the size of the nasal airway.



7. The shape of the nose can prohibit proper breathing. For example, some people have narrow nostrils or have a bridge of the nose that is flat.

8. The shape and/or size of the jaw can affect the ability to breathe through the nose.

9. Stress promotes shallow, rapid, abnormal breathing that is easier to accomplish by breathing through the mouth.

10. Chronic health conditions such as asthma, COPD, pulmonary hypertension and anemia will cause mouth breathing because the body feels it needs to get air in faster than nasal breathing can provide.

Why is it so important to breathe through your nose as opposed to your mouth?

1. The nose is your **FIRST** defense against bacteria and viruses that can make you sick. Remember the turbinates that were mentioned above? They are essential in this process. It is the job of these ridges, along with hair-like projections in the

nose called cilia, to keep as many germs, dust, and debris out of your lungs as possible. Your sinuses produce mucus, otherwise known as snot. This mucus also assists in the capture of unwanted air debris and germs. By breathing through the mouth, this first line of defense is eliminated.

2. The turbinates also humidify and warm the air we breathe. This is important so that the airway does not shrink making it more difficult to breathe. This can be particularly bad for people with asthma.
3. Mouth breathing can cause the airway to not function at its normal capacity because the air is cold and dry. A dry airway leads to poor oxygen exchange.
4. Dryness due to mouth breathing can also cause dental diseases such as decay, misaligned teeth, and gum disease.
5. By exhaling through the nose, the process of breathing is slowed down and a back pressure develops in the airway. This allows more oxygen to be transferred from the lungs to the bloodstream.
6. Mouth breathing in children can lead to facial deformities that will cause a small airway as an adult. A lower chin, longer face, less pronounced cheekbones, and narrow jaws will predispose a child to a lifetime of difficult breathing.

WHY DOES ALL OF THIS MATTER?

Oxygen is **ESSENTIAL** for cellular activity. Since **EVERY PART** of your body is made up of cells, and cells dictate the function of your organs, your body relies on oxygen in order to function properly. Proper breathing allows for optimum oxygen consumption and is one of the best things we can do for our cells.

