

How to Stop Mouth Breathing (Treatment)

*Manual
(Instructional Guide)*

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"All chronic pain, suffering and diseases are caused from a lack of oxygen at the cell level."

*Prof. A.C. Guyton, MD, The Textbook of Medical Physiology**

** World's most widely used medical textbook of any kind*

** World's best-selling physiology book*

1. Effects of mouth breathing

Breathing through the mouth is a sign of chronic hyperventilation. Healthy people (over 40 or 60 seconds for the body oxygen test) do not breathe through the mouth at all. If they try, their body oxygenation will be below 40 s. On the other hand, if you observe sick people, you will notice that they frequently do breathe through the mouth.



The very first step in solving this problem is education. You must completely understand the importance of nasal breathing 24/7. Mouth breathing causes more than 15 different negative and immediate physiological effects in the human body. However, for the sake of simplicity, I am going to list only three biochemical factors that directly affect blood flow and oxygen supply to all vital organs.

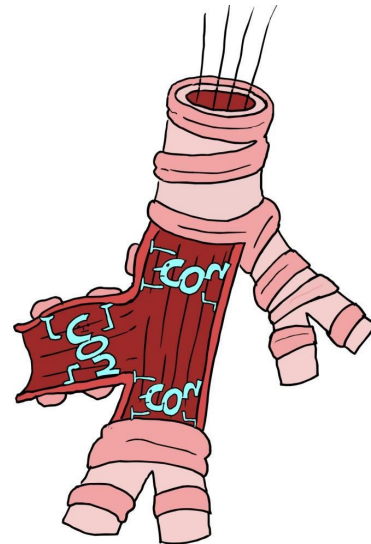
First of all, mouth breathing causes spasm of smooth muscles in airways which is also

known as bronchoconstriction or [bronchospasm](#). Second, mouth breathing upsets normal utilization of nasal nitric oxide (with NO for its chemical formula). Third, mouth breathing will cause reduced oxygen delivery to body cells. Let me focus quickly on these three factors since they are of paramount significance for normal health.

1.1 Bronchospasm

Bronchospasm takes place due to low CO₂ since during mouth breathing we increase the loss of CO₂ from the lungs and airways. Dozens of clinical studies have shown that CO₂ is a potent relaxant of smooth muscles in the human body (including muscles around blood vessels, airways, and the small and large intestines). Some studies claim that CO₂ is the most potent known vasodilator. Therefore, CO₂ is also possibly the most potent bronchodilator.

That means when you breathe more air at rest and have lower CO₂ levels in the airways, your bronchi and bronchioles become spasmodic (or constricted). When you breathe easy and very slowly, your airways are dilated.



Constriction of inflamed airways, as for people with asthma, bronchitis, cystic fibrosis, and so forth, has disastrous effects since airways are also inflamed and full of thick mucus. That makes air transfer either reduced or, in some areas of the lungs, even completely blocked.

Movements of air through inflamed and constricted airways greatly increases work of breathing. Your breathing muscles need to work much harder. Worst of all, friction from air movement causes additional mechanical damage to the already inflamed airways. Thus, mouth breathing for people with inflamed airways is like scratching a fresh inflamed or unhealed area on the surface of the body.

Nasal nitric oxide

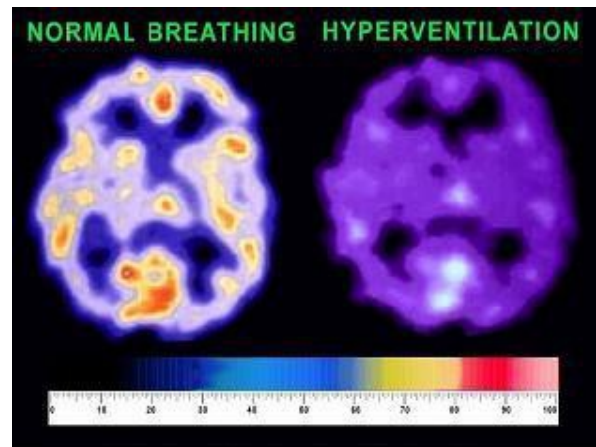
The second effect of [mouth breathing](#) relates to nasal nitric oxide that is necessary in the lungs to disinfect them by killing microorganisms that can cause respiratory infections. Nitric oxide is also a potent vasodilator and its synthesis explains why nitroglycerine has been used for almost a century to stop heart attacks. Yes, this known and safe drug nitroglycerine converts into nitric oxide, dilates, blood vessels, and prevents angina and heart attack symptoms. We naturally produce nitric oxide in different body parts, including sinuses, from arginine, a semi-essential amino acid that is present mainly in meat, fish and nuts.

1.3 Less CO₂ in the lungs and O₂ in cells

The third effect is the most destructive for oxygen delivery to cells of the body. Low CO₂ in the alveoli can cause one of the following two effects.

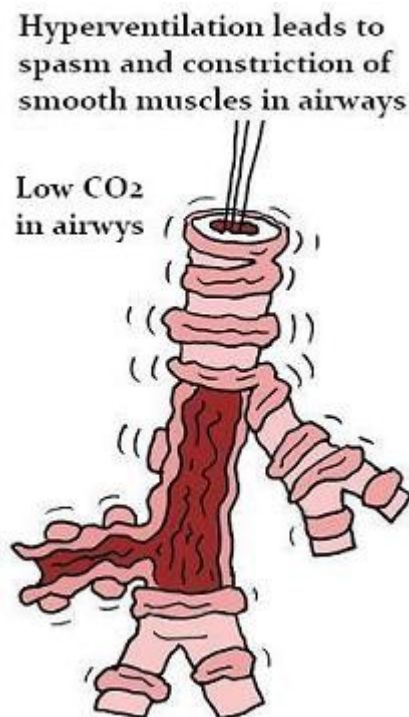
If you have normal lungs, as in most people, your overbreathing will cause low CO₂ in the arterial blood. This causes constriction of arteries or [vasoconstriction](#) (resulting in less blood and oxygen being transported to all vital organs) and the reduced [Bohr effect](#) (resulting in less oxygen being released by red blood cells in capillaries). Both effects drastically worsen oxygen availability in cells.

Note that you get more O₂ in body cells if you breathe slower and less at rest (down to 3-4 small breaths per minute). This is the law of physiology.



Effects of 1 minute of voluntary hyperventilation on brain oxygen levels (vasoconstriction due to lack of CO₂)

Those people who have problems with their lungs, due to asthma, COPD or cystic fibrosis, will make their ventilation-perfusion mismatch worse since mouth breathing favors spread of pathogens in the respiratory system (due to lack of nitric oxide) and also reduces alveolar CO₂ causing bronchospasm discussed above. Therefore, these people get too low levels of oxygen in the blood or hypoxemia and too much CO₂ in the arterial blood (due to too low CO₂ in the lungs).



2. Your health: up to you to decide

The second major step is your irrevocable decision to breathe through the nose all the time when you are awake. You need to remember and remind yourself about constant nose breathing throughout the day. If you have tendency to forget about strictly nasal breathing during the day (due to age, stress and other factors), there are additional resources below.

3. Stuffy nose problems

Any time when your nose gets blocked, you should apply the Emergency Procedure or a simple breathing exercise that will unblock your stuffy nose in about 40-60 seconds (for over 90% of people). This breathing exercise can be found on YouTube: [How to Get Rid of a Stuffy Nose](#) or [Stuffy Nose Remedy](#). Or you can also study a webpage that is devoted to problems with stuffy nose: [How to Get Rid of a Stuffy Nose Fast](#).

You can repeat this easy breathing exercise 10, 20, or 100 times per day. Keep in mind that your nose gets blocked when you breathe at least 2 times more air than the medical norm.

4. Mouth breathing during sleep

If you find that your mouth is dry in the morning, consider the following experience of Dr. Buteyko's patients. To ensure nasal breathing during the night, in the 1960s, Russian patients invented mouth taping.

First of all, it is necessary to find out if one has this problem by checking for dryness in the mouth just after waking up in the morning. If the mouth is dry and there is a desire to drink water after waking up, the person has been mouth breathing. It could have begun when the person went to sleep or it could appear at 3 or 4 am. In any case, just 20-30 min of mouth-breathing resets the breathing centre to lower CO₂ (breathing is mainly controlled by CO₂), and such patients, as a rule, have less than 20

seconds for the body oxygen test when they wake up in the morning.

Moreover, if you have a malignant tumor and your daily CP is above 20 s, your tumor will grow only during the time of the night, when you breathe through your mouth. If you have sinusitis, the pathogenic bacteria in your sinuses will multiply and colonize new mucosal surfaces when you breathe through your mouth. Organic damage to the heart muscle, growth of inflamed areas in the GI tract, advance of pathogens on your skin (in cases of eczema, psoriasis, etc.), and many other problems will appear if your mouth gets open during your sleep due to [hyperventilation](#). What are the solutions? One option is to tape your mouth.

5. How to tape one's mouth at night to prevent mouth breathing



For mouth taping one needs a surgical tape and cream to prevent the tape sticking. Both can be bought in the pharmacy. Micropore (or 3M) and Vaseline are popular choices. First, put a small amount of cream on the lips so that it is easy to remove the tape in the morning. Then take a small piece of tape and stick it in the middle, vertically, across the closed mouth. Some students prefer to put it along or horizontally, but a small piece in the middle is sufficient. If you are afraid to “seal” your mouth completely, tape only one half of the mouth leaving space for emergency breathing. In 2006 one of my Buteyko colleagues, Dr. James Oliver, a GP from the UK and former

president of the Buteyko Breathing Association made a presentation to the British Thoracic Society about the safety of mouth taping based on thousands of cases both in Russia and in the west. Previously he conducted a survey among us, Buteyko teachers, and obtained the statistical data.

Taping at night normally should be a temporary measure. When one's CP is above 20 s in the morning, mouth taping is not necessary.

5.1 Can mouth taping create distress?

The majority of students have no problems with mouth taping and they breathe only through the nose during the whole night. Their mouth is not dry in the morning and they report numerous benefits of mouth taping.

However, some students may find it difficult and uncomfortable so that they remove the tape during the night. These incidents have physiological causes, including:

- 1. Sleeping on the back.** If you turn on your back during night's sleep, your breathing gets almost twice as heavy and it will be very difficult to pump more air through the nose. Hence, study the module devoted to prevention of sleeping on one's back.
- 2. Too warm sleeping conditions.** If your blanket is too warm, your [respiratory rate](#) and ventilation increase during sleep. You will wake up noticing that breathing through the nose is uncomfortable. To prevent overheating, use cooler clothes and blankets during sleep.
- 3. Carpets in your bedroom.** Presence of carpets makes air quality tens or even hundreds times worse. During a night's sleep several cubic meters of air with millions of all these airborne particles, including dust, dust mites, their droppings, bacteria, viruses, etc. will enter through the nasal passages making them dryer and penetrating into bronchi and the lungs causing stress for the immune system and deep breathing. Sleeping in carpet-free

rooms or covering carpets with plastic will solve this problem.

4. Very dusty pillow cases, blankets, and bed sheets create the same effect, as do books, newspapers, hanging clothes, and old dusty curtains. Make sure that your bedroom has good air quality.

5. Closed windows during the night greatly worsen air quality in the bedroom due to poor air circulation and absence of air ions that make air cleaner. Either keep windows open or, if it is too cold or too noisy outside, buy an air ionizer/purifier and keep it running through the night.

6. Skin rashes due to extreme skin sensitivity to fiber or chemicals. Try to find a hypoallergic tape or surgical paper tape. If rashes still a problem, you can sew together two clean socks making a circle. Wear it at night around your head so that to keep your jaw closed.

6. Reminders about nasal breathing during the day

Some older people may use mouth taping during the day, if they have memory problems or can forget about the role of nasal breathing due to other factors.

If you have family members or friendly co-workers and you want to prevent mouth-breathing during the day, tell them that your doctor (Artour Rakhimov, PhD) prescribed you nasal [breathing](#) 24/7. Ask them to pay attention to the way you breathe and remind you about your commitment to solve this problem.

Use stickers on your PC screen, doors, desks, etc. reminding you, "Breathe only through the nose". Keep a large mirror on your working desk so that you can see your face and the way you breathe through.

If you have children, promise them a small treat if they catch you breathing through the mouth.

Nasal breathing during physical exercise will be very important. Always slow down or take rest if you exercise so intensively that you get a strong urge to open your mouth. Your struggle will not be long. You should increase your morning body oxygenation up to 20 s or more. It is better to do walking, not running, if you have less than 20 seconds CP. Carefully study other lifestyle Modules to slow down your breathing into the safe zone and get busy with more advanced challenges in your life with easier breathing and more oxygen in the brain and body cells.

8. Your future health is in higher body oxygen due to slower breathing

If you want to achieve really good health, the crucial thing is to boost body oxygenation up to 50 or more seconds. The Buteyko Table of Health Zones explains the details. For specifics of the body oxygen test, visit this page: [body oxygen test](#).

Your complete program with free breathing exercises and lifestyle Modules can be found on web pages of NormalBreathing.com in Section Learning.

Success in your journey for better health, Dr. Artour Rakhimov (NormalBreathing.com).