

THE EPOCH TIMES



Focus is the result of hundreds of days of habit building, years of determination, and clarity of vision. (fizkes/Shutterstock)

WELLNESS

Healthy Breathing Makes You Brainier

How everyday breathing affects your ability to concentrate, and what to do about it

By [Patrick McKeown](#) | February 1, 2022 Updated: February 1, 2022

A **A**  Print

There's no denying that the past two years have presented challenges.

At work and in family life, we've all dealt with unprecedented situations. The COVID-19 pandemic has created an urgent need to address mental health issues due to a [global increase](#) in anxiety and depressive disorders. While mental well-being is a multifaceted issue, research out of Harvard shows us a simple truth: A wandering mind is an unhappy mind. In 2010, Daniel Gilbert and Matthew Killingsworth collected real-time data from an app known as Track Your Happiness. They concluded that "the ability to think about what is not happening is a cognitive achievement that comes at an emotional cost."

For many of us, the start of a new year is an opportunity to refocus on goals, work, and the quality of our lives. But what does the word "focus" mean to you? At its core, focus is the ability to be in the present, concentrating on what's happening now: To give attention to something for a sustained period, whether that's the task at hand or an overarching dream or ideal.

Focus is the result of hundreds of days of habit building, years of determination, and clarity of vision. On a purely practical level, focus requires concentration. From school through university and in the workplace, military, professional sports, and the arts, success and fulfillment depend on our ability to concentrate without distraction, to absorb and retain information, to stay alert. How many mistakes have we made during our day-to-day lives simply because we weren't paying attention?

The frustrating thing is that this lack of attentiveness isn't deliberate. Most people generally show up wanting to do their best. But we've gone through life with little to no guidance on how to concentrate. A good education may rely on mental focus, but it doesn't teach you how to achieve it. Modern life presents more distractions than we had to face even a generation ago. If we aren't careful, today's youngsters (and those of us who aren't so young) can spend hours scrolling aimlessly on their phones, increasing mind activity and reducing the ability to hold attention.

And then there's the problem of [breathing](#).

From a scientific perspective, if your breathing patterns are dysfunctional, your concentration will suffer. There are good reasons why contemplative traditions such as yoga equate steadiness of breath with a stillness of the mind. Breathing affects blood flow and oxygen delivery to the brain. It directly affects the balance of your nervous system, activating or moderating stress response. When your body is in a heightened state of stress, brain cells die, and as more primal survival mechanisms take over, your intelligence literally switches off.

When your physiology is out of whack, it's hard to turn things around using mindset, positive thinking, and raw effort.

It's therefore vital to approach focus from the bottom up. Begin with deep sleep, functional breathing, and becoming aware of your breath, body, and mind in that order. Then you'll have a clear path toward your goals. I like to illustrate this with a revised hierarchy of needs. Get a good night's sleep first, and the rest will follow.

How to Sleep Well

To achieve deep sleep, breathing must be slow, light, from the diaphragm, and through the nose. Sleep hygiene is important, but the elephant in the room is mouth breathing. When you breathe through an open mouth during sleep, areas of the brain that signal arousal are activated.

You're more likely to snore loudly or experience obstructive sleep apnea (OSA) and to be in a chronic state of stress. In the same way that fatigue causes thousands of road traffic accidents every year, it affects your ability to focus at work. In children, poor sleep contributes to behavioral problems. The very fact that sleep apnea is considered a risk factor for dementia indicates the effect it can have on the health of your brain.

[Dr. Christian Guilleminault](#), who was a leading researcher in the field of sleep medicine, said “elimination of oral breathing, i.e., restoration of nasal breathing during wake and sleep, may be the only valid end point when treating OSA.”

Breathing to Flow

The ultimate form of concentration is something called flow. Flow is the state in which you bring your full attention to a task and complete it with your utmost capability—often effortlessly. The right action happens by itself and time flies. In performance, it's the culmination of years of patient practice and the ability to get out of the way—to step back from the conscious mind and its “hows” and trust the work. In the words of Formula One racing driver Michael Schumacher: “You have to become one with the car.”

In flow, the mind is relaxed and alert at the same time. It's not the same as zoning out, and despite the common instruction to “follow your bliss,” it doesn't require that you feel some divine calling to whatever work you're doing. But it does demand the ability to immerse yourself in a task. And for that, you need to be able to concentrate.

If you have some experience being in flow, think back. Did you ever manage to get reliably into flow when you were exhausted or feeling unwell? If you were in a state of fight or flight, could you achieve flow? Physiologically, there are reasons why stage fright may have knocked you off your game. Why you couldn't get past the negative self-talk and into a flow state during that important presentation, despite hours of preparation.

The Biochemistry of Breath

As I discussed in my book, [“The Breathing Cure,”](#) studies involving music students have found that those who experience the worst performance nerves hyperventilate and breathe irregularly before a performance. Cold hands, shaking, and a sense of dissociation are all symptoms of low blood carbon dioxide caused by over-breathing. Hyperventilation is breathing that's fast, hard, and into the upper chest. It involves taking in too much air, and it trips your body into stress. This is why the instruction to “take a deep breath” to calm the nerves can be counterproductive.

Light, nasal breathing, on the other hand, stimulates the vagus nerve, a long cranial nerve that activates the parasympathetic nervous system (the body's rest and digest mode). When breathing is slow, during longer exhalations, the vagus nerve releases a neurotransmitter that slows the heart. Light breathing increases levels of carbon dioxide in the blood. Carbon dioxide opens blood vessels in the brain, improving circulation to your thinking machinery. It's also instrumental in the release of oxygen to organs and tissues, including your brain. The brain needs oxygen to think.

Remember, when breathing is harder and faster, the brain interprets that the body is in danger. No matter what ambitions you have for your mental acuity, when the body is under stress, the brain will prioritize survival, undermining executive functions such as planning and decision-making. It's why our good judgment goes out the window when we're stressed.

Breathing Better Decisions

Scientists have proven that [slow breathing can help us make better decisions](#). In one study, 56 students were randomly assigned either a two-minute breathing exercise involving a slow inhalation and an extended exhalation or to watch an “emotionally neutral” film.

They were then asked to perform a challenging 30-minute decision-making task with multiple choice answers. While the control group who had watched the film reported heightened stress, the breathing group had no uptick in stress. The people who completed the slow breathing task had 50 percent more correct answers than their counterparts as well—a significant improvement in decision-making ability.

The Nose Knows

I often get questions about slow breathing. Students are confused that when they slow their breath their lungs never seem full. This is correct. The key to slow breathing isn't to disproportionately increase the volume of air. Big breaths, even performed slowly, sacrifice your blood biochemistry and blow off too much vital carbon dioxide. Aim to keep your breathing slow, light, from the diaphragm, and through your nose.

Finally, a word for those who can't breathe through their nose. A blocked nose can feel like a real obstacle for many people, but this simple exercise will help. Unless you have a severe physical obstruction, in which case you might consider surgery, you should be able to breathe through your nose. In my experience, if you can breathe through your nose for one minute, you can do so for life. I've taught many people who were scheduled for nasal surgery to breathe through their nose without going under the knife.

This nose unblocking exercise was my own first introduction to breathing exercises in 1997. Try it. It works in as little as five minutes by increasing carbon dioxide in the blood and opening the nasal passages.

How to Unblock your Nose

Here are six steps to unblock your nose.

Sit upright on a straight-backed chair.

Allow your breathing to calm. Take a small breath (two seconds) in through your nose if you can and a small breath out (three seconds). If you're unable to breathe in through your nose, take a tiny sip of air in through the corner of your mouth.

Now pinch your nose to hold your breath. Keep your mouth closed.

Gently begin to nod your head or sway your body from side to side. Continue nodding or swaying until you feel that you can't hold your breath any longer. Maintain the breath-hold until you feel a relatively strong need for air. Don't push it until you're gasping, or your next breath in will be too hard and fast.

When you need to breathe in, let go of your nose and breathe gently through it. Breathe in and out with your mouth closed. When you first inhale, avoid taking a deep breath. Instead, calm your breathing as soon as possible by focusing on relaxation. Repeat to yourself, "relax and breathe less."

Repeat this exercise until you can breathe fully through your nose. If your nose doesn't become completely unblocked, wait for about a minute and perform the exercise again. At first, you may need to repeat the steps several times to clear your nose.

Once you have tried the exercise a few times, your nose will be unblocked. But if you continue to over breathe, you'll lose the additional carbon dioxide, and it will congest again. It's normal for the nose to block again until the underlying breathing starts to change. Each time your nose blocks, perform the exercise again. Even if you have a cold, this exercise is very effective. Over time and with regular practice of breathing exercises, your body will adapt to higher levels of carbon dioxide in your blood, and your nose will remain clear.

How to Improve Your Focus

If you feel like life is pulling you down or if your lack of focus is affecting work performance, and family life, begin paying attention to your breathing throughout the day. If your breathing is getting a little faster, bring attention to your breath and slow down the exhalation. Even 90 seconds of a slow and relaxed exhalation can help activate a relaxation response.

You'll find a much more detailed explanation of the connection between breathing and focus in my book, "[Atomic Focus](#)." You'll also find many exercises to train your brain to concentrate and boost your intuition and confidence. And remember, breathe light, slow, low, and through your nose. Your brain will thank you!