



FLORIDA BAR NEWS

STIMULATION HUNGER AND ITS CONNECTION TO THE PRACTICE OF MINDFULNESS

By Scott Rogers ▶ Special to the News ▶ Columns

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Have you ever held your breath and felt an overwhelming urge to take in air? In this month's column, we'll consider an interesting fact about the sensation referred to as "air hunger" and apply it to mind wandering and the discomfort or restlessness one might feel when practicing mindfulness. This discussion may make practicing mindfulness a little easier in the midst of mental chatter.

AIR HUNGER AND BREATHING

A common misconception about the urge to take a breath is that it is a result of the body's need for oxygen. Whether submerged under water, playing a wind instrument, or merely holding one's breath, it is the accumulation of carbon dioxide (CO₂), a by-product of oxygen metabolism, that triggers the urge to take a breath. If you were to examine your blood-oxygen levels at such moments (and you can, with today's wearable tech), you'd find that oxygen saturation in the blood is still riding high. If continued, oxygen levels would drop and health concerns would become real, but the urge-to-breathe warning sign triggered by the accumulation of CO₂, errs on the side of caution.

James Nestor points out in his book, *Breath: The New Science of a Lost Art*, just how desperate for air we can feel notwithstanding that we are not in any danger. He describes research where people inhale air with a hefty dose of CO₂ and, despite the fact that their oxygen levels are fine, panic and a desperate urge to breathe set in. This sensation occurs even when subjects are told and believe that they are in no danger of suffocating.

SHALLOW BREATHING AND CO₂

The shallow breathing and short periods of breath holding that can commonly occur throughout the day (e.g., when feeling stressed or very focused) results in a rise in CO₂ which, in turn, can elicit feelings of agitation, anxiety, and unease. Perhaps you know the feeling. It's easy to attribute these sensations to our stressful work, but it may have more to do with the buildup of CO₂. While CO₂ is often thought of as a

waste gas, CO₂ determines the bioavailability of oxygen to the tissues and the cells. This helps explain why acclimating to a rise in CO₂ can promote a range of health benefits including enhancing a feeling of relaxation and calm.

Many of today's breathwork training programs are aimed at increasing CO₂ tolerance, thereby reducing one's sensitivity to an increase in CO₂ levels. Hence, simple exercises like slowing down the breath or adjustments like breathing through the nose can go a long way toward feeling a greater sense of calm and increasing resilience amid stressful and focused periods. More intense practices like the popular Wim Hof Method take this to another level altogether. If you're interested in learning more, you can review [previous columns](#) or check out books, podcasts, and YouTube videos exploring the work of Patrick McKeown (The Oxygen Advantage), Richard Brown and Patricia Gerbarg (the Healing Power of the Breath), Dan Brule (Just Breathe), James Nestor (Breathe), Dennis Lewis (Free Your Breath, Free Your Life), Danny Penman (The Art of Breathing), Anders Olsson (Conscious Breathing), and Stephen Elliott (Coherent Breathing). It is advisable to check with a medical professional should you wish to engage in intense breathwork.

As a basic understanding of oxygen metabolism is but the foundation for today's column, let's turn our attention from *Air Hunger* to what we can call *Stimulation Hunger* and its connection to the practice of mindfulness.

STIMULATION HUNGER

It is noteworthy that both breathing and paying attention operate automatically (thank goodness) *and* can be deliberately engaged. For example, while at this moment you are likely breathing without giving it any thought, you can shift gears and choose when to take your next breath, how deep it will be, and when to exhale. If you wait on the exhale, you can choose how long to hold it, with a likely upper limit of about a minute. And, as an experiment (not necessary to do), if you hold the breath for as long as you can, *knowing that the urge for air is premature* may allow you to more comfortably extend the holding period a little longer.

Similarly, at this moment your attention is on these words. A few moments ago it may have wandered off. As with breathing, you can commandeer your attention. For example, you can turn your attention to your left hand and zero in on your fingernails. You can also recall what you had for dinner last night or give

thought to what you'll eat tonight. As such, you can intentionally direct your attention to the external world (your hand) or to the internal (past memory and imagined future) as you may have just done — and as will take place on auto-pilot all day long.

Stimulation Hunger is involved in the familiar experience of having the mind spontaneously take flight while focusing attention on an object, like a book, food, an idea or to what someone is saying. Regardless of a desire to avoid mind wandering, attention will nonetheless dart to past and future and will scan one's environment all day long. This is what the mind does. So pervasive is this mental activity that researchers have sought to quantify it and results suggest the mind wanders about 50% of the time.

PRACTICING MINDFULNESS, THE BUILDUP OF MENTAL CO₂, AND RESILIENCE

Just as we can learn to better tolerate the accumulation of CO₂ in the body, and, in doing so, access relaxed states and become more resilient in the face of this natural and necessary process, we can also learn to tolerate the accumulating impulse to divert attention and become more resilient in the face of mind wandering. We may even be able to find a calm amid a storm of mental chatter.

Stimulation Hunger is a perceived need for greater stimulation and the sometimes frantic (and destructive) effort to seek it out. Research published in the journal [Science](#) illustrates this in a rather benign circumstance. Participants administered a mild shock were asked how much money they would need to be paid to receive the shock. After completing that part of the study, the researcher left — ostensibly, to get something — which justified their leaving the participants for about 15 minutes — alone with their thoughts . . . and the shocking device. Within minutes many began to self-inflict the electric shock — even though they had just indicated how much money it would take to receive one. Stimulation hunger!

If you've [practiced mindfulness](#), you surely know the busy mind that frequently persists after you begin practice and can hijack attention leading to feelings of restlessness and emotional agitation. Resilience in the face of a busy mind means being better able to maintain an observational (or witnessing) state of mind that is aware of unbidden mental activity without automatically getting caught up in the content. It involves feeling the hunger for stimulation and knowing that this urge is normal and tolerable. In the middle of a mindfulness practice, this translates into observing thoughts like “I wonder what time it is?” or “I'm no good at this?” and experiencing agitated feelings like boredom, restlessness, frustration, and mild

angst as merely passing mental phenomena without giving into the gratuitous impulse, look at your watch, or get up to do something else. In time and with practice, one becomes increasingly adept at maintaining the “witnessing” state of mind, less likely to succumb to every passing and transient thought, feeling, and impulse.

So, the next time you sit down to practice a mindfulness meditation (or even just to sit and relax or reflect), know that the recurring impulse to “do” something else is an understandable urge given our primal wiring and conditioning, and can be honored without succumbing (or succumbing as quickly) to its pull. See what it is like to stay put and to witness the recurring build-up of mental chatter, cresting and falling away. Unlike air hunger, which if prolonged needs to be sated, tolerating (and even befriending) stimulation hunger remains perfectly safe, even interesting.

And should you feel a bit restless and scattered at times, well . . . breathe.



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