

Breathing for Mental Clarity, Energy, and Sleep

Presenter: Puneeta Tandon, MD, MSC, University of Alberta Department of Medicine

In a session as part of the Health and Wellness Track at the PSC Partners Conference, Dr. Puneeta Tandon explored how intentional breathing practices can complement Western medicine and serve as a powerful tool for holistic health. Dr. Tandon emphasized that while breathing is an autonomic function, it is the one we can actively control to manage our physical and mental state.

Your Body's "Gas and Brake"

Dr. Tandon explained that many of us live in a "sympathetically over-driven state"—a chronic state of high alert characterized by shallow, rapid breathing. This state is linked to anxiety, depression, and even gut motility disorders. This "fight or flight" mode is governed by the sympathetic nervous system.

The antidote is the parasympathetic nervous system, our "rest and relax" mode, which promotes healing, restoration, and digestion. Breathing is the "gas and brake" that allows us to shift between these two systems. By changing our breath, we can actively tell our body that it is safe.

Three Pillars of Optimal Breathing

Dr. Tandon outlined three fundamental shifts to move from a state of stress to one of healing.

First is the shift to **nasal breathing**. Breathing through the nose filters and humidifies the air, but more importantly, our sinuses produce nitric oxide. This chemical widens blood vessels and allows for more effective oxygen exchange in the lungs.

Second is breathing **low into the diaphragm**. Many people are "chest breathers," which is a shallow, inefficient pattern. True diaphragmatic or "belly" breathing involves the diaphragm muscle flattening on the inhale, pushing the belly out. This deep breathing directly stimulates the vagus nerve, the main highway of the parasympathetic system, sending calming signals to the entire body.

Third is breathing **slow**, with a particular focus on making the exhale longer than the inhale. This practice is a direct activator of the "rest and relax" response.



Posture and Practical Tools

Our ability to breathe well is directly linked to our posture. Dr. Tandon noted that a collapsed, slouched posture—common when using phones or computers—physically prevents deep breathing. Studies have even shown that this posture makes it easier to recall negative memories, while an upright "power pose" does the opposite.

For moments of acute stress, Dr. Tandon taught the **Physiologic Sigh**. This is one of the fastest ways to shift your nervous system. It involves a full inhale through the nose, followed by a second, shorter "top-up" inhale, and then a long, complete exhale through the mouth. This practice can immediately shift your state and help you get out of a strong negative emotion.

For focused calm, she recommended **Box Breathing**, a technique used by Navy SEALs. This involves breathing in a balanced, square pattern: inhale for a count of four, hold for four, exhale for four, and hold for four.

Dr. Tandon concluded by reinforcing that with over 20,000 breaths taken each day, every single one is an opportunity to change our state and move toward a healthier, more optimal system.