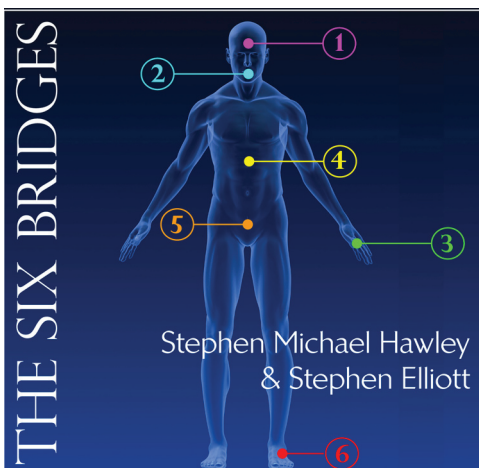


Hello all,

Happy New Year and welcome to the January 2010 **COHERENCE Newsletter!** I have many interesting topics in mind to share with you this year. We're going to celebrate the new year by starting off with a discussion of balloons and how we can use them to promote *diaphragm range* - which diminishes over time if we are not deliberate about maintaining it. *Why this happens is in my view, one of the most important questions in health today.* This being said, I'll offer you a simple exercise to cultivate and maintain healthful range. Surprisingly (*or not?*), as we practice this exercise, our psychophysiology gradually changes. Its a very subtle change that we only realize is happening after a few days. Nevertheless, the change is very real. In general, breathing becomes deeper, easier, and more natural.



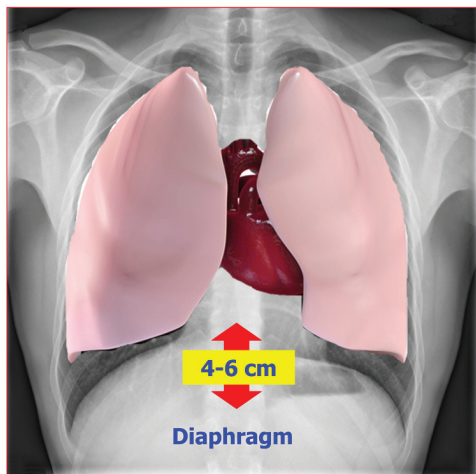
I'm also very pleased to announce a new CD that's been under development for a long time, *Six Bridges - The Exercise*. As you may know, there are two primary components to the Coherent Breathing "system": 1) resonant breathing at a specific frequency with appropriate depth, and 2) consciously relaxing "bridges". When frequency, depth, and relaxation of bridges are combined, it results in maximal variability of both Valsalva Wave and heart rate (HRV). One of the ways it does this is by facilitating relaxation of low threshold muscle motor units including those of the arterial system, thereby promoting increased blood flow throughout the body with every cycle of respiration. This wave is observable with **Valsalva Wave Pro** wherever we have access to the capillary circulation or a significant artery or vein. *The Six Bridges* is the guided progressive relaxation method to facilitate this deep *internal* relaxation. Regular practice of it allows us to shed subconscious tension that inhibits both body and mind. While the compact disc is still in production, the entire CD is already available in .mp3 download form. Introductory tracks are free of charge. Click on the image to find out more!



The diaphragm, a surprisingly large and powerful muscle, is hidden from our view. And for this reason, we tend to have little awareness of its existence. In this regard, its much like our other internal organs, out of sight - out of mind. Not unlike other internal organs, it plays a vitally important role in keeping us alive - and in the quality of our health and well-being. I believe we're beginning to understand its broader "thoracic" importance, where it plays a crucial role in the circulatory process. I'm confident that it plays an equally important part relative to abdominal functions, where it is known that the enteric nervous system

The diaphragm, a surprisingly large and powerful muscle, is hidden from our view. And for this reason, we tend to have little awareness of its existence. In this regard, its much like our other internal organs, out of sight - out of mind. Not unlike other internal organs, it plays a vitally important role in keeping us alive - and in the quality of our health and well-being. I believe we're beginning to understand its broader "thoracic" importance, where it plays a crucial role in the circulatory process. I'm confident that it plays an equally important part relative to abdominal functions, where it is known that the enteric nervous system

works in synchrony with diaphragmatic action, becoming active as the diaphragm moves up (exhalation) and becoming inactive as the diaphragm moves down (inhalation). I'm also very interested in the diaphragm's effect on the mesenteric circulation, but we'll save that discussion for a future newsletter.



In a typical adult, the diaphragm has ~10 centimeters of range. This is the distance the diaphragm is capable of moving from its bottommost position to its topmost position or visa versa. Most adults use about 1 centimeter of this range during normal daily breathing. I like to say that this is enough diaphragm movement to survive, i.e. not suffocate, but its not enough movement for us to thrive. In *Coherent Breathing - The Definitive Method* we offer that the goal is learning to breathe with 40-60% of diaphragm range, i.e. 4-6 centimeters of movement. When combined with relaxation, this yields about 2% variability in capillary blood volume (ear or finger) and heart rate variability of approximately 20-30 beats.

But Coherent Breathing alone does not allow us to exercise the bounds of diaphragm range which is important. This is where balloons come in! (I use "helium standard" balloons for consistency). Here is the exercise:



- 1) Inhale as deeply as you can without strain, then add three short inhaling "puffs". These serve to lower the diaphragm to its bottommost position. For some reason short puffs make it easier to extend the diaphragm's reach. Do this very gently.
- 2) Now, blow into the balloon, exhaling fully and emptying the lungs completely. Be sure to use the diaphragm to push the air - not the mouth. Again, at the end of each exhalation add three short puffs. This serves to raise the diaphragm to its topmost position. Again, this should be done very gently.
- 3) Continue the process until the balloon is tight and fully inflated, after which you can let go of it and allow all the air to escape.

Try this 3 times a day, once in the morning, once at mid-day, and once in the evening. I'm confident you'll find it makes a difference - for the better. Please let me know.

Thank you for your interest and best wishes For 2010!

Stephen Elliott, COHERENCE