



Hello all,

Welcome to *Swan & Stone, Volume 1, Issue 8, The Physiology Of Resonance*. This issue includes a high resolution wall chart developed for COHERENCE Practitioners. It can be printed in 8.5 x 11 or as a wall chart in Architectural A, D, or E size. [Click here to download the full size chart. Glossy paper works best.](#)

The chart captures the state of the art understanding of the thing we refer to as “Resonant Breathing”. It’s interesting to note that the very definition of “Resonant Breathing” relates to circulatory phenomena, specifics that really describe “circulatory resonance”, i.e., the moment of circulatory optimality. I’ve argued for a very long time now that *breathing is a circulatory function*: a) diaphragm movement literally pumps the blood, b) in the process, gas is exchanged.

Seeing “breathing” in this way, makes it utterly and completely obvious why breathing well is supercritical to health, well-being, performance, and longevity, i.e. when breathing is productive, it hydrates, nourishes, cleans, and otherwise maintains all of the cells in the body. It accomplishes this by facilitating variation in pressure and flow that are experienced throughout the entirety of the body, head to toe, keeping the 42 liters of fluid we carry in our bodies, circulating. 28 liters of this fluid (66%) exists inside cells and it is fundamentally a function of circulation to maintain the viability of this fluid. The fact of the matter is this: When we are not breathing with relative depth and regularity there is no wave action in the circulation. There is just the steady beat of the heart. When breathing is resonant, the amplitude of the breathing induced variation in blood density as detected by Valsalva Wave Pro is approximately equal to that of the heartbeat. [\[Please note that the Beta release of VWave Pro 2.0 is presently available at 50% discount.\]](#) This is a profound

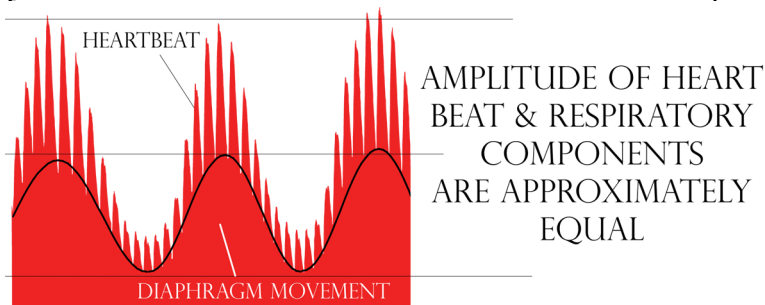


Figure 2: The Complex Valsalva Wave At Earlobe

point in that it indicates that the forces involved in moving the blood during resonant breathing roughly double, but note that the breathing induced wave is highly sinusoidal and half of it is negative going. This negative going period is the inhalatory phase, i.e. when inhalation occurs, blood volume in the capillary circulation falls. This is because the negative going pressure in the thoracic cavity is drawing venous blood from the capillary circulation through the venous tree and right heart into the lungs. The diaphragm is generating this force, not the right heart. When the diaphragm is not performing this function, the heart must take on the role of pushing blood through the circulation, thereby resulting in systemic blood stagnation and excessive pressure. I hypothesize that this is the root cause of essential hypertension, the high blood pressure condition affecting 1 of 3 adults but that “has no known cause”.

Stephen Elliott, President, COHERENCE

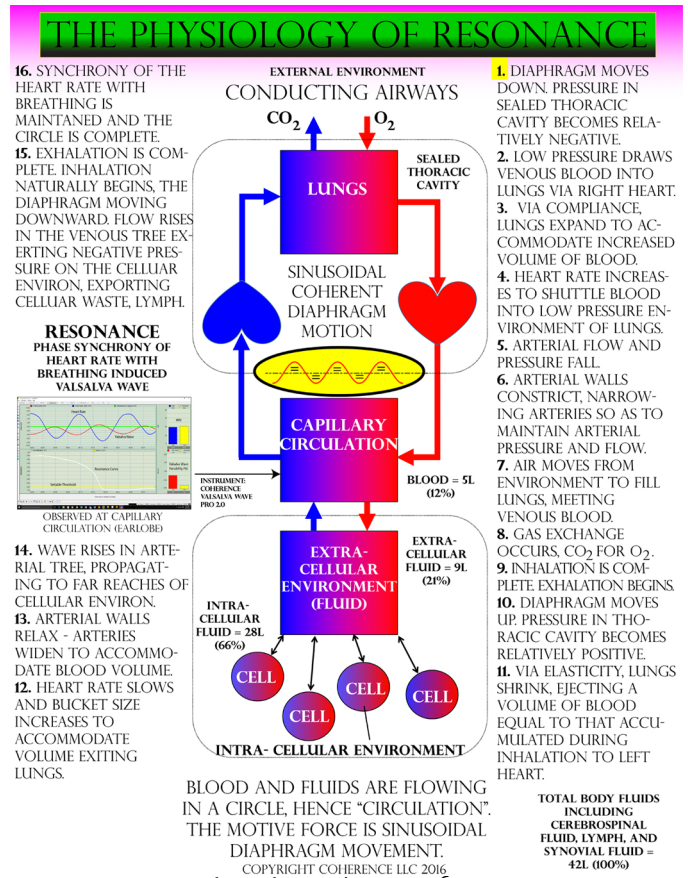


Figure 1: The Physiology Of Resonance

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