

Welcome to Coherent Breathing, Volume 2, Issue 3, July 2020: Let's Eliminate The #1 Underlying Health Condition: Essential Hypertension! The CDC, Anthony Fauci being the voice of reason, is urging every American to accept personal responsibility for keeping themselves and others safe via mask wearing, avoiding crowded places, and general social distancing. However, we're not hearing any guidance about how to maximize one's own health and immunity. This is typical of our CDC and NIH, where the entire focus is on disease, not health. Hypertension tops the list of underlying health conditions, relative to COVID risk, with essential hypertension constituting 90% of cases both in the US and the industrialized world. In the US it affects 25% of the adult population and 63% of those over 60, with prevalence in children on the rise, so we're talking about a number close to 100 million people in the US alone. Essential hypertension is "ideopathic", excessive pressure with no known cause. This is poppycock and can easily be proven wrong.

*The important thing to understand is that hypertension means that blood is not flowing freely in the circulatory system. (It is stagnant).* Why not? Because it is impeded. When flow is impeded the autonomic nervous system demands more flow and attempts to realize it by increasing arterial pressure. Modern medicine is focused on addressing the problem of excessive arterial pressure via chemotherapy, but as it relates to *essential hypertension* arterial pressure is the symptom, not the cause. Blood & The cause is inadequate venous blood flow due to the failure to inhale

Figure 1: The Circulatory System



Blood & Fluids Flow In A Circle Unimpeded.

with significant depth. Because it is the job of the diaphragm and lungs to keep venous blood flowing, when we fail to inhale with depth, capillary and venous blood languish and arterial blood has nowhere to go. Referring specifically to "essential hypertension", a single deep inhalation will cause arterial pressure to drop. Why? Because when the diaphragm moves down, it generates negative pressure in the chest, compelling venous blood to flow from the extremities through the vena cava, right heart, and into the lungs. Here, we're talking about moving half a liter or more with a single deep inhalation. This is the purpose of the <u>Spirometer</u>, a medical device that supports "inhalation exercise" to make sure the arterioles of the lungs are clear of clots, but ultimately to make sure that venous blood is flowing healthily. It isn't possible for the immune system to function properly, much less optimally when blood and fluids are stagnant and oxygen is low. This is what makes hypertension a critical "underlying health condition".

Following this reasoning, I posit that failure to breathe with adequate depth (where depth and frequency are two sides of the same coin) is the root cause of essential hypertension and is a "condition" that has the potential to set up every single human being for poor health and a slippery slope of declining health over time, ultimately effecting every cell of every organ, including the brain, resulting in this *high blood pressure with no known etiology*. *This is a gross lie by omission and the failure to inform is killing people even before COVID-19.* Sub-optimal breathing is the root cause of essential hypertension – simple as that. (This is my position on the matter.)

A decade or so ago I debated this with the head of the NIH Heart & Lung division, with the final reply being, that "breathing is under consideration as a causative factor". However, we can clearly see that it isn't. Because *essential hypertension* generates \$100B in annual "health care" revenue in the US alone, due to high blood pressure and its related deleterious health consequences, and because it drives all matter of pharmaceutical sales, we won't be hearing recommendations from our leading health agencies to adopt healthful breathing habits. The medical establishment steers away from anything to do with conscious breathing, and in so doing relegates breathing to the unconscious, the autonomic. Of course, the problem with this is that in the world we live in, when left on its own, automatic breathing spirals completely out of control such that the typical adult breathes at a rate between 17 and 19 breaths per minute with insignificant depth, this resulting in circulatory pathology affecting much of the public. This is even more true for those that are under a high stress burden, a growing percentage of America. I posit that this "blood stagnation" due to suboptimal breathing does systemic harm to health and immune function at a cellular level, including suboptimal fluid exchange, oxygenization, hydration, nutrition, and immunity. *Look at what essential hypertension and its myriad consequence is costing (US) now.* 

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My thesis, about which I am very confident, is that the diaphragm and nervous system control thereof, evolved in land dwelling vertebrate life with erectness, the reason for this being that blood must flow upward against gravity. The heart serves us pretty well when we are horizontal because gravity is normalized along the length of the body, but not when we are erect. The heart will keep us alive when we are erect but it does not enable us to thrive. The heart alone does not support adequate circulation to sustain human health, not in the moment and certainly not over decades. The failure to breathe with significant depth is the root cause of many diseases both mental and physical due to suboptimal circulation. Here I believe there to be a conundrum, which I've written about previously, this being that when one is not breathing with significant depth (and rhythmicity) "one seems not to be open to the possibility" of even trying it. For



Figure 2: Systolic And Diastolic Pressures In Trained Breather. (Click To Enlarge)

## this reason, it is often the case that one comes to experience and understand the value of breathing, only when we are in crisis and seek intervention, but without a crisis it often doesn't happen. *Here I offer that we need to see COVID-19 as the crisis* and use this opportunity to bring essential hypertension to an end. This can only happen by accepting personal responsibility to end it – by training oneself to breathe, and hopefully by compelling others to do so. All humankind can benefit.

I think COVID has shed some light on this quandary, this being that when one's blood oxygen is low, one doesn't even know that they are sick, the nervous system doesn't seem to respond "normally". So, I think it is likely that we will find that a few percentage points in blood oxygen separates those who breathe with depth and rhythmicity from those who don't, and that these few percentage points in blood oxygen make a huge difference in how the nervous system functions, both conscious and subconscious aspects. Couple increased blood oxygen level (~95% and above) with the fact that blood, gases, nutrients, and hydration are carried to every cell by a wave throughout the body – but specifically to the brain – with every breath, and here we have a potential system explanation of an anatomical arrangement that has served and continues to serve an evolutionary purpose, *optimal* functioning of body and mind when we are erect. An acute care nurse in an ICU once told me that B.F. Skinner, with whom she had studied said, "It is better to sit than to stand, and better to lie down than to sit.", where we were discussing the theory of gravity on the circulation, something that she said Skinner was keenly aware of.

So, I recommend learning to breathe with depth and rhythmicity but doing it in a safe space and within CDC guidelines, where the goal is first to learn how to breathe in this manner, but ultimately making it one's normal breathing modus operandi. If one has symptoms of hypertension, consult your physician before beginning this practice. Once one begins, be sure to assess your blood pressure before and after breathing practice. Prove it to yourself.

Nominal normal resting blood pressure is 120mmHg/80mmHg. *Elevated* blood pressure is considered anything over this.

Stage 1 hypertension is defined as systolic pressure of 130-139mmHg and/or diastolic pressure between 80-90mmHg.

Stage 2 is defined as systolic pressure greater than 140mmHg and/or diastolic pressure greater than 90mmHg.

(Note that the nominal normal of 120/80mmHg is derived from a population that is not breathing slowly and deeply.) Figure 2 presents systolic and diastolic pressures of a trained breather breathing slowly, deeply, and rhythmically.

Obtain a pulse oximeter and use it daily. Try and keep blood oxygen levels at 95% and above as this is understood to confer heightened immunity. Breathing with depth and rhythmicity ultimately requires increased hydration, this thought to be due to increased fluid exchange that occurs between the blood stream and the aqueous cellular environment. The same demand for increased fluids occurs during exercise for the same reasons. The diaphragm is a large strong muscle that requires energy.

Erik Peper, Ph.D., has several excellent blogs on the topic of breathing safely, including the importance of breathing through the nose vs. mouth, as a job of the nose is to filter incoming air, both physically and immunologically. It also helps generate wave action in the circulation, as the nasal turbinates are under subtle autonomic control so as to establish optimal pressure in the lungs.

I implore my readers to spread this message far and wide! FREE resources can be found on The Coherent Breathing Channel.

Stephen Elliott, President, COHERENCE

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