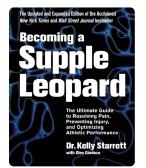
What is Tactical Breathing?

When I graduated Probationary Fire Fighter School eleven years ago, I considered myself lucky to be assigned to a fire house where many of the members had twenty plus years on the job. This is a job that values experience and places a premium on the knowledge of senior firefighters and officers. It's said that our training begins in Proble School, but our education truly begins when we get to the firehouse. I mention this because these members, while teaching me about our company SOPs, about the daily routines of firehouse life, and the best practices at emergencies, used a specific phrase, before or after our drills, that stood out to me. They would tell me: "Slow down, take a breath, do a scene size up." At the time, I didn't understand the complexity of this seemingly simple phrase, or the importance of this specific sequencing. Not until I delved into the world of meditation and breathing did I start seeing this for what it was: a recipe for success under stressful conditions. There are 3 major points I wish to cover in this article; Mindset, Posture & Breathing.

Elite-level military personnel and top-level athletes in any sport will tell you that a clear, confident mindset is an important key to their success. Legendary boxing trainer Ray Arcel, who trained 20 World Champions from 1920 - 1980, would constantly reinforce to his fighters that they were the soul-keepers to their destiny, they were the boss. "It's all in your mind",

he would tell them. In order to be successful at any task, whether big or small, you must refine your outlook so that you may tether your thoughts to a more positive ethos. Questions that you must ask yourself: What are your motives? What is your purpose? Whatever your answers are to these questions, your actions and thoughts become interlocked components that lead you to success.

Arnold Schwarzenegger's demeanor, in his prime, was misconstrued as pompous and vain. He later on divulged in interviews and books that the reason he walked in this manner, and maintained a god-like posture was because he cared about his body. His body was his livelihood. His posture alleviated shoulder and back pain and he kept his spine in neutral alignment. Research from Harvard University revealed that striking a "Power Pose" - aka "Superman pose" or an "Arnold Schwarzenegger pose" - leads to spikes in



testosterone production and lower levels of cortisol (stress hormone). Higher levels of testosterone lead to increased feelings of confidence, researchers state. By lowering cortisol, we decrease anxiety and improve our ability to deal with stress. Dr. Kelly Starrett, a physical therapist and Crossfit coach, talks in great detail about neutral spinal position and proper posture in his book, *Becoming a Supple Leopard*. As firefighters, no matter what operational position we are assigned on the fire ground, we carry weight in excess of sixty-six pounds extra on our backs. Now, add poor posture (for example "flexion

spinal fault") to the mix, it leads to poor breathing mechanics chronic shoulder, back and/or knee pain, and eventually may lead

to serious injuries. Fixing the natural position should be the new daily





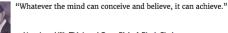
This picture was taken before the PSS was added to standard equipment



The P.S.S. With harness adds an extra 7lbs to a fire fighters gear.

goal. This is also the current mission statement at the Probationary Firefighter School at the Fire Academy in New York City. "Head up, chest up; shoulders back and down." This neutral alignment allows for mid-line stabilization and organization which sets someone up perfectly - not only to operate safely carrying a load on their back but also aids in the transition to becoming something called a Horizontal Breather.

A Braced Neutral Spine: The Key to Mo ing Safely and Effectively

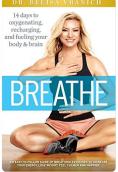




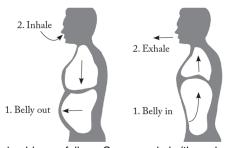
We are all inadvertently vertical breathers, meaning we breathe with our chest and shoulders. When we are fatigued we regress back to the tripod position – think hands on knees, head hanging low - to aid us in getting a deeper breath, or we place our hands on our heads, giving us the illusion of greater chest expansion and that of taking a deeper breath. Imagine this ineffective position with the approximate sixty-six added pounds on our backs, and having the "flexion spinal fault" as our day to day normal posture, and you can see how this leads to a taxing of our biochemical adaptors. As firefighters we are typically Type A personalities, and as such, our bodies have been compensating for our poor posture and pushing through the "pain" for decades. One can begin to understand why nagging shoulder, back and/or knee pain never seems to go away, and excuses are based solely on age. "I'm getting too old for this..."

First we must fix our posture and make it a priority to catch ourselves once we default back to a flexed back. Make this a primary focus of your mindset and day-to-day rituals. Once we fix this simple detail, we can move on to becoming a horizontal breather.

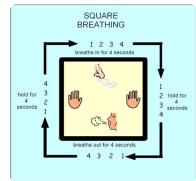
Dr. Belisa Vranich wrote a great book titled "Breathe". She goes into detail about how to fix your breathing and how to make the change from vertical breathing (breathing with your shoulders



your breathing and how to make the change from and chest) to horizontal breathing (belly breathing). For your first few practice sessions, you should find a place where you can have some time alone for at least five to ten minutes. Set a stop watch for time tracking and either lie down on the ground or sit upright in a chair. Place your right hand over your belly button and your left hand on your chest. On your inhale (through your nose) pretend like you are Santa Claus and expand your belly. Your right hand should be the only hand moving during the



initial inhale. Once you fill your lungs, your left hand should soon follow. On your exhale (through your mouth) pretend like you are at the beach and an attractive individual walks by and you want to suck in your stomach. Inhale to the big belly of Santa Claus, exhale to where you are showing off those well-earned abs. The goal of this breathing



exercise is to practice outside of a stressful environment; the premise being that when placed in a stressful environment, you will revert to muscle memory to compensate for the physiological and psychological effects created by those stressors. Without this practice, the tactical breath is rendered useless. I recommend practicing twice a day for at least 5 to 10 minutes each session. Practice upon waking in the morning, or before going to bed at night; practice in your car before walking into work or coming home to your family. The point is to make time for it. This is a compound exercise, much like any other exercise of muscle groups trained in the gym setting. Breathing exercises are a daily part of tactical athletes and military personnel's training regimen. To obtain the full effect of "tactical breathing", you must put in practice, effort, and training.

Once you have practiced belly breathing, I recommend using "Square Breathing" or 'Box Breathing" to gauge the breath within the 5 to 10 minutes of

practice. The same guidelines apply with hand placement until you become comfortable with belly breathing. During square breathing practice you will add a number value count to the inhale and the exhale with a hold of the breath. This will allow you to concentrate on the breathing and help your mind stay focused. Inhale (big belly) through your nose for a count of 4 seconds. Hold that inhale breath for a 4 count. Exhale (hide your belly) for a 4 count, hold the exhale breath for a 4 count; repeat this box cycle for 5 to 10 minutes. You may keep your eyes open or closed. You may sit, lie down or stand. The comfort is yours as long as you get the practice in. Another tactic, and great way to utilize this tactical breath, is to do any exercise that taxes you or makes you feel gassed (i.e, burpees, kettlebell swings or sprints) while performing what is called "The Breathing Ladder", created by fitness instructor Rob Lawerence. Decide before the workout that you are going to rest from set to set for a predetermined amount of breaths (i.e., 5, 10, 30 or however many in between). This will also help you build endurance.

The ultimate goal is to use this tactical breath to reset oneself in any stressful environment. Mindset, posture and breathing exercises aids in the advancement of tactical breathing. These 3 elements require practice and consistency. Once you are thrust into a stressful environment, you can take that second to pause; take a "tactical breath" to re-center and reset yourself, and then you will be able to react responsibly to any situation.

References

Anderson, D. (1991). In the Corner. New York, New York: William & Morrow Co.

Cuddy, Amy J.C., Caroline A. Wilmuth, and Dana R. Carney. "The. Benefit of Power Posing Before a High- Stakes Social Evaluation." Harvard Business School Working Paper, No. 13-027, September. 2012 ...

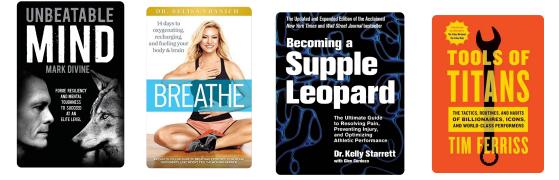
Ferriss, T. (2017) Tools of Titans. New York, NY: Houghton Mifflin Harcourt

Schwarzenegger, A. (1977). Arnold: Developing a Mr. Universe Physique. Schwarzenegger.

Starrett, K., Cordoza, G. (2015) Becoming a Supple Leopard. Las Vegas, NV: Victory Bell Publishing Inc.

Vranich, B. (2014) BREATHE. New York, NY: Breathing Class Press.

Recommended Books



Bio

FF Felix Manjarrez assigned to Engine 73 in 2006. Currently detailed to the Health & Fitness Unit at the Fire Academy, Randall's Island(2015). Newly elected Hispanic Society Sergeant at Arms 2017-2019. Peer Fitness ACE Certified, Master Fitness Trainer - US Army Certified, Crossfit Level 1 Holder, Movement & Mobility Certified, Freestyle Movement & Gymnastics Certified.

