Breath AS Medicine: The Diaphragm & Functional Movement



Presented Ed Harrold

Author, Leadership Coach and Educator, Expert in the Science of Breathwork

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Webinar Details

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- A recording of the webinar will be made available for future viewing to all MFN members and webinar registrants.



About the Presenter

Ed Harrold is an author, inspirational leader, public speaker, coach and educator. Ed's mastery in the science of mindful breathing has guided him to apply conscious breathing practices in corporate performance coaching, fitness & athletic training, healthcare trainings, stress reduction and overall health and well-being. Ed is the author of two books, *Life With Breath* and the newly released, *BodyMindBusiness: The Business Of BE'ing Within.*

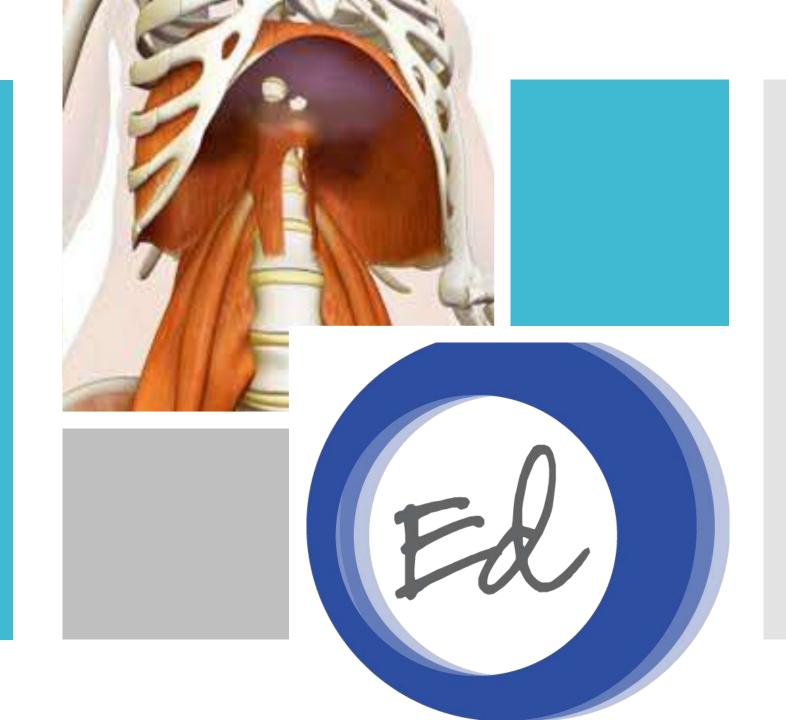


Today, Ed blends the fields of neuroscience and the wisdom of contemplative traditions into effective strategies to improve well-being in Corporate America, Healthcare, athletic performance and individual health. Ed's fluency in mindfulness-based strategies combined with the belief in the human potential gives him the depth and understanding to meet individuals and group needs across industries and platforms.

Ed is a contributing health & wellness editor for Huffington Post, Thrive Global, MindBodyGreen & PTOnTheNet. Ed's Breath AS Medicine Training offers CE in the healthcare, wellness coaching, fitness & athletic training sectors. Ed is a Faculty Member of the Medical Wellness Association.

Discover YOUR "life with breath"

Breath AS Medicine: The Diaphragm And Functional Movement



Dysfunctional Diaphragmatic Breathing

- Improper breathing
 - Mechanics
 - Length, depth, pace
 - Mouth breathing/shallow breathing vs. nasal diaphragmatic
- Chronic Illness Can be found contributing to and/or a result of:
 - Stress
 - Heart Disease
 - Improper Biomechanics leading to injury and neck, back and shoulder pain
 - Upper Respiratory Disease (including sleep disorders)
 - Craniofacial development & mood disorders in children
 - Cancer
 - Auto-Immune Disease
 - Gastrointestinal Disorders
 - Mental Health
 - Performance & Productivity

Proper Nasal Diaphragmatic Breathing

- Diaphragm Muscle
 Visualization
 Guided Meditation
- Nitric Oxide
- Activates CNS & Circulatory
- Activates Cranial Nerves
- Sun Breath

Shoulders Don't Move

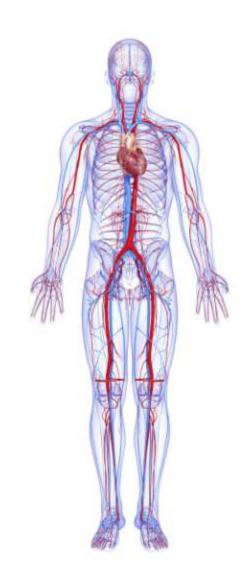


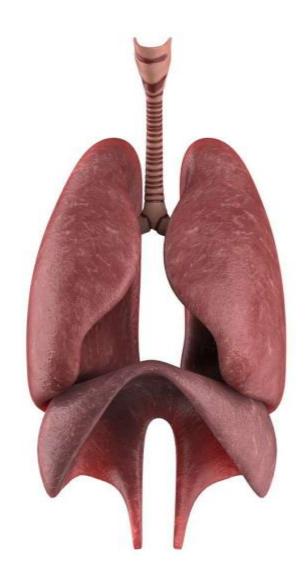
Inhale begins in belly, then expand ribs and upper chest

Cranial Facial Nerves

Intention vs. "Intension"

- Upper Airway
- Central Airway
- Lower Airway



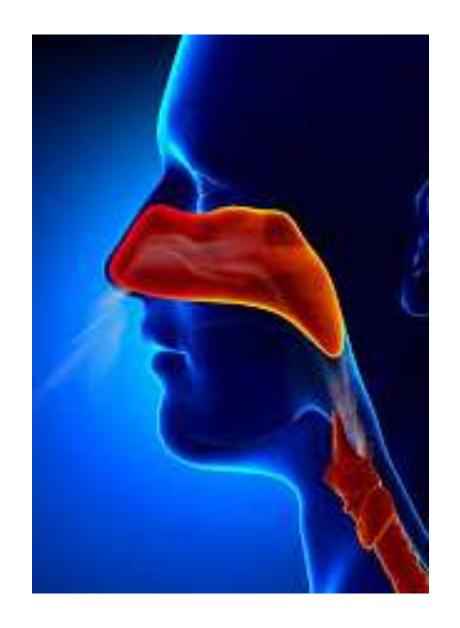


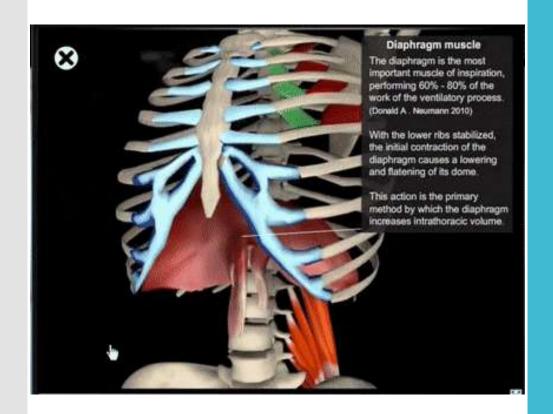
Breathing & The Diaphragm Muscle

- Breathing is the mental + physical act of bringing air in and out of the lungs influencing our biomechanics.
- Core stabilization of pelvic bowl and low back alignment (the basis for ALL patterns of movement)
- Creates more space + energy from floating ribs to hips
- Connects upper and lower body via ligaments and fascia
- Only with good posture can be properly engage in Diaphragmatic breathing AND only with proper Diaphragmatic breathing do we enjoy good posture
- Mediates action of autonomic and enteric nervous systems
- Cross-patterning movement (crawling, walking, running)

Victory/ Ocean Sounding Breath

- Strengthen inspiratory & expiratory muscles
- Apply to improve length, depth & pace (LDP) of breathing patterns
- Remove toxins and impurities
- Focuses the mind inward
- Mindfulness Stillness/Mindful Movement
- Activates vagus nerve
- Great for any throat disorders/ thyroid





Optimal Diaphragmatic Breathing

- Respiration is the physiological and biochemical response of breathing that responds to the length, depth and pace of our breathing.
- Vagus Nerve runs through Diaphragm (PNS)
- Phrenic Nerve runs through Diaphragm (motor/sensory)
- Length, depth & pace influence:
 - Heart rates/Blood pressure/Neurochemistry/Fat metabolism
 - Autonomic Nervous System
 - Upper lobes of lungs sympathetic nerve endings
 - Lower lobes of lungs parasympathetic nerve endings
- Breathing rates and patterns: Average is 12 15 breaths/minute (sympathetic response). Ideal is 10 12/minute (parasympathetic response).

The Breath Mechanics of Nostril Cycles 101

The inhale is sympathetic.
The inhale gains
information on our
surroundings.

The exhale is parasympathetic. The exhale is the action based on the information.

Mouth breathing/shallow breathing is sympathetic

Nasal diaphragmation breathing is parasympathetic

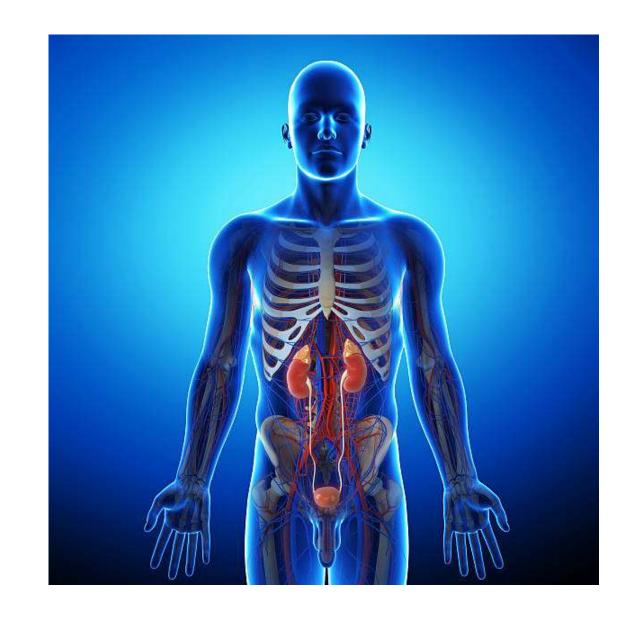
The left nostril is parasympathetic in inhale & sympathetic on exhale

The right nostril is sympathetic on inhale & parasympathetic on exhale

One nostril is more dominant than the other every 90 to 120 minutes. This is how we regulate our body temperature of 98.6

4-Part Breathing

- Anaerobic Movement of Diaphragm
 - Strengthens Diaphragm
 - Strengthens Inspiratory & Expiratory Muscles
 - Creates gaps in mind for deep focus
 - Heart rate variability (PNS & Vagus Nerve)
 - Holds oxygen & carbon dioxide molecules in bloodstream longer
 - Raises CO₂ tolerance
 - Improves LDP
 - Improves Lung Function



Power Breathing

- Aerobic Movement Of Diaphragm
 - Exchanges O2 & CO2 quickly
 - Both heating & cooling qualities
 - Replaces mouth breathing hyperventilation
 - Heats body systems up quickly from inside out (respiration, cardiovascular, neuromusculoskeletal
 - Cooling Vigorous short inhales & exhales
 - Less than 5 rounds (cooling)
 - More than 5 rounds (heating)



Power Breathing With 4-Part Breath

- Workout Examples
- Alternate Nostril Breathing
 - Syncs pre-frontal cortexes
 - Creates flow
 - Brings heart rate down
 - Balances ultradian nasal rhythm
 - Creates meditation in the mind (calming neurochemistry)
 - Strengthens Visualization In Mind & Improves movement patterns from inside out



Mouth Breathing & Cool Downs / Yoga Sleep

- Pursed Lips
- Slow motion inhales to capacity ... hold
- Slow motions exhales to capacity ... hold
- Cooling (amplifying gains & recovery protocols)
- Lie Down (improve posture after vertical exercise)
 - 5 to 10 minutes
 - Inhale hold 2, exhale hold 2
 - Guided visualization (release & relax)



Fitness Clubs Re-Open

NEVER Been More Important to Nasal Breathe

- Built-in ventilator with cilia
- Maximize use of H20 & O2 & CO2
- Vagus Nerve inhibits "cytokine storm"
- Reduces anxiety with relaxation response
- Strengthens Immune System
- Fat Burning Machine
- Don't exercise beyond your abilities
- Less is More Mentality
- Slow down movements, less reps, more breath control
- Heal moods, emotions, attitudes, thoughts will follow
- All Love, All the Time, Reset our Heart/Brain centers in Mind/Body

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Go BE Great!

- Research
 - Anatomic connections of the diaphragm: influence of respiration on the body system
 - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3731110/#!po=27.9412
 - Brain structures participating in mental simulation of motor behavior: A neuropsychological interpretation
 - https://www.sciencedirect.com/science/article/abs/pii/ooo169189090056L?fb clid=lwARoLpVoufZ6NTVymZPydzQtFs4UeVtVG_ck5FkjDwOox2j1DUNOR KqooSTo
- Learn More @ www.edharrold.com
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 - Life With Breath IQ + EQ = NEWYOU http://bit.ly/LWBAmazon
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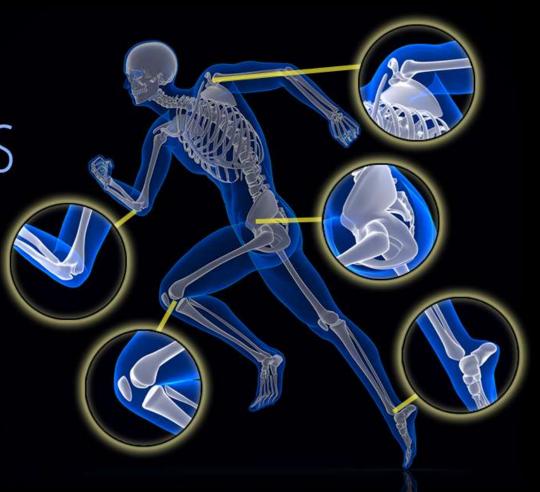
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Upcoming Webinar

Progressive and Regressive Exercises for People Living with Parkinson's Disease



Presented by Colleen Bridges, M.Ed.

NSCA Certified Personal Trainer, Fitness Consultant; Founder of Power4Parkinson's

LIVE PRESENTATION: Tuesday, May 26, 10:00am PST

Registration will be available on medfitclassroom.org.

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Upcoming Webinar

Masterful Health & Wellness Coaching: Getting Yourself Out Of The Way



Presented by Dr. Michael Arloski

Licensed Psychologist, Trainer, Consultant, Author, Speaker, and Wellness Coach

LIVE PRESENTATION: Tuesday, June 2, 10:00am PST

Registration will be available on medfitclassroom.org.

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Thank you!

Question and Answer Segment

Please type your question in the questions box to be answered by the presenter.

For More Info or Questions Email: ivy@medfited.org

