



Prāṇāyāma

Present Moment Wonderful Moment

By Thich Nhat Hanh

Breathing in, I calm my body.

Breathing out, I smile.

Dwelling in the present moment,

I know this is a wonderful moment.

Saturday 10 October 2015– Fairfax – Vicki L Christian ERYT200-RPYT

“Full body breathing is an extraordinary symphony of both powerful and subtle movements that massage our internal organs, oscillate our joints, and alternately tone and release all the muscles in the body. It is a full participation with life.” *Donna Farhi, The Breathing Book*

With Gratitude and Appreciation:
Donna Farhi, Doug Keller, Leslie Kaminoff, David Keil,
Mark Stephens, David Gorman, Gay Hendricks, PHD,
B.K.S. Iyengar, Thich Nhat Hanh, Richard Rosen, Rolf Sovik, Gil
Hedley, Bruce Bowditch, Swami Saradananda, Blandine
Calais-Germain, Gregor Maehle, Swami Rama, Andrew Biel,
Gary Kraftsow, TKV Desikachar, ancient yogic texts, and to
all of my past and current teachers.

Breath Is: Part of the Respiratory System

- Air taken into and expelled from the lungs
- Necessary for life
- Oxygen supplier for the body
- Death @ 3 minutes without oxygen
- Part of autonomic nervous system
- Average breath rate: 8-16 breaths/minute
- Able to be controlled/regulated
- Shape Change in the body
- Breath intimately tied to life force/energy

Yogic Texts on Prāṇāyāma

“Breath-centered asana practice and pranayama are among the greatest gifts from the yoga tradition to help us maintain our physiological and metabolic health and well-being, balance our emotions, and clarify our minds.”

- Gary Kraftsow

From The Hatha Yoga Pradipika

- After mastering asanas, the yogi-possessing self-control and eating a suitable, moderate diet-should practice Prāṇāyāma as taught by his guru
- When the breath is unsteady, the mind is unsteady. When the breath is steady, the mind is steady, and the yogi becomes steady. Therefore one should restrain the breath
- Correct Prāṇāyāma will weaken all diseases. Improper practice of Yoga will strengthen all diseases.

From The Yoga Sutras

- **Yoga Sutra I.34** Or that calm is retained by the controlled exhalation or retention of the breath.
- **Yoga Sutra II.49** Prāṇāyāma is the regulation of the incoming and outgoing flow of breath with retention. It is to be practised only after perfection in asana is attained. (B.K.S. Iyengar)
- **Yoga Sutra II.49** That [firm posture] being acquired, the movements of inhalation and exhalation should be controlled. This is Prāṇāyāma (Sri Swami Satchidananda)
- **Prāṇāyāma and Breath Control Yoga Sutras II.49-II.53**

Gross ANATOMY of the Breath

Muscles of Respiration

“Don’t Exercise In Quicksand”

Diaphragm

External intercostals

Internal intercostals

Quadratus

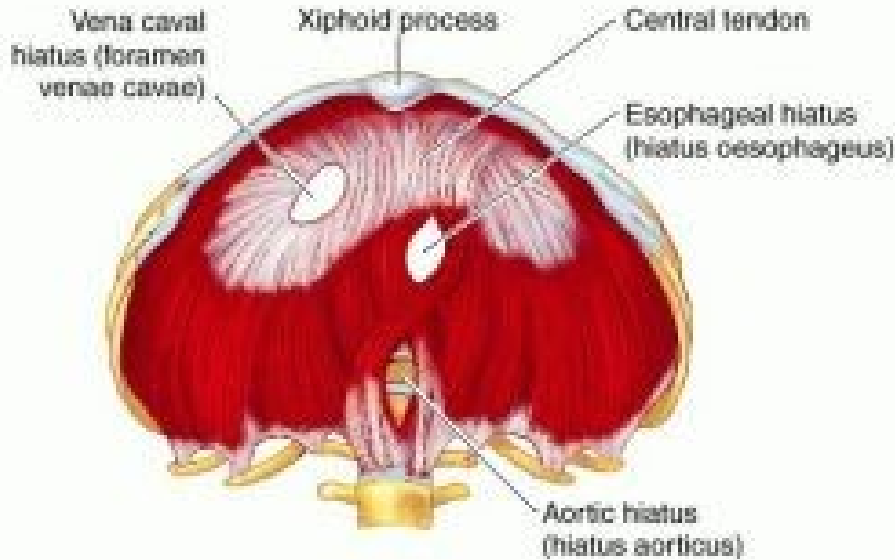
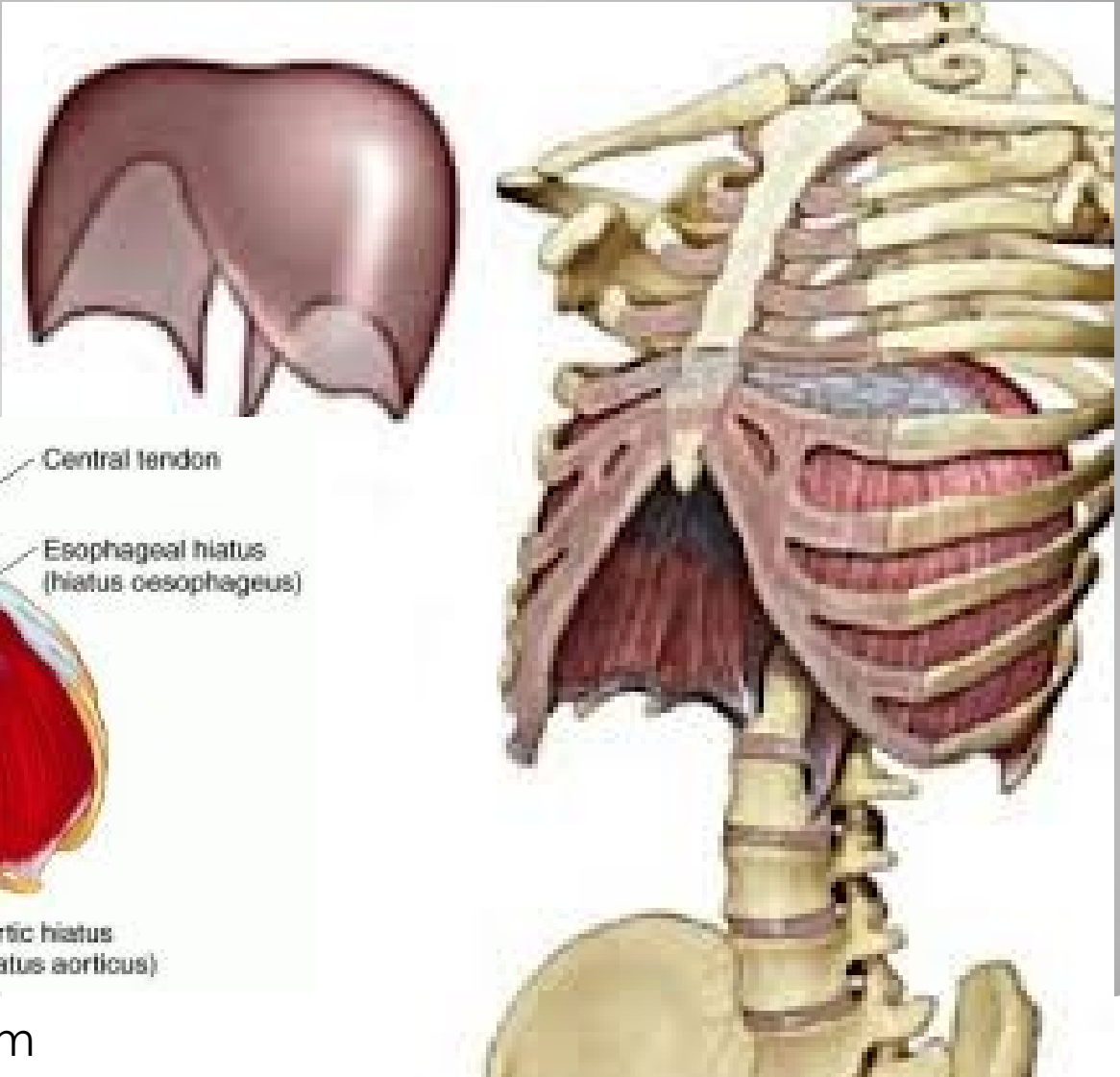
The Diaphragm

Thin but strong asymmetrical dome/ parachute/ umbrella shaped muscular membrane that separates the abdominal and thoracic cavities and when functioning correctly – promotes most efficient breathing

Muscle fibers attach to the inner surface of the ribs (7-12) and the lumbar vertebrae (1-4) and converge at a central tendon

Has holes/ openings for the esophagus (connects pharynx & stomach), the aorta (major artery transports oxygenated blood away from heart), and the vena cava (largest vein returns blood to the heart)

The Diaphragm: Main Muscle of Breathing



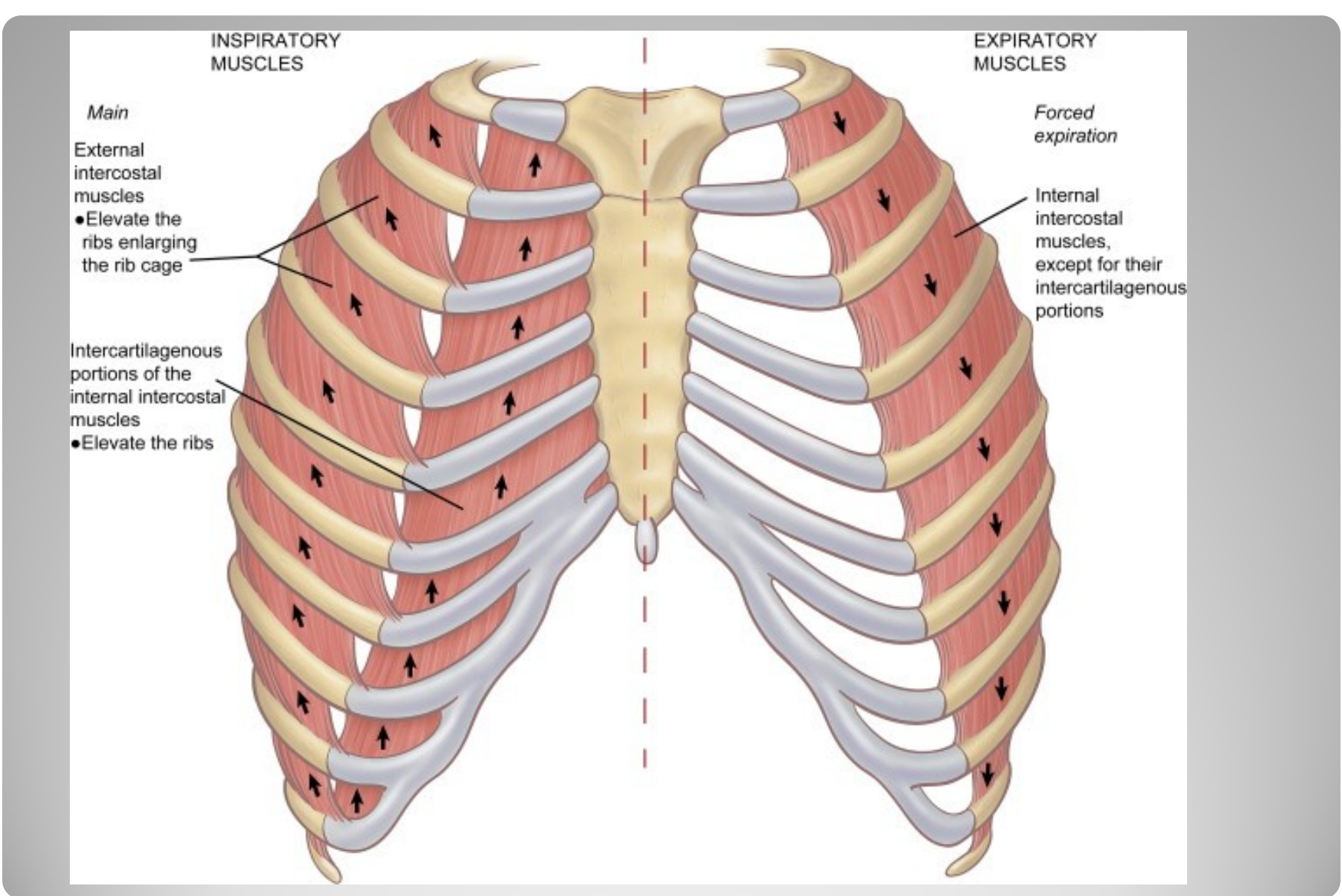
Underside of Diaphragm

External & Internal Intercostals

Small, slender muscles located between the ribs are two groups – external & internal – with fibers perpendicular to each other and considered extensions of the external & internal obliques

External intercostals draw the ventral part of the ribs upward, thus increasing the space of the thoracic cavity

Internal intercostals draw the ventral part of the ribs downward, thus decreasing the space of the thoracic cavity

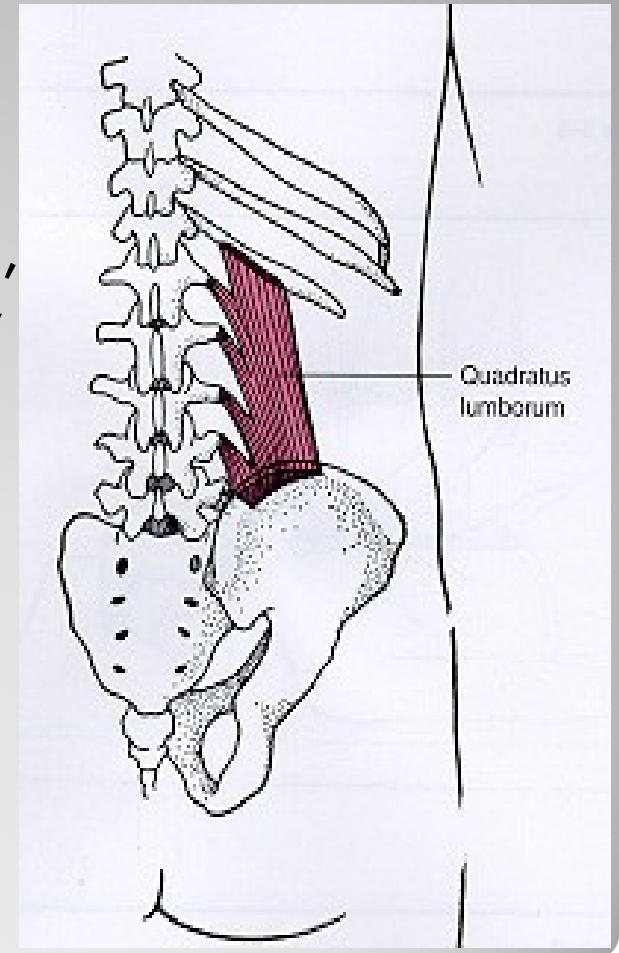


Intercostal Muscles

Quadratus Lumborum

During inhalation,

- Fixes the 12th rib in relation to the pull of the diaphragm, allowing the rib cage to fully expand.
- a muscle of inspiration as it increases the vertical height of the thorax
- Dysfunction in quadratus lumborum may result from labored breathing

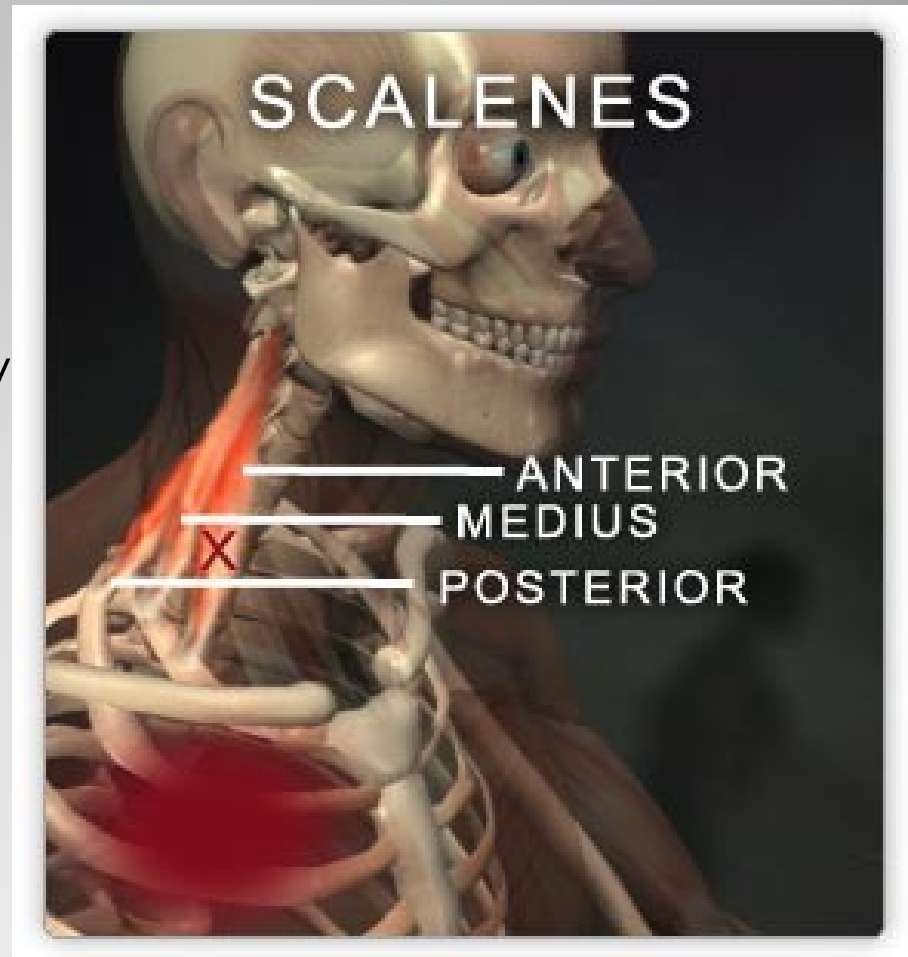


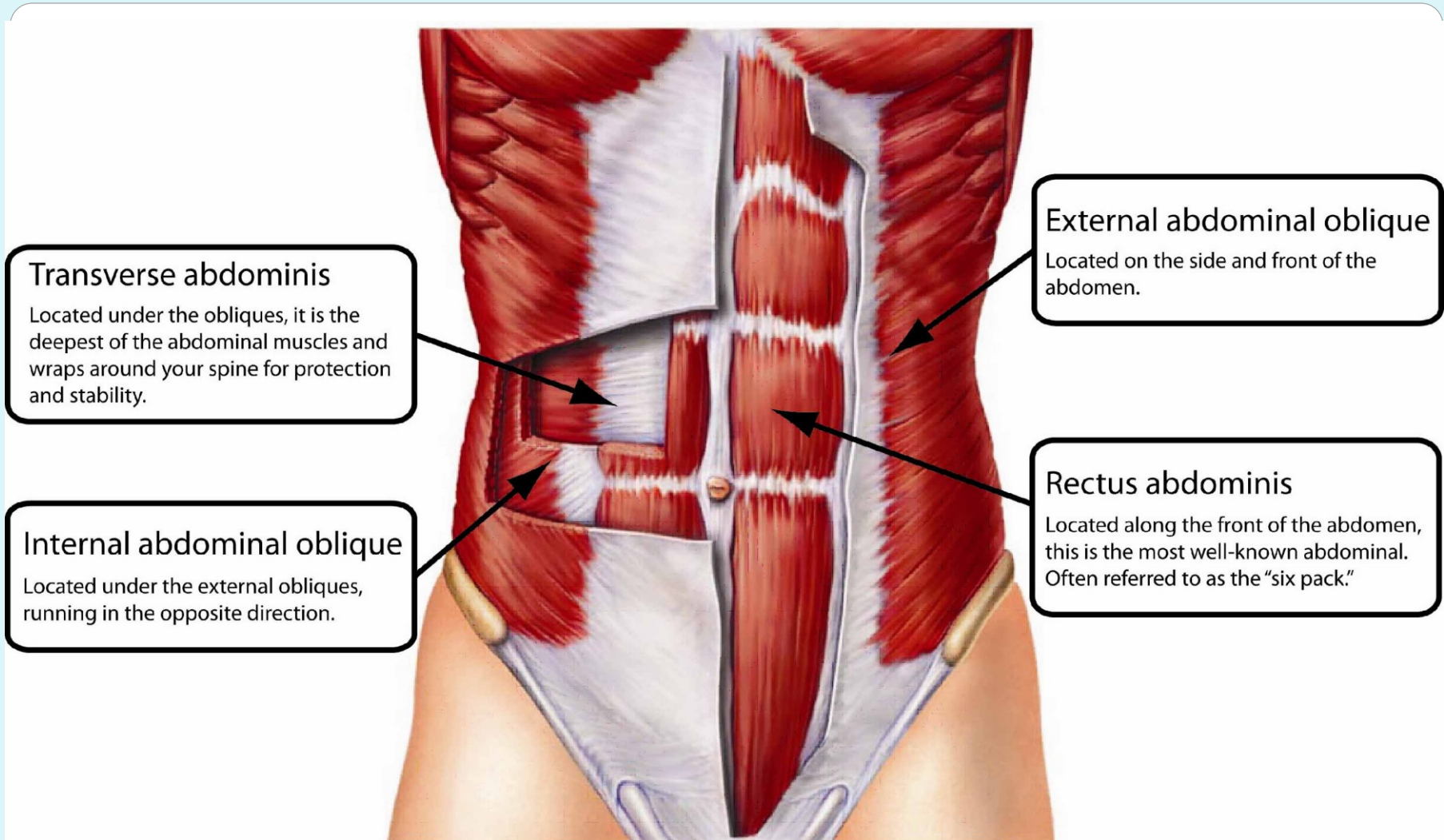
Scalenes

Anterior, Middle, & Posterior Scalene Muscles

Originally thought to be an accessory muscle, in that they appeared only to be used in labored or forced breathing. May play larger role in that they are active even during quiet normal breathing

Work to elevate and fix the first and second ribs, while serving to fix them during quiet breathing





Transverse Abdominus

Deepest of the abdominal group Plays a major role in forced exhalation

- sternocleidomastoid (elevated sternum)
- serratus anterior
- pectoralis major & minor
- upper trapezius
- latissimus dorsi
- erector spinae (thoracic)
- iliocostalis lumborum
- quadratus lumborum
- serratus posterior superior and inferior
- subclavius

Other Accessory Muscles of Breathing

Muscles of inspiration

Accessory

Sternocleidomastoid
(elevates sternum)

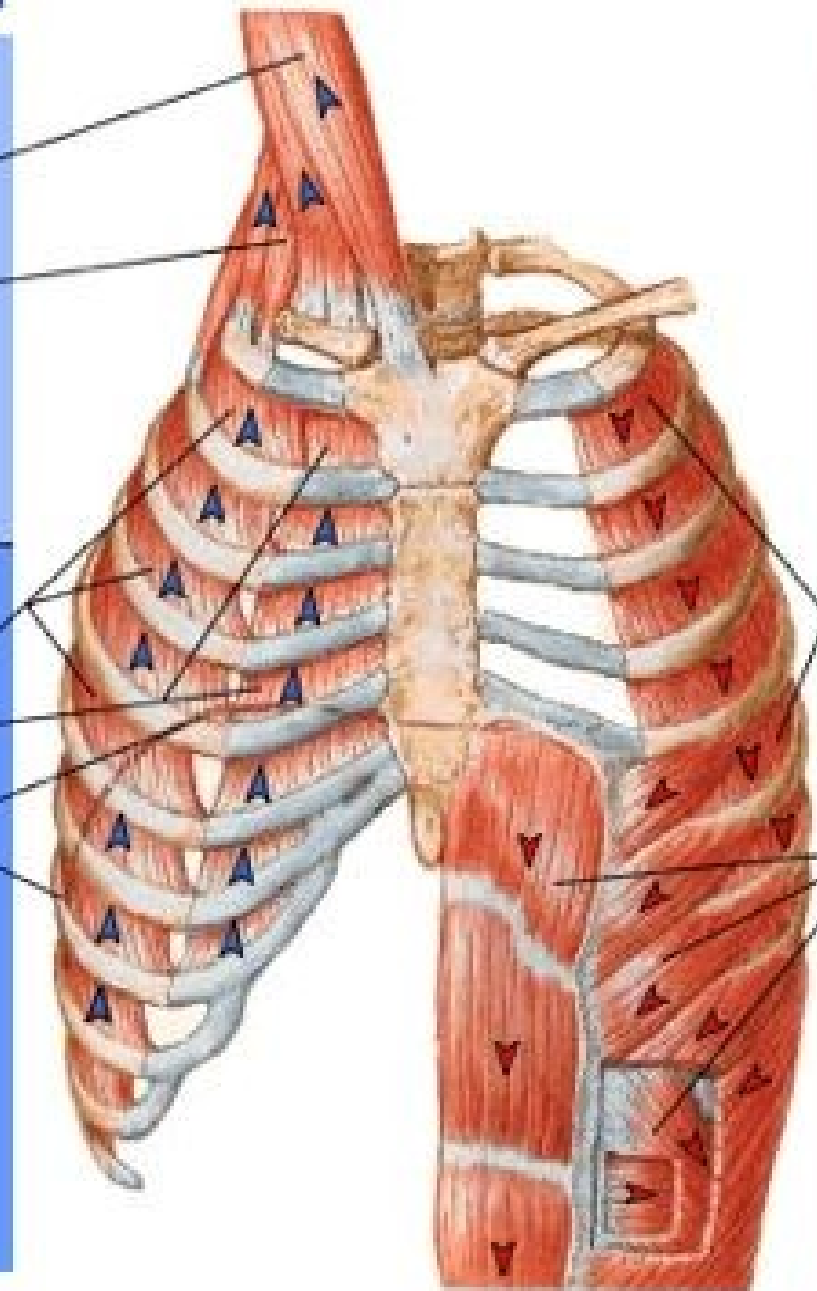
Scalenes Group
(elevate upper ribs)

Not shown:
Pectoralis minor

Principal

External intercostals
Interchondral part of
internal intercostals
(also elevates ribs)

Diaphragm
(dome descends, thus
increasing vertical
dimension of thoracic
cavity; also elevates
lower ribs)



Muscles of expiration

Quiet breathing

Expiration results from
passive, elastic recoil
of the lungs, rib cage
and diaphragm

Active breathing

Internal intercostals,
except interchondral
part (pull ribs down)

Abdominals
(pull ribs down,
compress abdominal
contents thus pushing
diaphragm up)

Note shown:
Quadratus lumborum
(pulls ribs down)

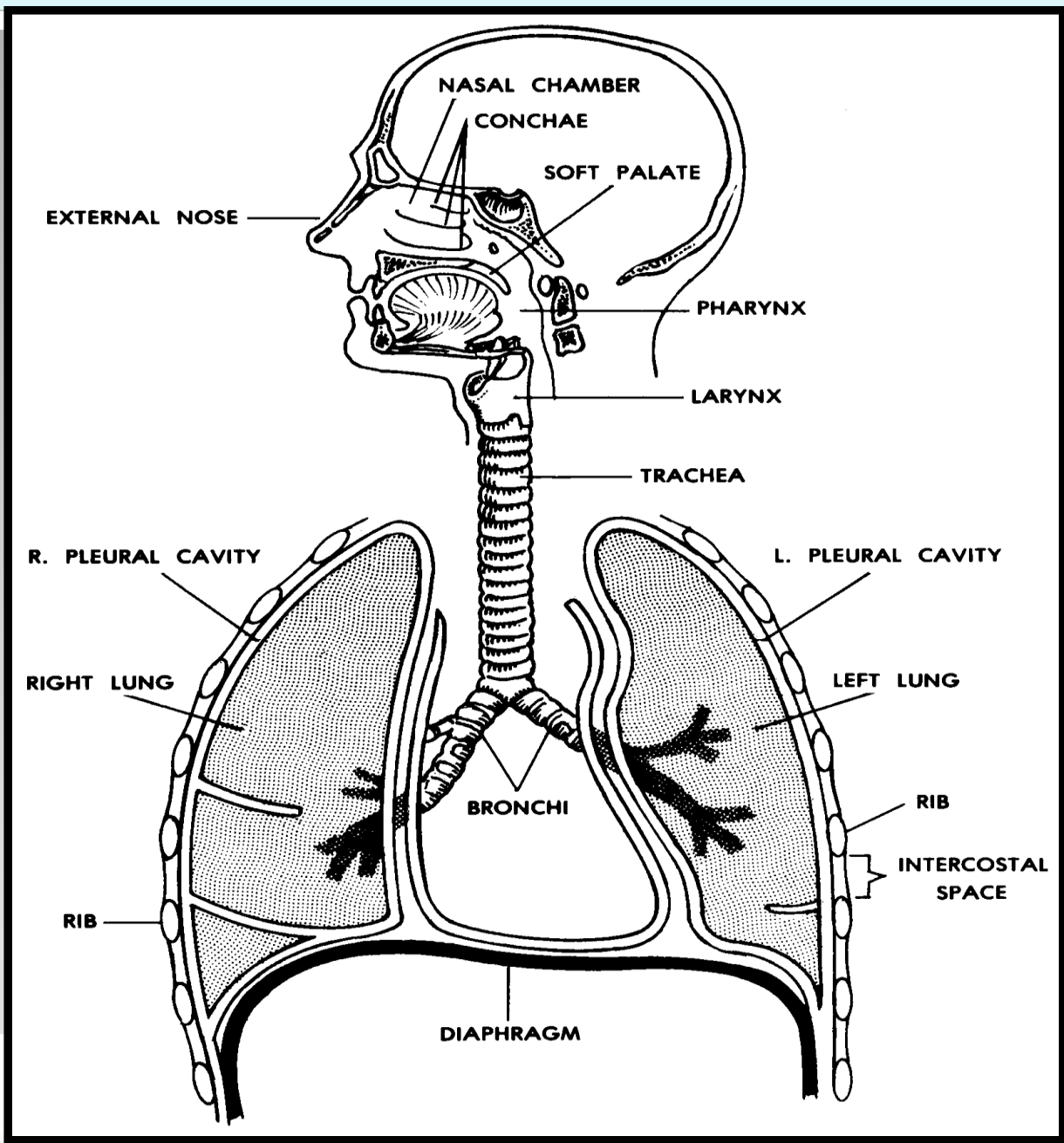
MECHANICS

The Respiratory System

Shape and Volume Change of Torso

Ribs create “Bucket Handle Effect”

A typical rib might be compared to a bucket handle, attached at one end to the sternum (breastbone) and at the other end to the vertebral column.



- **Respiration.** Respiration is the exchange of gases between the atmosphere and the cells of the body.

It is a physiological process.

There are two types of respiration-- external and internal.

External respiration is the exchange of gases between the air in the lungs and blood.

Internal respiration is the exchange of gases between the blood and the individual cells of the body.

- **Breathing.** Breathing is the process that moves air into and out of the lungs.

It is a mechanical process.

Types of breathing:

In costal (thoracic) breathing, the major structure causing the movement of the air is the rib cage.

In abdominal breathing the abdomen does most of the movement

In diaphragmatic breathing, interaction between the diaphragm and the abdominal wall causes the air to move into and out of the lungs.

Costal Breathing: the diaphragm is almost immobile and the abdominal wall is held rigidly. The intercostal muscles actively lift the chest up and out and the rib cage expands. The mental state is anxious.

Abdominal Breathing: The dome of the diaphragm moves down in a fairly simple piston-like action. The abdominal wall is relaxed and pushed forward by the diaphragm during inhalation. The intercostal muscles actively hold the chest wall in a stable position, thus the rib cage does not expand. The mental state is relaxed.

Diaphragmatic Breathing: The dome of the diaphragm presses down against the abdominal organs and the abdominal wall is slightly toned. The intercostal muscles maintain the shape and integrity of the chest wall and the rib cage is flared at its base by the attachment of the diaphragm. The mental state is clear and attentive

BREATHING

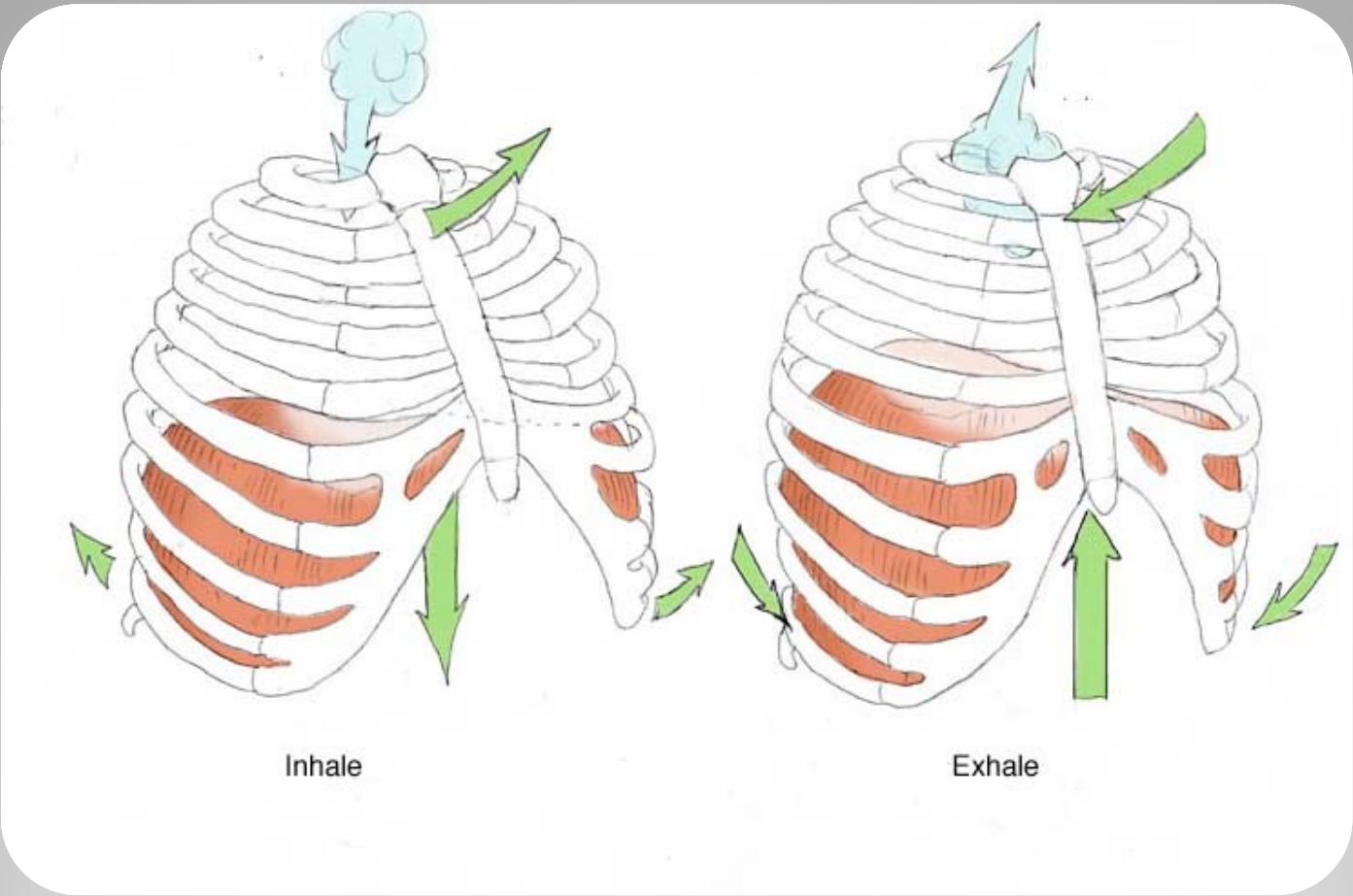
Inhalation

Boyle's law, states that the increase in volume leads to a decrease in pressure. The air pressure outside the body then forces air into the lungs and inflates them.

Exhalation

The pressure relationships are reversed for exhalation. Thus, volume decreases and pressure increases. This forces air outside the body.

And in one simple statement: "Breathing is Shape Change" -Leslie Kaminoff



The thoracic cavity:

Changes shape and volume example: bellows, accordion

The abdominal cavity:

Changes shape, but not volume example: water balloon

Leslie Kaminoff

Subtle ANATOMY of the Breath

Prana
Vayus
Nadis

PRANA-

Prana is the energy permeating the universe at all levels. It is the vibrating energies, the physical energies, the hidden or potential energies, and the energy of creating, protecting, and destroying. Sanskrit word for vital force or energy.

Upanishads: prana is the principle of life and consciousness.

pra=first Na=smallest unit of energy

Breath is the external manifestation of the force of prana

**Usually associated as synonym with breath
– but incorrect – so much more than breath –
prana can be controlled by the breath**

- Vayus – (winds) major currents/ flows of the bodies vital energies / movement in the body

- **1. Prana Vayu**
- **2. Apana Vayu**
- **3. Samana Vayu**
- **4. Udana Vayu**
- **5. Vyana Vayu**

- **Prana-vayu:** upward moving, invigorating, the inhalation, and corresponds to chest region & ida nadi
- **Apana-vayu:** downward moving, the exhalation, and corresponds to abs and lower body functions, grounding & pingala nadi

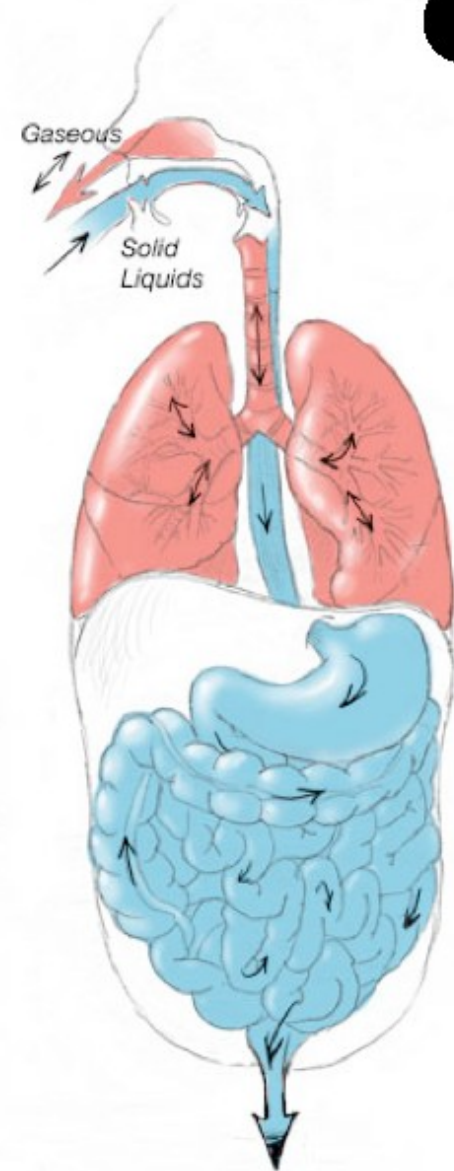
Pranic Body -5 winds/flows of breath

- **Samana Vayu** – assimilation – a circular flow of breath around the waist and associated with digestion
- **Udana Vayu** – part of exhalation– a circular flow of breath in the neck and head- concentrated in the throat and associated with speech
- **Vyana Vayu** – through entire body – the breath that extends out to the limbs of the body

The other 3 Vayus – currents/flows

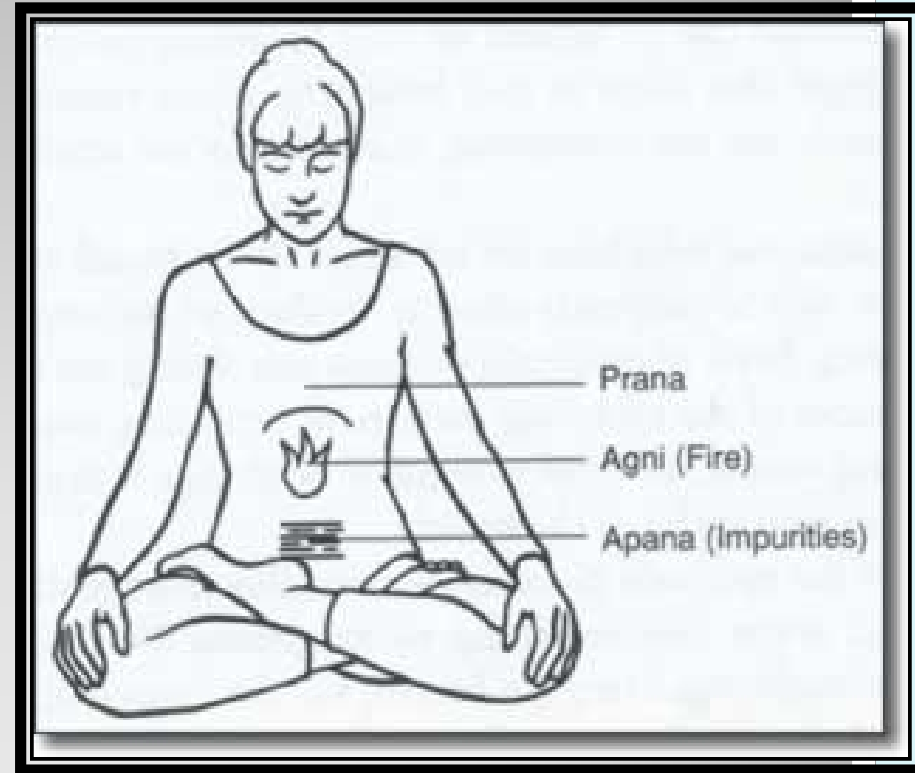
- **Prana:** “pra:” before, first, in front - “anu:” unit, living, human
- *The force and substance of nourishment*
- Nourishment enters at top of system and moves down

- **Apana:** “apa:” away, off, down
- *The force and substance of elimination*
- Solid, liquid waste exit from the bottom of the body
- Gaseous waste exits from the top of the body
- Apana must be able to move freely in both directions



yogic model of the breathing body

- Bring Prana & Apana into balance-join
- Prana-Inhale-Nourish
- Apana-Exhale-Waste
- In-breath offered to out-breath
- Transmutation in the Fire
- 3 main bandhas aid

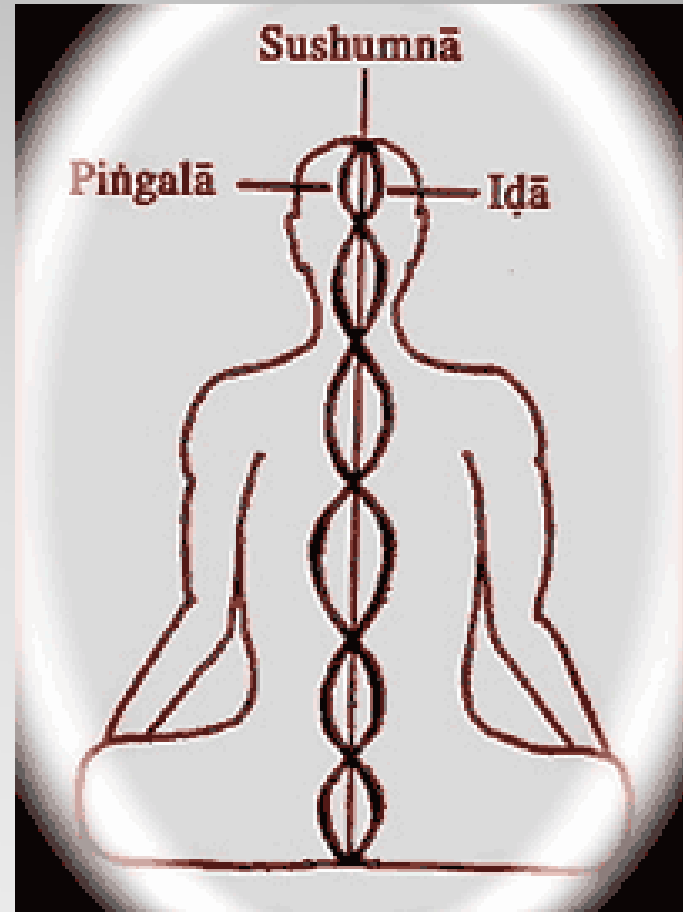


**Prāṇāyāma is the meeting
of Prana and Apana (Leslie Kaminoff)**

- Main central channel –**Sushumna** –from root chakra to crown chakra

Other main Nadis

- **1. Ida** –left, feminine energy, moon, rising vital breath, cool
- **2. Pingala** –right, masculine, sun, descending breath, heat



Nadis–channels/pathways for prana

Prāṇāyāma

Prana = breath, respiration, life force, vitality, chi/ki
Yama = control or restrain

PRA – forth, away

AN – to breathe, to respire, to live, to move

AYAMA – stretching, extending, restraining

Prāṇāyāma – DIFFERENT INTERPRETATIONS

breath practice, breath attention, breath mastery,
breathing exercises, breath control, bandhas, purify
nadis, for purification, fourth limb of yoga, to lead to
meditation, activate prana, control of prana, expansion
of consciousness

Prāṇāyāma = prana + ayama

Ayama = non-control – extension – expansion

Prāṇāyāma = expansion of life force

Prāṇāyāma

- The fourth limb of the eightfold path of yoga
- *The extension and restraint of the breathing*
- *Unobstructing the prana is accomplished through a balanced joining of the forces of inhale and exhale.*
- *Breath is the integrating principle of posture, movement, and yoga practice. -Leslie Kaminoff*
- *Yoga Sutra II.50 Prāṇāyāma has three movements: prolonged and fine inhalation, exhalation and retention; all regulated with precision according to duration and place. – B.K.S. Iyengar*

!!! CAUTIONS !!!

- Because we are dealing with control of the breath, practicing Prāṇāyāma can cause dizziness, hiccups, light-headedness, chest pain, hyperventilation, extreme emotions, or even loss of consciousness.
 - **It is extremely important to practice Prāṇāyāma with caution.**
- Find a comfortable & supported body posture
- Relax the body
- Teach slowly, carefully, & mindfully
- Exercise moderation, gentleness & patience
- Pay attention & find ease (sukha)
- Observe natural breath before moving on
- Do not force the breath
- Give permission to return to own natural breath
- Breath through the nose (some exceptions)

1. INHALATION – Pooraka/Puraka “filling”

2. KUMBHAKA – Retention after inhale

2. EXHALATION – Rechaka “emptying”

3. KUMBHAKA – Retention after exhale

The four parts to each breath can be practiced in different ratios

Parts of the Breath

- **KUMBHAKA**

(full pot/empty pot-symbolizing the body full or empty of breath)

- Consciously bringing in/extending the pause
- Retention/suspension of breath that brings a stilling of the prana

- Antara/Antah Kumbhaka – breath is paused and held in at the end/top of the inhale

- Bahir/Bahya/Bayha Kumbhaka – breath is paused and held out at the end/bottom of the exhale

Kumbhaka –Breath Retainment

Prāṇāyāma Practice Categorized As.....

- **BRAHMANA** = expansion – Longer inhalation than exhalation – focus on chest – energizes
Ratio breathing = I(inhale)6:H(hold)2:E (exhale)4:H1
- **LANGHANA** = starving – Longer exhalation than inhalation – focus on abdomen – relaxes
Ratio breathing = I4:H1:E 6:H2
- **SAMANA** = balanced – Inhalation and exhalation are the same length – even state of mind
Ratio breathing = I6:H2:E 6:H2

Ratio Breathing = Vritti Prāṇāyāma

(vritti here indicates a course of action)

Equal ratio-sama-vritti & unequal ratio-vishama-vritti

Prāṇāyāma for Level 1

- **Natural Breathing**

- Paying attention
- Observe
- Relationship between breath and movement
- Flow
- Pacing
- Length
- Counting
- Parts of breath
- Witness to
- Not controlling

- **Conscious Breathing**

- **Abdominal Belly -Diaphragmatic**
- **Three part – Complete Dirga or Deergha**
- **Breathing 8 parts**
- **Simple Ratio Breathing**
- **Simple Ujjayi**

Prāṇāyāma for Level 1

POSES for Level 1

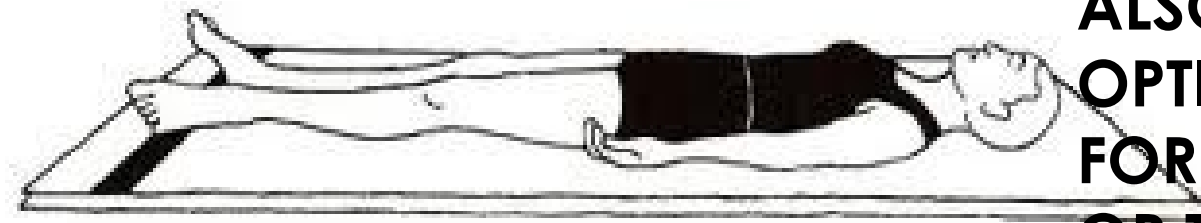
Postures for Prāṇāyāma - Easy and stable posture

Choose props and support in a posture/position in which the body does not disturb the mind and the breath

Props : yoga mat, blankets, bolsters, blocks, yogic straps, wall, sandbag, chair, eye bag/pillow, elastic bandage, and/or timer

**BLANKET
OPTIONS
FOR HEAD
OR UNDER
THE LEGS**

**Gentle &
Level 1+**



**ALSO CHAIR
OPTIONS
FOR LEGS ON
OR TO SIT ON**



TECHNIQUES for Level 1

Ways to “Shape Change”

Foundation Steps to move into a Pranayama Practice

1. Awareness of ones own natural breath
2. Understanding of the mechanics of breathing
3. Awareness of breath relaxing the nervous system
4. Awareness of breath enhancing concentration
5. Able to do diaphragmatic breathing

Observation of the “Natural” Breath Breath Awareness / Breath Training

FIRST STEP: AWARENESS

Breath moving in & out of nostrils

Paying attention to the *Mechanics of Own Breath*: patterns, rhythms, pacing, limitations of our breathing...etc...

This is the place to begin with and return to, again and again and again, to reconnect

How Healthy Is Your Breathing?

By Barbara Benagh | Aug 28, 2007

Upper-Chest Breathing: Lie on your back, placing one hand on your upper chest and the other on your abdomen. If the hand on your chest moves as you breathe but the one on the abdomen does not, you're definitely a chest-breather. Anything more than slight movement in the chest is a sign of inefficient breathing.

Shallow Breathing: Lie on your back and place your hands around your lower ribs. You should feel an effortless expansion of the lower ribs on the breath in and a slow recoil on the breath out. If your ribs remain motionless, your breathing is too shallow, even if your belly moves.

Overbreathing: Lie down and take a few minutes to let your body establish its relaxed breathing rate. Then count the length of your next exhalation and compare it to the length of the following inhalation. The exhalation should be slightly longer. If not, you are an overbreather. As a second test, try to shorten your inhalation. If that causes distress you are probably an overbreather. Because it is easy to manipulate the outcome of these two tests, you may want someone else to count for you at a time when you are not paying attention to your breath.

Breath Holding: Holding one's breath after inhaling may be the most common poor breathing habit. To determine if you do this, pay attention to the transition from inhalation to exhalation. A breath-holder usually feels a "catch" and may actually struggle to initiate the exhalation. This tendency is particularly noticeable during exercise. You can reduce the holding by consciously relaxing your abdomen just as an inhalation ends.

Reverse Breathing: Reverse breathing happens when the diaphragm is pulled into the chest upon inhalation and drops into the abdomen on exhalation. Lie on your back and place your hands on your abdomen. The abdomen should slowly flatten as you exhale and rise gently as you inhale. If the opposite occurs you are a reverse breather. Since reverse breathing may only occur during exertion, this test is not completely reliable.

Mouth Breathing: It's fairly easy to notice if you're a mouth-breather; if you're not sure, ask your friends or try to catch yourself at unguarded moments.

- Observe natural and spontaneous breathing
- Witness – Casual observer of the Breath
- Notice attempt to change/modify -Observe without interference or judgment
- DO NOT CONTROL
- Coolness inhale – Warmth exhale
- Where do you feel breath movement?
- Feel breath in chest, ribcage, and/or belly?
- Does breath make ribs move up, out, both?
- Quick or Slow?
- Length of Inhalation? Exhalation?
- Shallow or Deep?
- Pauses? Where?
- Uneven? Erratic?
- Breathing normally with full attention
- Feel the flow of inhale into exhale & exhale into inhale

observation of the breath

ABDOMINAL –DIAPHRAGMATIC- BELLY

- Enhance action of diaphragm and minimize costal ribcage movement
- Relax body -especially abdomen & Observe Natural Breath
- Invite breath to abdomen/belly – rest hands lightly on either side of navel
- Feel movement of abdomen with breath
- Inhale, diaphragm moves downward toward navel and presses on & massages internal organs
- Exhale, diaphragm moves upward and internal organs release [Internal massaging action with each breath]
- Movement of diaphragm signifies that lower lobes of lungs being utilized – where best oxygen exchange
- Calms the mind and nervous system
- *Note: diaphragmatic breathing involves expansion and contraction of the abdomen as well as expansion and contraction of the lower most ribs*

DIAPHRAGMATIC BREATHING

On the inhalation the diaphragm contracts, the dome flattens and main central tendon is pulled down causing the diaphragm to descend.

This increases the depth (vertical diameter) of the thoracic cavity and thus increases its volume. This decreases air pressure within the thoracic cavity.

The greater air pressure outside the body then forces/ draws air into the lungs.

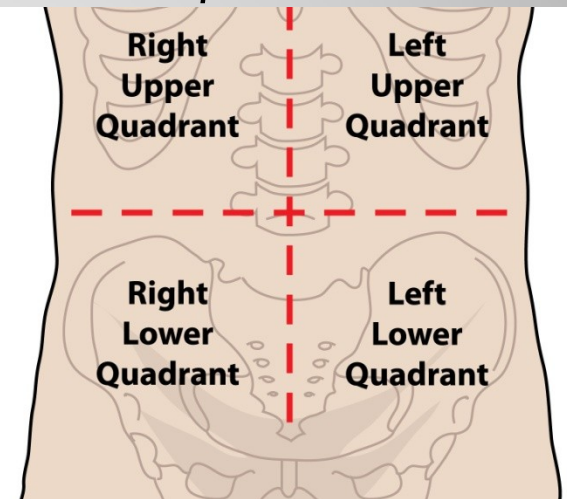
On the exhalation, the diaphragm relaxes and returns to the dome shape by the elastic abdominal wall forcing the diaphragm back up with the pushing of the watery tissues of the abdomen against the underside of the relaxed diaphragm.

With the dome shape extended upwards causes air to exit the lungs and the process of inhalation is reversed.

- **Breathing into 8 parts of the body**, which helps us to bring awareness in all the parts of the torso. Begin in a supported lying down or seated position with the back straight.

Awareness at the front of torso: Breathe into the front right upper quadrant of the torso, then front lower right part, front lower left, front upper left part.

Awareness shifts to back of torso: Breath into the back upper Left quadrant, back lower left part, back lower right part and ending at back upper right quadrant (behind where started)



Breathing into 8 parts of the torso

3-PART – COMPLETE -YOGIC – DIRGA/Deergha

- *Dirga Prāṇāyāma* The 3 part breath or complete breath is nourishing, calming and relaxing.
Wave of breath from belly toward middle/lower ribs toward upper chest and then back down again. Initially may be more segmented/sectioned. Whole circumference of the lungs becomes elastic and responds with breath movement
- Actively breathing into three parts of your torso. The first position is the low belly/lowest ribs (just slightly above the belly button), the second position is the low chest (most of the rib cage), and the third position is the low throat (just above the top of the sternum). The breath is continuous, inhaled and exhaled through the nose.



Rest your hands on the individual positions to feel the breath rising and falling through each position. When you start practicing, you may want to individually isolate the movement in each position, using the hands. When you have a good feel for the breath moving in and out of each position, practice without the hands. Eventually relax the effort of the Prāṇāyāma and breathe into the three positions gently, feeling a wave-like flow of breath move up and down the torso.

3-PART – COMPLETE -YOGIC BREATHING– DIRGA/Deergha

UJJAYI

ujaya, ujaya breathing,
ujjayi breathing

UJJAYI: B.K.S. Iyengar's classic Light on Yoga:

- “The prefix ud [the “uj” in ujjayi] attached to verbs and nouns, means upwards or superiority in rank. It also means blowing or expanding. It conveys the sense of pre-eminence and power. Jaya means conquest, victory, triumph, or success. Looked at from another viewpoint it implies restraint or curbing. Ujjayi is the process in which the lungs are fully expanded and the chest puffed out like that of a proud conqueror.”

UJJAYI – Jaya: conquering, winning, triumph, being victorious, victory over

- Victorious Conquers Breath
- Victorious Breath
- Conqueror Breath
- Ocean Breath – Ocean Sounding
- Victoriously Up-Rising
- To Be Victorious
- Triumphantly Expanding
- Victory From Expansion
- Ideally used in asana and brings awareness to each breath as to quality and texture
- Darth Vadar Breath

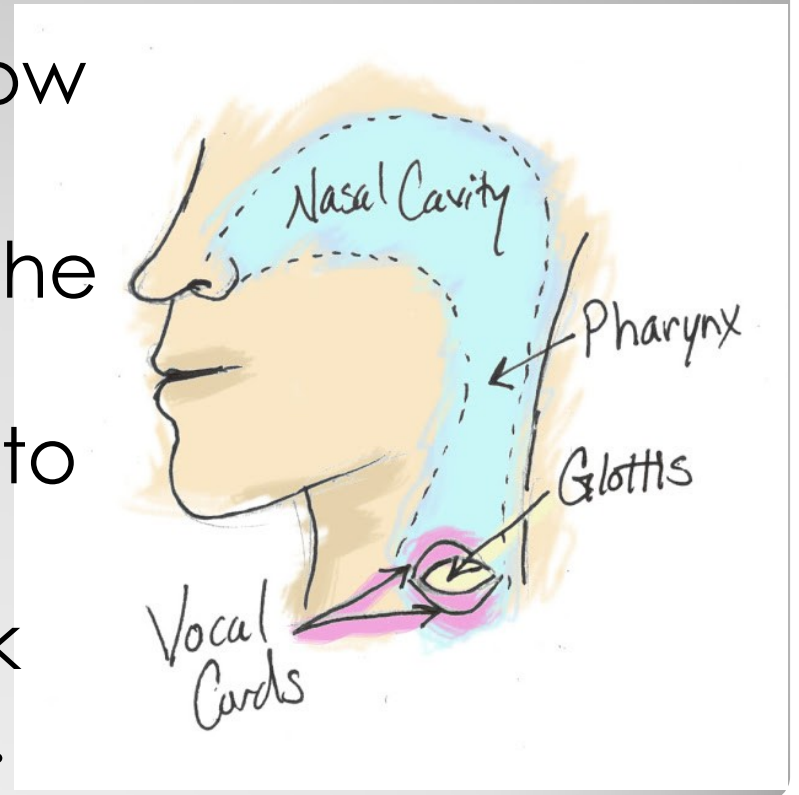


UJJAYI Practice

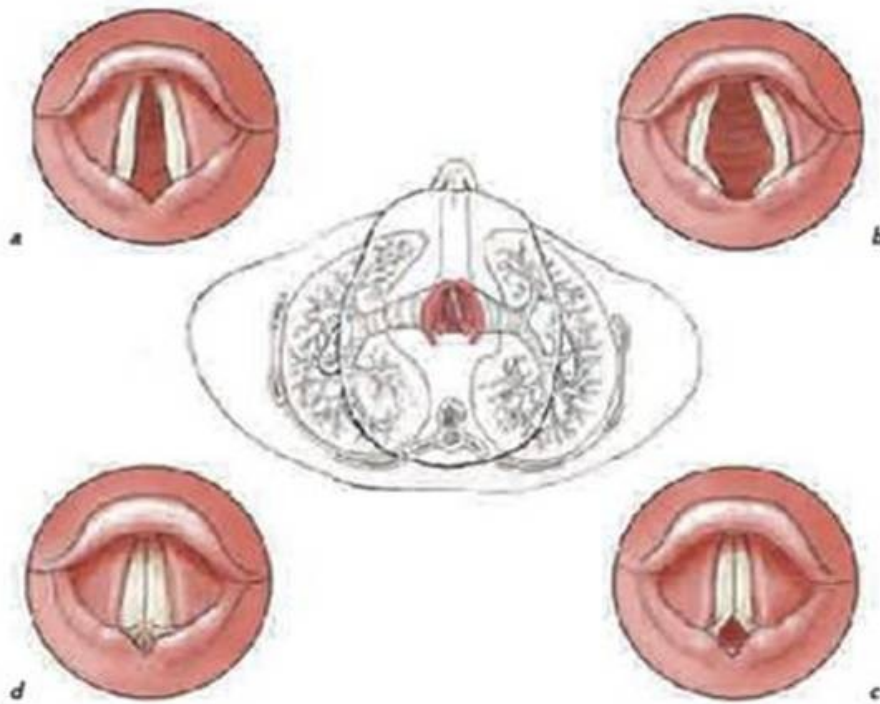
- Begin with observation of natural breath, transition into Dirga Breath before Ujjayi
- Ujjayi differs from Dirga in that there is more belly tone and ribs expand more upward and outward
- Simple Ujjayi for Beginners: inhale through the nose and breathe out through the mouth with “hhhaaaa” sound “As if fogging a mirror”

UJJAYI

- Two main characteristics:
action in the throat
producing distinctive
sound and attempt to
maintain evenness of flow
of the breath
- There is a narrowing of the
throat – half closing the
epiglottis to give sound to
breath, that moves the
breath toward the back
throat and nasal cavity.
Sound is not very loud



The Vocal Diaphragm



Picture of the vocal cords, and notice the size of the opening while at rest (a), when breathing hard (b), whispering (c), and speaking (d).

(Source: [Yoga Anatomy](#), by Leslie Kaminoff) pg 14-15

The gateway to the respiratory passages is the glottis. This is not a structure, but is a space between the vocal folds/cords. At rest in a restorative yoga practice, the vocal cords can be relaxed with the glottis neither restricted or enlarged. In deep and rapid movements of breathing (kapalabhati or bhastrika), there is a larger opening. For long slow deep breaths (ie: ujjayi), the glottis is partially closed with only a small opening at the back of the vocal cords.

Prāṇāyāma for Level 2+

- All of previous &
- **Ujjayi**
- **Viloma** –
interruptions –
"against the grain"
**Viloma I* –pauses
inhalation
**Viloma II* –pauses
exhalation
- **Nadi Shodhana** –
alternate nostril

- **Simhasana** -Lion's
Breath
- **Brehmari**
/**Bhramari**–
hum/bee
- **Shitali** – cooling
- **Sitkari** – hissing
- **Bhastrika** – bellows
(Kriya)
- **Kapalabhati** –skull
shining (Kriya)

Prāṇāyāma for Level 2+

POSES for Level 2+

Postures for Prāṇāyāma - Easy and stable posture

Choose a posture/position in which the body does not disturb the mind and the breath, choosing props and support to assist

Props : yoga mat, blankets, bolsters, blocks, yogic straps, wall, sandbag, chair, eye bag/pillow, elastic bandage, and/or timer

SANDBAG BREATHING



UPRIGHT SEATED WITH OR WITHOUT WALL SUPPORT

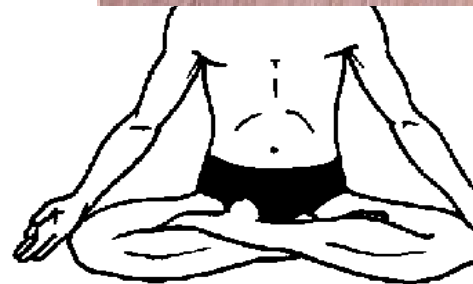
Recommended: block or blanket(s) support under pelvis



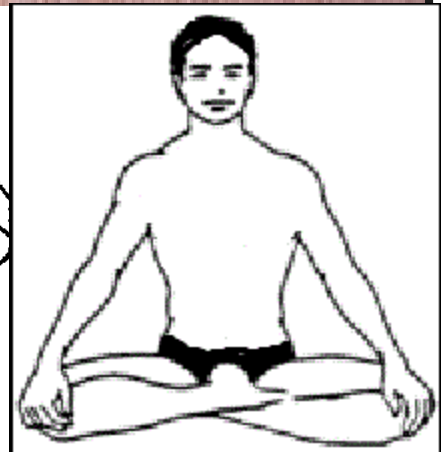
Padmasana



Sukhasana



Svastikasana



Siddhasana

BLANKET SUPPORT

Inclined or Bolster

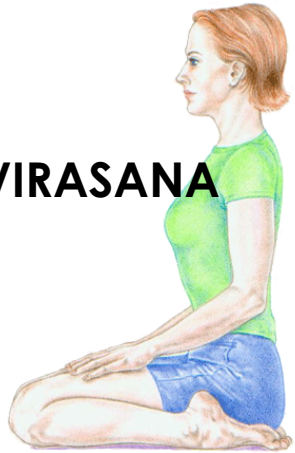


Level 2+



VAJRASANA

VIRASANA



**ON BELLY:
Makarsana/crocodile**



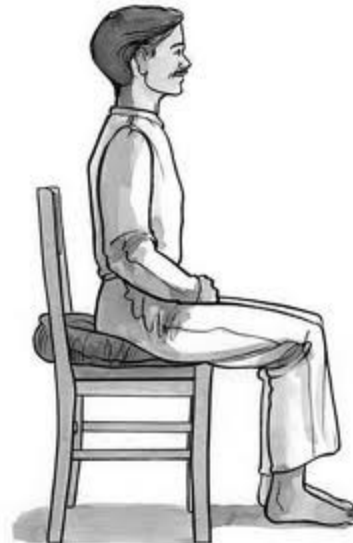
OTHER BREATH POSES



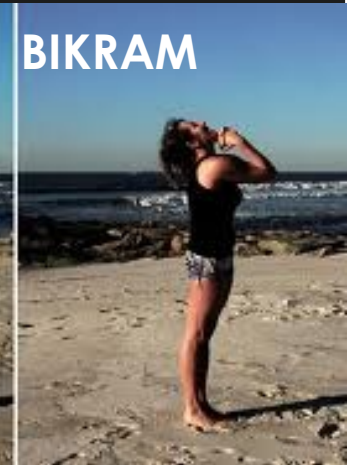
RESTORATIVE



**SUPTA
BADDHA
KONASANA**



**SITTING ON A CHAIR
Maitri Asana**



BIKRAM

TECHNIQUES for Level 2+

Ways to “Shape Change”

UJJAYI – Jaya: conquering, winning, triumph, being victorious, victory over

- From root words uj=upwards and jayi=victorious
- Level 2 can be encouraged to bring the breath to the back body, encourage pauses, and/or ratios of inhale to exhale
- Ideally used in asana to bring focus to practice
- Brings awareness to each breath as to quality and texture during practice

Alternate Nostril Breathing

Nadi Shodhana/Nadi
Shuddhi/Nadi Sodhana

Ida, Pingala & Sushumna

- Place the thumb and third finger on the narrowest part of the nose, where the cartilage begins. Apply the thumb and finger to gently rest on slight indentations of nostrils. To close off one side, apply gentle pressure.
- If the right arm tires, the practice can end or the left hand or bolster can support the right elbow



*Visnu Mudra / Mrgi Mudra
(Doe Seal) – Right hand position*

Alternate Nostril Breathing

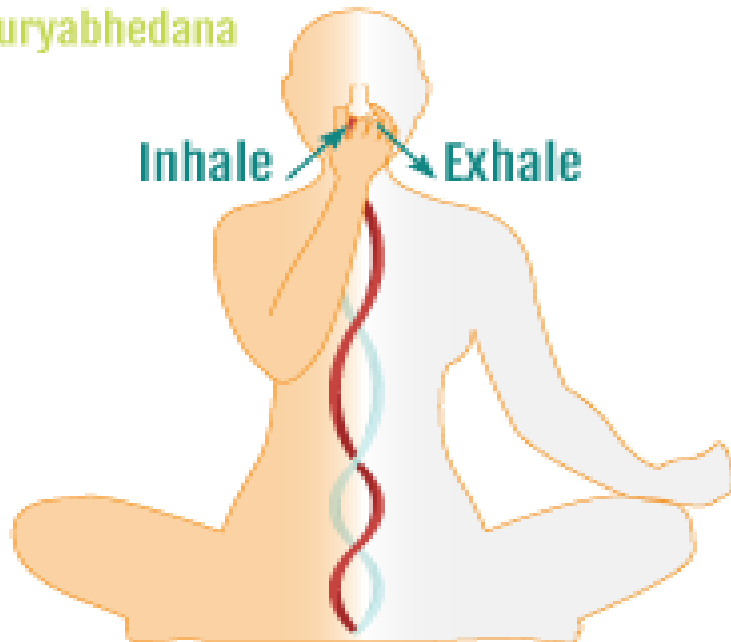
- Means of purifying the nadis (clearing & equalizing Ida & Pingala) and not considered formal Prāṇāyāma
- The hand is used to regulate the nostril breath by the pressing of thumb tip and ring fingertip alternately to the sides of the nostrils

- Beginning practice, inhale through both nostrils, exhale alternately through one nostril
- **Full practice:**
 - Right nostril blocked-inhale left
 - Left nostril blocked-exhale right
 - Left nostril blocked-inhale right
 - Right nostril blocked-exhale left

**Nadi Shodhana/Nadi Shuddhi/Nadi Sodhana:
The sweet breath / channel purification**

- **Surya Bhedana**
- *surya* = sun
- *bhedana* = piercing
- Sun breath, mentally stimulating, taps into energizing energy of Pingala nadi

Suryabhedana



- When there is not enough heat in the system (for example, cold limbs, low blood pressure, depression), it can help to breath in through the Right nostril (to stimulate the solar channel) and out through the Left (to sedate the lunar channel).

- **Chandra Bhedana**
- *chandra* = moon
bhedana = piercing
- Moon breath, mentally soothing, taps into cooling energy of Ida nadi

Chandrabhedana



- Sometimes there might be too much heat in the system (for example, if somebody has hot flashes or feels angry/irritable), which can be helped by breathing in through the Left nostril (to stimulate the lunar channel) and out through the right (to sedate the solar channel)

Interrupted Breathing

Viloma

Loma means hair. The prefix “Vi” is used to denote negation. Viloma thus means against the hair, against the natural order of things. Against the grain.

In Viloma Pranayama inhalation OR exhalation is not one continuous process, but is interrupted by several pauses.

- **VILOMA I**
- **Interrupted Inhalation (antara kumbhaka)**
 - *Contraindicated for hypertension, heart ailments & anxiety*
 - Full smooth exhalation, inhale slightly, pause, relax, inhale again slightly, pause, inhale in rest of breath, pause and then do a slow smooth exhalation

- **VILOMA II**
- **Interrupted Exhalation (bayha kumbhaka)**
 - *Contraindicated for fibromyalgia, chronic fatigue, depression, or low blood pressure*
 - Full smooth inhalation, exhale slightly, pause, relax, exhale again slightly, pause, exhale out rest of breath, pause, and bring in slow smooth inhalation

- **Bhramari** – Bee humming, inhale full complete breath and exhale with gentle humming
- **Shitali/Sitali/Sheetali** – Tongue hissing/cool sensations, air is drawn in through curled slightly protruding “straw” tongue tube, (mouth inhalation) . Exhale nostrils
- **Sitkari/Seetkari** – Cooling, air is drawn in through lightly parted lips and teeth. Exhale nostrils
- **Bhastrika** – Bellows breath/energizing, vigorous, quick paced, inhale & exhale short strong equally forceful
- **Kapalabhati** – Skull shining, short forceful puff/contraction of exhalation with upper abdominals & diaphragm and passive slow full diaphragmatic inhalation

- **Slow breathing Prāṇāyāma** techniques such as Bhramari, Shitali, Sitkari or Nadi Shodhana relatively pose **less risk** as long as practitioner employs **steady attention, patience and discipline**.
- Kapalabhati and Bhastrika, being rapid breathing techniques, pose greater risk. They can accentuate preexisting structural or functional problems or cause excessive strain on the respiratory system.-
[Vijai Sharma, PhD](#)
- Kapalabhati and Bhastrika are considered Yogic Kriyas – Cleaning Processes in Yoga. It is the process of cleaning the brain and the central top of the head

- Mantras are interpreted to be effective as vibration, or more simply as sound, which may include verbal repetition (*japa*) in the form of chanting in a normal voice (*baikhari*), whispering (*upanshu*), or internal (silent) mental incantation (*manasik*). Repetition when chanting in private meditation is called *japa*, when performed congregationally, in call-and-response form and often with instruments and dancing, it is *kirtan* - which also means "to repeat".
- The most basic mantra is **Aum - A Sacred Sound**
- It is the primordial and uncreated sound, considered to be the first vibration emanating as sound at the beginning of creation.

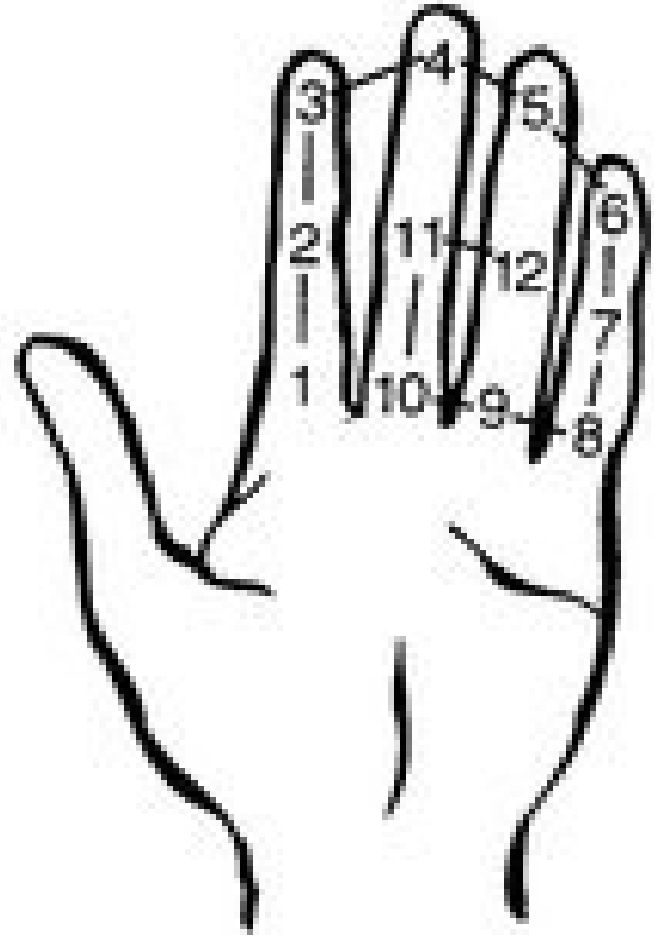
Breath into Sound



- Meditation: silent natural mantra/ sound of the breath
- **Soham (aka So Ham, So hum or Sohum):**
Inhale – Sooooo /Exhale – Hummmmm “I AM THAT”
- **Hamsa: Inhale – Hummmmm]/Exhale – Saaaa**
translates to “THAT I AM”
- Close your eyes and notice the way your energy state is altered while you inhale and exhale. Experiment with hearing "ham" on the inhalation and "sa" on the exhalation. Does this feel energizing or calming for you? Next reverse it: hear "so" on the inhalation and "ham" on the exhalation. Does this change the energetic feelings?
- B.K.S. Iyengar says they are actually combined; every creature creates so'ham on the inhalation (which means "He am I") and hamsa on the exhalation (which means "I am He").

AJAPA MANTRA

- Prāṇāyāma practice includes the movement of more than one breath
- Different segments of left hand allow for the counting of those breaths
- Beginners might do 4 breaths
- Level 2+ might be able to do at least 12
- Often 16 or 24 breaths are done



Using the left hand to count breaths

7th Chakra – Sahasrara – Nadi Shodana and Meditation

6th Chakra – Ajna – Nadi Shodana

5th Chakra – Vishuddha – Shitali, sitkari, and Brehmari, Lion's breath, Ujjayi

4th Chakra – Anahata – All Breaths: Ujjayi, Viloma I & II, Kumbhakas

3rd Chakra – Manipura – Ujjayi, Khapalbhathi, Bastrika, and Uddiyana Bandha

2nd Chakra – Svadhisthana -Dirga Complete, and fluid transitions

1st Chakra – Muladhara – Belly Breathing and full complete breaths especially on exhalations

Prāṇāyāma and the Chakras



***Without full awareness of breathing,
there can be no development of
meditative stability and understanding--
Thich Nhat Hanh***