

# Breathe using your diaphragm

Diaphragmatic breathing is the healthiest form of breathing. It is also the most natural - observe how a very young baby breathes. They will use their diaphragm and full torso for each breath.

By utilizing your diaphragm you activate your natural means of emptying and re-filling your lungs effectively.

## Re-learn to use your diaphragm

Imagine that your chest is a somewhat conical cavity with the lungs lightly attached to the inside. And with the floor of the cone being made up of a large muscle called the diaphragm. It's the movements of the wall **and** the floor of this cone that result in the movement of air into and out of your body.

Being more like sponges than muscles your lungs cannot get rid of the stale air on their own. For this they must rely on the contraction of the `cone' which surrounds them - in particular the floor of that cone - the diaphragm. This is why using your abdominal or stomach muscles in breathing, which indirectly activates your diaphragm, ensures a better supply of refreshing oxygen.

If you use mainly the top of the cone it's called upper-chest breathing. If you mainly engage the lower walls and floor of the cone it is called diaphragmatic breathing.

## To check how you are breathing

Rest one hand on your upper chest and the other over your navel area.

Notice which hand rises first when you inhale.

If the upper hand rises first you are using upper chest breathing. If the lower hand rises first you are breathing with your diaphragm. If both move at the same time you are using a mix of both.

## Upper-Chest Breathing

This is not wrong but it does mean that your breathing will be a lot more rapid than if you were using your diaphragm. This is because the amount you can inhale and exhale is considerably less - because the upper ribcage does not have the ability to expand and contract as well as the combination of lower ribcage and diaphragm 'floor' - diaphragmatic breathing.

## Using your Diaphragm

Diaphragmatic breathing, particularly if combined with mid- and upper-chest breathing, is much slower and more calming than upper-chest breathing alone.

An added bonus to diaphragm breathing is that it gives a wonderful massage to your internal organs such as the heart, liver, and digestive organs (including colon) keeping them toned and ensuring they get a healthy blood supply.

Most better-breathing techniques rely on your ability to breathe using your diaphragm. So if you have habitually used the mid- or upper-chest it is worthwhile to first develop your ability to use your diaphragm. That way, if you need to use a special technique you will have the diaphragm-breathing skill ready.

## Practice using your diaphragm

Spend a few minutes a couple of times a day practicing using your diaphragm:

1. Lie flat on the floor. Raise your knees. (You can put a cushion under them if you wish.)
  2. Put one palm on your upper chest and the other over your navel. (Your objective is to have the lower hand rise *first* when you breathe in.)
  3. Breathe out fully - and then a little bit more. With practice you will find you can do this by drawing in your abdomen. Pause for 2-4 seconds.
  4. Allow the air to naturally flow in again.
- Slowly and calmly repeat this cycle a few times.

Reference: Ward, Brian. *Lungs and Breathing*. Watts Franklin, 1988.

## **Breathing Exercises - Pranayama and Yogic Breathing**

Breathing is so simple and so obvious we often take it for granted, ignoring the power it has to affect body, mind and spirit. With each inhale we bring oxygen into the body and spark the transformation of nutrients into fuel. Each exhale purges the body of carbon dioxide, a toxic waste. Breathing also affects our state of mind. It can make us excited or calm, tense or relaxed. It can make our thinking confused or clear. What's more, in the yogic tradition, air is the primary source of prana or life force, a psycho-physio-spiritual force that permeates the universe.

*Pranayama* is loosely translated as prana or breath control. The ancient yogis developed many breathing techniques to maximize the benefits of prana. Pranayama is used in yoga as a separate practice to help clear and cleanse the body and mind. It is also used in preparation for meditation, and in asana, the practice of postures, to help maximize the benefits of the practice, and focus the mind.

### **The purpose of these exercises is to make the breath: Deeper, Quieter, Slower, More Regular.**

- For these exercises, place your hands on your abdomen, and feel the abdomen expand with each inspiration. These breathing exercises can be performed in the morning just after waking, and in evening just before falling asleep, or any time when you will have no interferences. These exercises are useful when performed daily, for 5-10 minutes.

### **Follow Your Breath**

- The aim of this exercise is to follow your breath, without changing it.
- Put attention on your breath, but don't influence it
- Notice how it comes of itself
- If your mind wanders, gently bring it back to the breath
- Notice which part of the breath you are observing

### **Reversed Breath**

- start with observing regular breath
- then reverse the concept of your breath cycle,
- begin each breath with exhalation
- this exercise shows you how to take control of your breathing process, and deepens the breathing by increasing the amount of air that is breathed out and therefore breathed in.

### **Squeezing air out of the Lungs**

- breathe in through nose, and out through the mouth
- increase exhalation, forcefully
- feel the intercostals muscles at the lower ribs contracting
- at end of expiration squeeze out a little more air, and a little more air again, and a little more. Force this extra expiration 3 times at each expiration.
- Most people focus on inspiration, as a result expiration takes 1/3 the time of inspiration

### **Bellows (Stimulating) Breath**

- increases energy of nervous system, also increases warmth and alertness.
- Place the tongue in Yogic position. Place the tip of the tongue just behind the upper front teeth, and slide it up (back) until it is just behind the hard tissue between teeth and the front palate. The tongue should be on top of the little ridge.
- Breathe in and out rapidly, through nose, keeping mouth lightly closed
- Inhalation and exhalation at equal length and as short as possible (can even get as short as 3 cycles per second), but do a pace that is comfortable for you.
- Rapid movement of diaphragm
- Should be noisy
- It is real exercise
- Muscles at base of neck can get tired
- First time you do it, do it for 15 seconds
- Increase by 5 seconds each time
- Work up to 1 minute

- Stop and don't try to influence your breath (breathe normally)
- Can be used to wake yourself up and focus attention

At this stage you are ready to meditate, or sit quietly and listen to music and enjoy a few minutes of a peaceful meditative state. Observe your breath, work on making your breath DEEPER, QUIETER, SLOWER, MORE REGULAR.

### **Passive Recipient of Breath**

- this exercise requires active imagination
- it is playful, can be done when waking up or falling asleep
- perform this when lying down
- close eyes, rest arms at sides of the body
- observe your breath
- imagine that each time you inhale, the universe is blowing air into you, and each time you exhale, the universe is withdrawing air from you
- you are doing nothing, the universe is breathing air into you and out of you

### **Relaxing Breath**

- most powerful exercise
- tongue in Yogic position
- inhale through nose quietly
- purse your lips and exhale out mouth noisily
- exhale completely
- inhale for a count of 4
- hold for a count of 7
- exhale for a count of 8
- repeat for 4 breath cycles
- the limiter here is how long you can hold your breath

### **Alternate Nostril Breathing**

Nadi Shodhana, or the sweet breath, is simple form of alternate nostril breathing suitable for beginning and advanced students. Nadi means channel and refers to the energy pathways through which prana flows. Shodhana means cleansing -- so Nadi Shodhana means channel cleaning.

- this exercise calms the mind, soothes anxiety and stress, balances left and right hemispheres and promotes clear thinking
- hold your right hand up and curl your index and middle fingers toward your palm. Place your thumb next to your right nostril and your ring finger and pinky by your left. Close the left nostril by pressing gently against it with your ring finger and pinky, and inhale through the right nostril. The breath should be slow, steady and full.
- now close the right nostril by pressing gently against it with your thumb, and open your left nostril by relaxing your ring finger and pinky and exhale fully with a slow and steady breath.
- inhale through the left nostril, close it, and then exhale through the right nostril.

One complete round of Nadi Shodhana:

- Inhale through the right nostril
- Exhale through the left
- Inhale through the left
- Exhale through the right

Begin with 5-10 rounds and add more as you feel ready. Remember to keep your breathing slow, easy and full.

*Most of these techniques were transcribed from Breathing – The Master Key to Self Healing cassette by Dr. Andrew Weil, M.D.*

## **Breathing Exercises**

### **Alternate Nostril Breath:**

#### **I) Benefits:**

#### **The Alternate Nostril Breath –**

- Has a marvellously calming effect on the nervous system
- Helps to overcome insomnia
- Relaxes and refreshes the body
- Purifies the bloodstream and aerates the lungs
- Soothes headaches
- Improves digestion and appetite
- Helps to free the mind of anxiety and depression

#### **I) Technique:**

1. Sit in a comfortably cross-legged position, back straight.
2. Raise your RIGHT hand and place your ring finger against your LEFT nostril, closing it off.
3. Inhale deeply and slowly through the RIGHT nostril to the count of four.
4. Close off the RIGHT nostril with your thumb and retain the breath for a count of 1-4 seconds.
5. Open the LEFT nostril and exhale to the count of 4-8 seconds. The longer you can make the exhalation, the better. Concentrate on completely emptying the lungs.
6. Breathe in through that same LEFT nostril to the count of four.
7. Close off the nostril with the ring finger again and hold to the count of 1-4 seconds.
8. Exhale through the RIGHT nostril to the count of 4-8 seconds. This makes up one round.
9. Repeat these rounds of alternate nostril breathing five more times, or up ten minutes if you are concerned about insomnia.
10. Practice a ratio of 4:4:8, if at all possible. Increase this to 8:4:8 eventually, then 8:8:8, after some months.

#### **II) Do's and Don'ts:**

DO practice the Alternate Nostril Breath whenever you need calming – if you are nervous, upset or irritable.

DO NOT push yourself with the holding position or by increasing the ratio until you are comfortable doing so.

DO NOT make the breathing rhythmic, smooth and slow. You can work on making it inaudible eventually.

The importance of this particular breath cannot be over-emphasised. The body and mind are closely inter-related and one influences the other to a much greater extent than medicine admitted to for many years. As an all-around “soother” the Alternate Nostril Breath is incomparable.

### **Complete Breath:**

#### **I) Benefits:**

#### **The Complete Breath –**

- Purifies the bloodstream and enriches it
- Develops the chest and diaphragm
- Strengthens lungs, thorax and abdomen
- Increases resistance to colds
- Calms the nervous system
- Aids digestion
- Clears up phlegm
- Helps to lift depression

#### **II) Technique:**

1. Sit in a comfortable cross-legged position or in a chair.
2. Straighten your back, which will straighten your thorax for easier breathing.
3. Inhale slowly through the nose, breathing deeply, consciously.
4. Take five seconds to fill the lower part of the lungs, by expanding the ribs and pushing the abdomen out.
5. Concentrate on filling the top of the lungs for the next five seconds. This will expand the chest and tighten the abdomen slightly.
6. Hold the breath for 1-5 seconds.
7. Exhale slowly until you have emptied the lungs.
8. Repeat 4-5 times more.

#### **III) Do's and Don'ts:**

DO establish a rhythmic rise and fall of your abdomen, to promote regular breathing.

DO attempt to breathe inaudibly after you have gotten the knack of deep breathing.

DO concentrate on your breathing alone, with your eyes closed, if you wish. It serves to so the technique better but it is also a preparation for meditation.

DO push your abdomen out as you breathe in and pull the abdomen in as you breathe out.

DO give an extra snort as you exhale to rid yourself of stale waste-matter in the bottom of the lungs.

DO NOT slump. For maximum efficiency the thorax must be straight.

## **The Cleansing Breath:**

### **I) Benefits:**

#### **The Cleansing Breath –**

- Clears lungs, sinuses and nasal passages
- Relieves colds
- Tones the nervous system
- Strengthens the lungs, thorax and abdomen
- Purifies the bloodstream and clears the head
- Aids digestion
- Stimulated the liver, spleen and pancreas

### **II) Technique:**

1. Sit in a comfortable cross-legged position or a chair, back straight.
2. Inhale deeply, pushing the abdomen out, and taking in as much air as possible in the space of 1 second.
3. Whack your abdomen forcefully to expel the air through the nostrils. The sensation should be one of having been punched in the stomach.
4. Inhale again by pushing the abdomen out and letting the air rush back into the vacuum created by the exhalation.
5. The whole process, inhalation and exhalation should take not much more than 1-1/2 seconds. Both should be forceful and will be quite audible.
6. Repeat ten times, follow with a complete breath and repeat ten times more.

### **III) Do's and Don'ts:**

DO push the abdomen out as far as you can as you inhale.

DO NOT exhale consciously, but let the action of the abdomen do it for you.

*CCNM CLINIC HANDOUT*