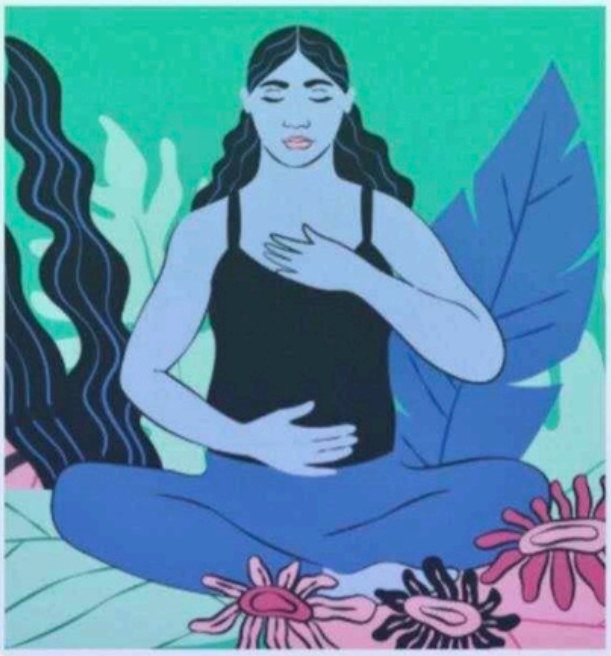
...THE BREATHING SPACE...



ayfever Asthma Sinusitis Menopause PMS Insomnia Panic Attacks Anxiety Snoring Sleep Apnea

High Blood Pressure ADH **Breath Education for Women** Chronic Fatigue Addic

Correct your breathing, connect with your breathing and promote mind/body wellness.

ease Vitality Immunity Focus Heal Energy Improve Clarity Wellbeing Awareness Exer

COURSE CONTENT

- 🗣️ Definition of Dysfunctional Breathing.
- ❌✅ Consequences of DB and Benefits of Functional Breathing.
- 🫁 Physiology of Breathing.
- 💙 Emotional Impact and Breathing.
- 🌳 The External Environment and Breathing.
- 🚺🚹 Female Breathing Vs Male Breathing.
- 🧘‍♀️ Breath Awareness.
- ☯️ Breathing Development Exercises.
- 🆘 Rescue Breathing Exercises.
- 🤲 How to Support your Breathing.
- 💤 Sleeping and Breathing

WHAT IS FUNCTIONAL BREATHING ?

The definition of Functional Breathing simply means correct breathing .
What is so important about Functional Breathing ?. . . . Everyone breathes! It is an automatic behaviour conceived at the time of birth, so surely it takes care of itself to do an efficient enough job to take care of you .
However there is just breathing and there is efficient breathing ,these differences can be worlds apart .

There are numerous reasons why one may develop bad habits with breathing . These habits can be so subtle that one might not notice their breathing behaviour and the effects that can accumulate from incorrect breathing. The difference with efficient breathing is your awareness , understanding and connection with breathing and practicing good breathing habits for optimal health.

We all know that the function of breathing is to bring oxygen (O_2) into the body by inhaling air into the lungs and to exhale carbon dioxide (CO_2) . This of course happens when you are 'just breathing'.
However there are various functions breathing carries out which we are discovering and understanding more and more each day.
It is understood that if the mechanics of our breathing is incorrect this can lead to a myriad of problems .

We are now aware that the way we breathe affects not just our physical health but also our mental and emotional state due to the effects that breathing has on the nervous system as well as the endocrine system which involves hormone release. Functional breathing is 'efficient breathing' and can play a fundamental role in improving and maintaining wellbeing and good health.

As you begin to learn about Functional Breathing you will quickly be aware that this branch of practice is unlike other breathing practices that people are accustomed to.
This therapy includes practical exercises to improve awareness and,connection and good breathing habits. . . . . for life. A huge part of the therapy however is about educating individuals about the basic physiology of breathing and the physiological effects in the body and mind, good and bad.

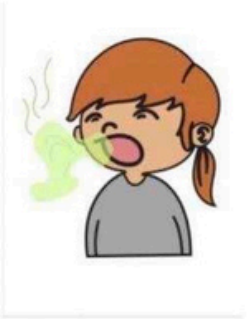
Fundamentally , the aim of improving breathing habits is to improve gaseous exchange in the blood.
When you inhale , O_2 is delivered to the lungs where there is an exchange of gases, between O_2 and CO_2.
Oxygen is delivered in the blood to take to every single trillions of cells so that they can work optimally to keep you healthy. The cells expel carbon dioxide as a waste product into the blood which then journeys to the lungs and then exhaled. . . . Job done !
. . . Except it's not that simple !

Depending on how you breathe can have a huge effect on gaseous exchange and can create an imbalance between O_2 and CO_2. It is CO_2 that Functional Breathing Therapy focuses on increasing . This may sound strange but as you delve into this therapy you will become to understand why there is such huge importance played on CO_2. You will also learn how by correcting breathing helps with other physiological issues, such as symptoms of disorders,posture,digestion,sleep,stress management and more !

WHAT IS DYSFUNCTIONAL BREATHING?

Incorrect breathing causes dysfunction in breathing and dysfunction of the body .
Dysfunctional breathing presents itself in the form of overbreathing , i. e hyperventilating.
The medical description of hyperventilating is overbreathing at an increasing rate resulting in an increasing rate of carbon dioxide loss.
On an acute level such as a panic attack the rapid loss of CO_2 leads to rapid heart rate, faintness ,numbness, anxiousness etc.
However long term incorrect breathing habits results in chronic hyperventilating. . . this type of hyperventilating can be very subtle and go unnoticed .

Symptoms :
Insomnia
Fatigue
Dehydration
Hunger
Anxiety
Stress



Symptoms:
Wheezing
Sinusitis
Weak immunity
Halitosis
High blood pressure
Hormone imbalance
. . . and more !

Signs of overbreathing

Mouth breathing
Snoring
Over yawning
Over sighing
Heavy breathing
Audible breathing
Shallow breathing
Upper chest breathing
Extensive talking
Continuous nose block / sneezing
Coughing
Easily out of breath

??? QUESTIONS ???

Answering these questions will help you to recognise your breathing habits and how your breathing may be affected throughout a typical day

Do you breath often with your mouth open ?

Do you snore ?

Do you wake up with a dry mouth ?

Do you dribble during the night ?

Does your breathing wake you ?

Do you often have a blocked nose during the night or day ?

Do you sneeze often ?

Do you often have a runny nose ?

Do you cough often ?

Do you sigh often ?

Do you yawn often ?

Are you often out of breath ?

Note if you have any physical concerns or issues or medical conditions

* Please note that any personal information written does not have to be discussed in group sessions . Any personal details are for your use only. *

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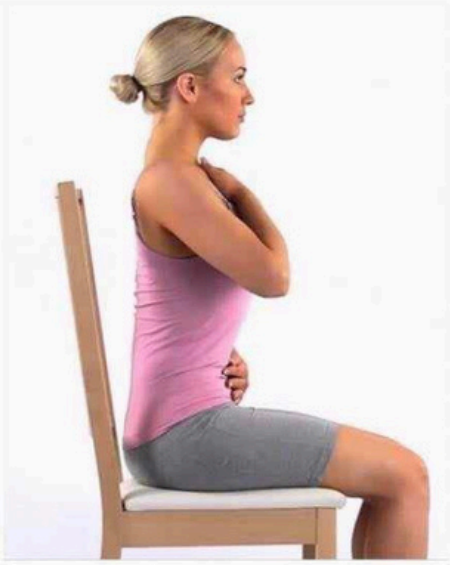
BREATH AWARENESS

Exercise 1

Sit comfortably with an upright posture.
Take a few minutes to become aware of your breathing.
Do not control or manipulate the breath, be honest and allow to just breath the way you normally do without change.

Place one hand on your upper mid chest the other hand on or just above the navel.
Just breath without any control....
you want to become aware of your present breathing state, remember , it's important to be honest to realise the nature of your present breathing.
Zone into becoming aware of your breath :

FEEL :
With your top hand ,
can you feel your chest rise and fall ?
Is the movement deep or shallow, quick or slow ?
Is the breath high or low on the chest ?
Are there pauses, quivering or shaking ?
With your bottom hand
Can you feel your belly rising or not ?
Is the movement fast or slow, deep or shallow ?
Are there pauses , or quivers or shaking ?
Are your inhales longer or shorter than your exhales ?



NOTES

Feel your breath :
can you feel the air as you breath in and out ?
Is the feeling from your mouth or nose or both ?
Is the air cold or warm ?
Can you feel the speed of the air as you inhale and exhale ?
Do you feel air or any sensation in your throat?

LOOK : lower your vision and see where movements occurs which hand moves more, how deep or shallow, how slowly or quickly, how rhythmic.

LISTEN :
Can you hear your breathing ?
Does the breathing sound fast or slow ?
Is the sound from the mouth or nose or throat ?
Is the exhale louder than the inhale ?
Can you notice any pauses ?
How rhythmic is the sound of your breathing ?

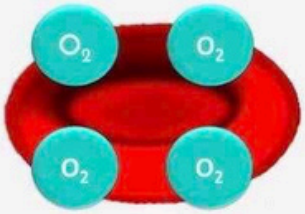
During or after the Breath Awareness Exercise circle or note what you have observed.

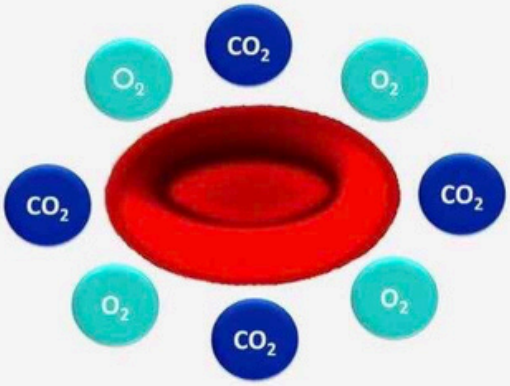
THE IMPORTANCE OF CARBON DIOXIDE

The Bohr Effect

In 1903 a scientist by the name of Christian Bohr made an important discovery that unravelled some of the mysteries around breathing. He discovered that the level of carbon dioxide in the blood is important in allowing oxygen to be released by the haemoglobin. At higher levels of CO2 haemoglobin releases O2 more easily. This has been named the Bohr Effect. It is also known by medical doctors and scientists as the oxy-haemoglobin dissociation curve. When the level of CO2 in the blood is lower, oxygen bonds more tightly to haemoglobin, causing the symptoms of lowered oxygen in body tissues.

Without carbon dioxide, oxygen bonds tightly to the haemoglobin, making it unavailable to the body cells





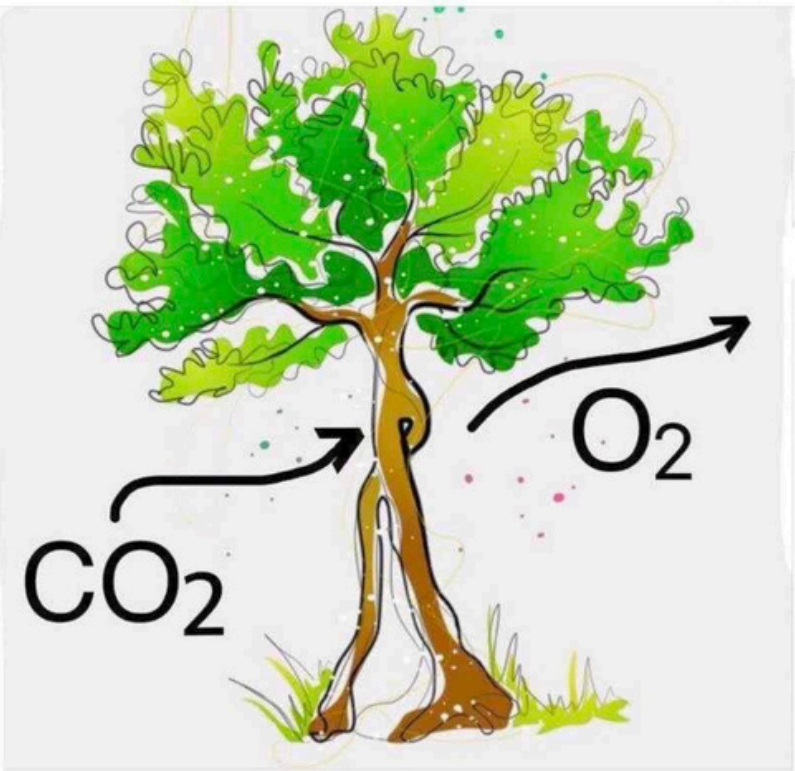
When carbon dioxide is present, oxygen splits from the haemoglobin and is available to the body cells

Oxygen Transportation and The Bohr Effect

When tissue cells have high enough levels of CO_2, the O_2 that is bound to haemoglobin in red blood cells detach and then bind to tissue cells

If you breathe out too much CO_2 at a fast rate, the O_2 stays bound to red blood cells and doesn't transfer to the tissue cells, because there is not enough CO_2 for the exchange to take place. This is how over-breathing causes problems.

We need to have a good CO_2 tolerance, so that we don't need to breathe as much. When we don't breathe as much, CO_2 levels are higher and that allows the O_2 to detach from red blood cells and bind with tissue cells



IT'S NOT JUST PLANTS THAT NEED CO_2

THE IMPORTANCE OF CO2

It's common to think that carbon dioxide is nothing but a waste gas but the human body actually needs to hold on to some CO2 ,it's imperative to keep a certain amount to ensure that all works well at a cellular level . Breathing incorrectly has a phenomenal influence on the amount of CO2 we hold on to . . . . . **FB** techniques will teach you how to achieve and make the most of this tainted stigmatised molecule . ❤️ CO2.. we need you.

Carbon dioxide (CO_2) is vital for survival .
Aside from playing a central role in the balance of pH levels and oxygen efficiency , CO_2 also possesses wonderful qualities.
This gas is a vasodilator. This means that the gas helps to relax the walls of the blood vessels allowing the blood to flow easier as a result the heart does not have to pump so heart, reducing blood pressure.
CO_2 is also anti inflammatory,reducing swelling and secretions of membranes particularly in the nose,throat and lungs.
CO_2 has antiviral and antibacterial properties. When in balance this can help protect the immune system by acting as one of the first defences of viral,bacterial infections.
Breathing slower ,quieter and lesser will increase your CO_2 level thus improving the role off this misunderstood gas .
CO_2 we ❤️ you !

Correct Breathing = Sufficient CO2 = Efficient O2 = Better Health. Incorrect Breathing = Insufficient CO2 = Inefficiency O2 = Health Issues . Help Oxygen out! Give it what it needs to help you be the best you can be! CO2 we need you ❤️

NO

NITRIC OXIDE

NO spells Nitric Oxide

The longer the nasal exhale the more NO !

The deeper the nasal exhale the more NO !

The slower the nasal exhale the more NO is produced !

Research shows that the Paranasal Sinuses generate Nitric Oxide which then releases to the Paranasal Cavities. However studies have shown that not only nasal breathing produces NO also the slower you breath particularly during exhale as well as breath holding the more NO you produce. . . . . FB promotes all the above... the NO Connection.. it's a beautiful thing❤️

Gentle humming Increases NO !

NASAL BREATHING VS MOUTH BREATHING

Nasal Breathing

The nose is the structure that is part of your respiratory system, allowing air to pass through , into your lungs where gaseous exchange takes place between alveoli and blood.

The nose is directly connected to the diaphragm ,the main muscle that assists the breathing mechanism.

Nasal breathing promotes the use of the diaphragm. Therefore allows the air to reach deeper into the lungs where air exchange is more prominent.

The nose is an important line of defence.

The fine nasal hairs filters the air before it enters the lungs, protecting the body against particles such as pollen and pathogens such as bacteria and viruses.

This helps lessen the effects of dust and pollen allergies and decreases the risk of viral or bacterial infections.

Nasal breathing increases oxygen uptake up to 20% in comparison to mouth breathing and decreases the loss of carbon dioxide, this ensure a healthy balance of circulating blood oxygen and carbon dioxide.

When breathing from the nose slowly , Nitric Oxide (NO) builds up in the paranasal sinuses.

Nitric oxide improves blood oxygenation.

NO has many benefits , anti inflammatory,antibacterial,antiviral are just a few ! Nasal breathing increases NO.

You are much less likely to over breath when breathing from your nose

Nasal breathing has a calming effect due to the the relation of the diaphragm which when operating correctly, stimulates the Vagal Nerve .

Mouth breathing

Although the mouth is able to breath you may ask yourself, why not breath from the mouth ? Put simply, the mouth is part of the digestive system, for food and fluid to enter , chew and swallow.

As you swallow there is a build up of pressure which is released from the mouth to the nose, without thus outlet the act of swallowing would cause pressure in the ears.

The mouth is also used for vocal expressing , this would be impossible without exhaling because the expression of words and sounds are carried out with the action of exhaling .

These are the reasons why the mouth has connection to the lungs.

Mouth breathing creates an avalanche of effects.

When breathing from the mouth air cannot be filtered. Dust and other unwanted particles such as bacteria and viruses happily and readily enters your system causing disturbances and aggravation to your immune system .

Mouth breathing causes weakness of bone and muscular structure this leads to changes of facial and neck symmetry and worsen breathing patterns.

Mouth breathing also heightens the loss of carbon dioxide leading to the decrease of oxygen delivery to your cells.

Nitric oxide is unable to produce efficiently therefore you are missing out on the amazing effects of nitric oxide.

Mouth breathing stimulates the sympathetic nervous system which increases heart rate ,blood pressure and release of adrenaline. You are more likely to be stressed if you are a mouth breather,so....

SHUT YOUR MOUTH !

Remember the importance of keeping your mouth closed .... do yourself a favour and SHUT YOUR MOUTH ! 😉

CORRECT BREATHING

DIAPHRAGMATIC BREATHING

Allows deep breathing

Increases gaseous exchange

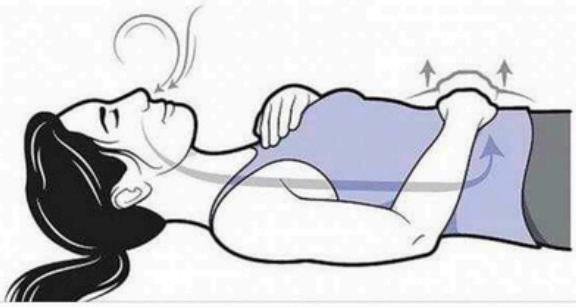
Bonus:

Aids digestion

Tones Vagus nerve

Stress release

Belly breathing Lie flat on your back with your knees bent. Place one hand on your chest and the other on your belly just below your rib cage. Breathe in slowly through the nose so your stomach expands against your hand. The hand on your chest should not move. Slowly exhale through the nose or pursed lips and feel the belly move down to its original position. Repeat for five to 10 minutes. As you get more comfortable with the technique, practice sitting or standing.



NASAL BREATHING

Allows air resistance

Less loss of CO_2

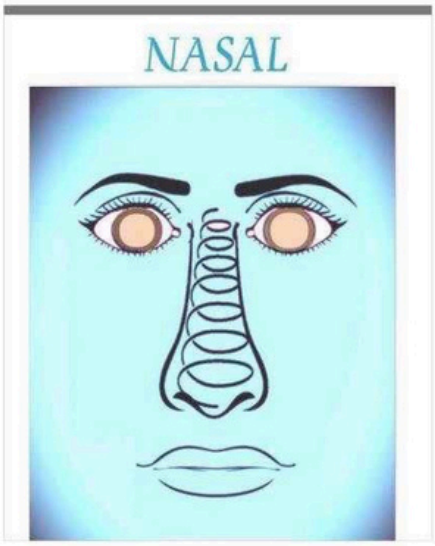
Increase production of Nitric Oxide

Dilation of blood vessels

Lowers blood pressure

Stimulates parasympathetic NS

Cleans air , protecting immunity



The stimulation of the Vagus nerve and the Parasympathetic Nervous System lowers blood pressure , slows heart rate, releases endorphins, decrease stress,promotes calmness and relaxation ! Diaphragmatic breathing directly stimulates the Vagus Nerve !. . . Healthy breathing , healthy mind

Nasal breathing produces Nitric Oxide.

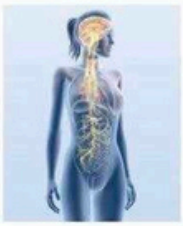
Known as the 'Miracle Molecule'

NO has many amazing benefits,

This molecule is a strong vasodilator and is antiviral and antibacterial !

DIAPHRAGMATIC BREATHING AND THE VAGUS NERVE

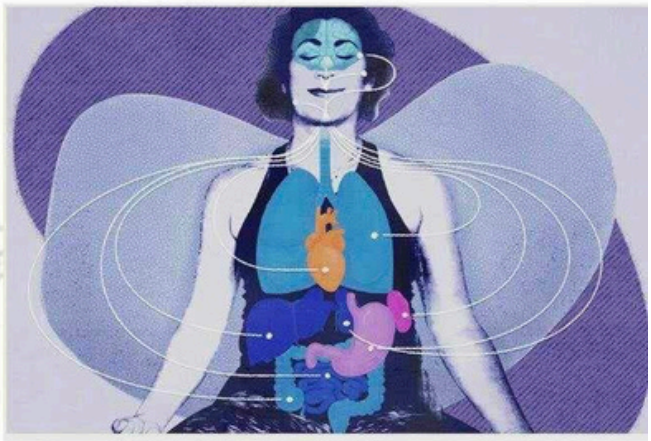
The diaphragm is intrinsically connected to the vagal nerve,. Studies have shown that when breathing slowly and deep from the diaphragm this large spreading nerve is stimulated. Nasal breathing promotes effective diaphragmatic breathing.



The vagus nerve, also called 10th cranial nerve, is the longest and most complex of the cranial nerves, and one of the most important nerves in your body.

Let me explain why. The word "vagus" actually means "wandering" in Latin—and that's exactly what the vagus nerve does. It has an average of 100,000 parasympathetic nerve fibres that connect your brain with almost every organ in your body.

The vagus nerve is the primary component of your parasympathetic nervous system (rest and digest, or feed and breed response), and as a consequence plays a key role in your heart rate, breathing rate, digestion, detoxification and much more.

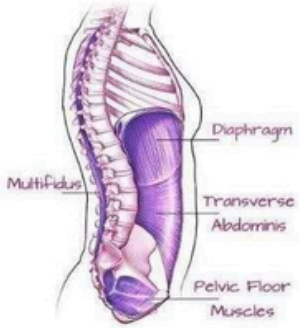


Higher vagal tone is linked to an increased resilience to stress, reduced allostatic load (the amount of stress you accumulate over time), less anxiety, and healthier emotional, physical and mental well-being.

Interesting facts about diaphragmatic breathing and vagal stimulation

Helps regulate the internal organs to optimise health,growth and regulation.
Slows the heart rate.
Lowers blood pressure.
Calms the nervous system.
Sends anti inflammatory signals to other parts of the body.
Promotes good digestion and sexual arousal.
Balances oxygen / carbon dioxide respiration.

THE DIAPHRAGM



& POSTURE

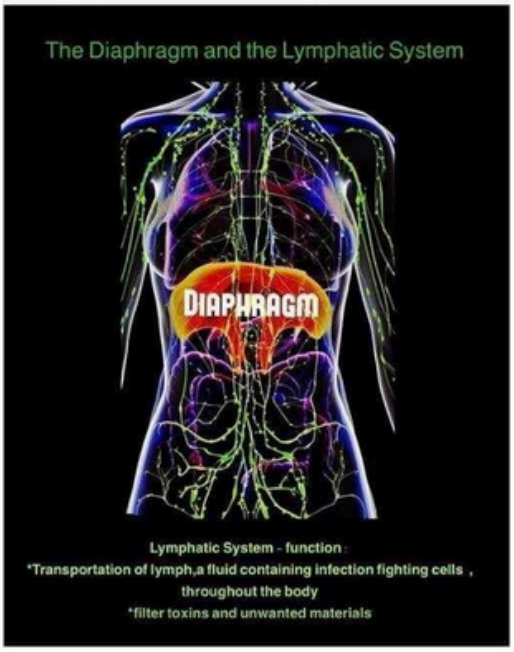
Shallow breathing or breathing from the chest causes tension around the upper chest,back ,neck and shoulder muscles ,weakens the abdominal muscles and lower back ,causing stiffness / pain in any of these areas and prone to injuries.
Good diaphragmatic function is essential for good posture and core stability as much as good posture is important in proper diaphragmatic breathing.
When correct breathing takes place the diaphragmatic actions increase intra abdominal pressure which stabilises the trunk area ,the lower back and core muscles ,keeping them toned,preventing compensations, injuries and pain.

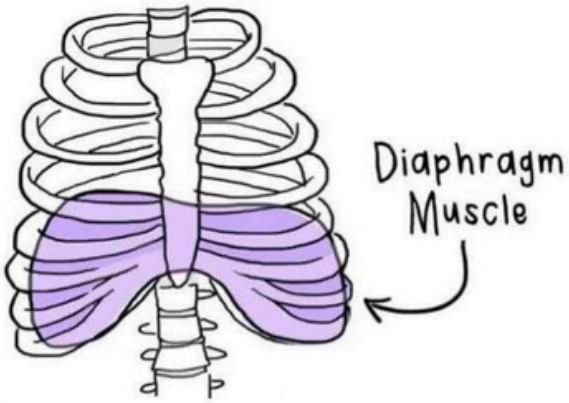
THE DIAPHRAGM

& VENOUS RETURN

Diaphragmatic breathing increases effective flow of oxygenated blood to the internal organs and body tissues this ensures all cells receive optimal oxygen intake and toxic outlet .
The diaphragm plays a very important role to increase the flow of deoxygenated blood in the veins as unlike the arteries the venous system lacks muscular contraction to help with moving the blood flow.

Chest breathing at rest causes lymphatic stagnation in the stomach, pancreas, spleen, liver, kidneys, large and small colon, and other organs. Unlike the circulatory system the lymphatic system has no pump. It relies on movement to efficiently transport lymph around the body in order to eliminate toxins and unwanted material.The lymph nodes are filters and contain lymphocytes (infection , disease fighting cells). The nodes situated around the upper body and groin area receives assistance from moving body parts,the legs , arms,neck etc. However around 60% of lymph nodes are located under the DIAPHRAGM !! Therefore nature expects us to use the diaphragm effectively in order to help continuously remove waste .





So , you can see that when the diaphragm is moving effectively that this benefits many systems of the body and this can only be done by breathing correctly.
Mouth breathing disengages the connection to the diaphragm causing this muscle to become weak and less efficient.
So , close your mouth....breath deep,lower and slower 😉

Methods to correct and improve breathing with Functional Breathing Therapy.

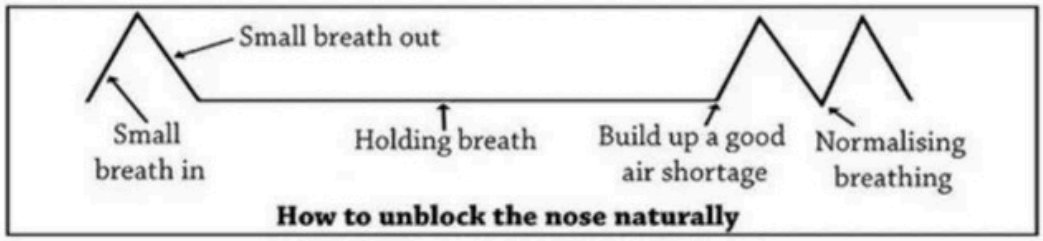
To correct bad breathing habits and improve CO_2 tolerance , exercises have been developed throughout the years and are backed up by research and many case studies.
The aim of the exercises is to improve CO_2 level and therefore improve cellular function by increased O_2 delivery.
There are further benefits from practising the exercises such as improvement of posture,digestion,energy increase, calm state of mind and more.
The individual is required to practice daily but it takes little effort and just a little time and the results experienced can give significant results in health,fitness and mental wellbeing .
The exercises are powerful and can be tailored to the individual depending on their health issues.
Examples of breathing exercises are Reduced Breathing and Steps. There is also an emergency breathing exercise available to use in cases such as panic attacks / asthma attacks.

How do you know you are improving ?

There is a specific method used to test your breathing . It is a simple exercise that serves as a useful way to measure or appraise breathing patterns. This method is called the Control Pause (CP) and involves holding a breath in a particular way and counting seconds. The higher the seconds the better the breathing. When scores are low it is a sure sign that there are problems with breathing patterns and a rising risk in health issues. You can use this method for the rest of your life to understand where you are with your breathing and to track progress.

HOW TO DECONGEST THE NOSE

The first step to normalising breathing volume is to decongest the nose and make a permanent switch to nasal breathing. As chronic hyperventilation can be maintained by an occasional sigh, it is important to counteract the sigh by swallowing or holding the breath. The switch to nasal breathing is followed by employing breathing exercises designed to bring breathing volume towards normal.



How to unblock the nose naturally

The nose can be decongested for both allergic and non allergic rhinitis by holding the breath as follows:

- Take a small, silent breath in and a small, silent breath out through your nose.
- Pinch your nose with your fingers to hold your breath.
- Walk as many paces as possible with your breath held. Try to build up a large air shortage, without overdoing it of course!
- When you resume breathing, do so only through your nose; your breathing must be calmed immediately.
- After resuming your breathing, your first breath will usually be bigger than normal. Make sure that you calm your breathing as soon as possible by suppressing your second and third breaths.
- You should be able to recover this breath hold within two to three breaths. If you cannot, you have held your breath for too long.
- Wait for about a minute or so and then repeat.
- Repeat this exercise five or six times until the nose is decongested.

Your CP (control pause) is a way of measuring how well you breathe , a base measurement of your breathing volume and consequently how well you are tolerating CO_2 therefore a guide to how well your cells are receiving O_2.

Although a simple exercise it may take a little practice to get it right but be patient, this is a very useful way of measuring just how well you are breathing.

Make sure when taking your CP you are rested and your breathing is relaxed, no talking for at least a couple of minutes.

When you are measuring you will be breathing normally without the smallest exaggeration .

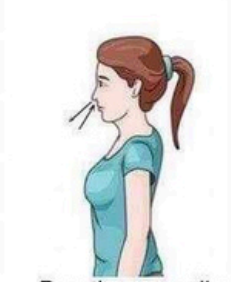
This is basically a comfortable breath hold time.

Have a clock or timer ready showing the seconds and time your breath hold.

Inhale and exhale as normal

at the end of an normal exhale ...

... pinch your nose and hold. Count the seconds
Release at the first sign of air hunger



Breathe normally

- Inhale , exhale as normal from the nose .
- When you are ready , as you come to the end of your natural exhale pinch your nose and hold .
- Count the number of seconds until you feel the natural desire to inhale and release your nose.
- Your inhale should be calm , as calm as when you was breathing normally before you started the breath hold .

- Wait two minutes and repeat.

If you're even slightly out of breath, signs being your nostrils flaring or inhaling to fast, wanting to breath in quick, this means you have held your breath too long which means the results will be incorrect.

Breathing Exercise
Reduced Breathing
(RB)

This is a breath reducing exercise that fundamentally aims to increase your blood CO2 level and production of Nitric Oxide.

Here you will learn to quieten,slow and calm the breath by decreasing the inhale and increasing the exhale. Unlike the other Functional breathing exercises RB encompasses a meditative nature involving relaxing and calming the body and mind so to focus your thought on breathing.This helps to connect with body and mind before moving deeper into the exercise.

***How do I know I am doing the exercises correctly ?**

After a few minutes into the exercise you should feel warmer, your hands, fingers may feel clammy ,sometimes even cold.

Your eyes will have a glazed look about them and you should feel relaxed.

If your CP is a little higher and your pulse lower than before you started you are doing the exercise correctly.

*** How often should I do RB ?**

You can do RB as often as possible (the more the better!)...but at around 40-60 minutes if your CP is between 10-20 seconds is a good guide and at least 20 mins if your CP is 20 to 40, providing you are exercising or you are very active and continue with correct breathing.

Remember, Functional Breathing exercises are designed to increase your Control Pause .

Sessions can be broken into 10-20 mins each time.

Feet flat on the ground.

Sit upright but relaxed.

Ensure your clothes are comfortable and loose.

Imagine a string holding up your head ,neck and spine, your head should be level.

Begin with one hand on your chest and the other over your abdomen area.

Breathe as normal.

Look , listen and feel the breath.

Sense your breathing.

Begin to relax each part of your body, releasing tension part by part. Sometimes it helps to tense the area then relax...

Tense your face and jaws then release the tension, tense the neck then relax, tense your shoulders then let go.....continue to do this throughout...your chest,arms,back,abdomen,thighs,lower legs then feet.

Once relaxed go back to the breathing.

If you can hear the breath, quieten it.

If you can feel the breath slow down and breathe gently. This alone will begin to reduce your breathing.

Relax into it.

Once you are comfortable in slowing and quietening the breath reduce your breath by inhaling a little smaller and exhaling a little longer....going a little deeper with the exhale as you continue the exercise. You may even pause a little at the end of the exhale if you feel comfortable to do so. Continue keeping the inhale a little small, imagine that you are slicing around 10% from the inhale. You should feel a little air hunger, but only a little.

If you become uncomfortable or stressed it is because you either feel strange due to the newness,or you are creating too much air hunger or both.If you do feel stress go back to normal breathing and when you are ready ,resume.This is perfectly normal at first.

For some ,it can take some practice to get the right amount of air hunger and feel very relaxed in the process

Ensure to do the exercise on an empty stomach.

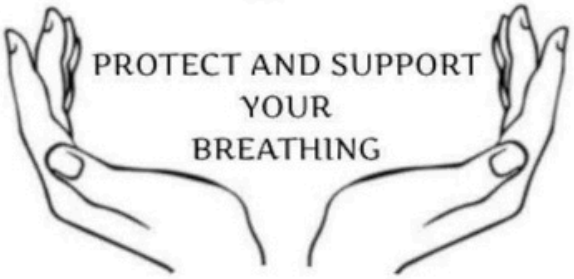
The RB exercise is very useful to do just before you go to sleep to increase effective breathing during the night and helps to calm the body and mind before sleeping this can help towards a deeper more relaxed sleep.

Once you get used to this exercise you will be comfortable to do RB while standing,walking,moving !

You can listen to music if you wish or just have quietness while doing RB but to help you start off please look up

MINDFULNESS BUTEYKO

on YouTube



There are several factors which may impact on breathing patterns and if not addressed can perpetuate dysfunctional breathing.These factors include external effects as well as lifestyle choices.Sometimes the effects may be subtle however it is important to recognise these influences.
As you become increasingly aware and connected to your breathing you will have the growing ability to zone into and identify links between your breathing behaviour and external effects.

EXTERNAL EFFECTS

VOCs (Volatile Organic Compounds) : Solids and sprays that emit gases.
Many household and outdoor products contains concentrations of VOCs. These may have short term or long term adverse effects on breathing / health.
Examples : Paints,varnish,pesticides, aerosol sprays, adhesives.

Chemicals such as
perfumes, disinfectants.

Pollution.

Allergens such as
Grass pollen
Dust
Animal - eg cat dander,feathers
Chemicals

Atmosphere :
Too dry, too humid . Ideal indoor humidity is between 30% - 50%.

Stagnant air.
Keep gentle air circulation by ventilating keeping windows open or a ventilating system.

Indoor Temperature :
Central heating is widely adopted in modern housing. Common problems with central heating is overheating,dry and stagnant atmosphere. This can cause aggravation of the airways,drying the nasal and throat causing inflammation. Too much heat can increase blood pressure and imbalance of body temperature causing the body to work hard. This inevitably increases breathing rate and volume.
Recommended indoor temperature is between 18 - 21 Celsius.

LIFESTYLE

Diet:
Obesity,overweight
Overeating
Bloatiness
Food allergies
Food sensitivities
(Signs :CP decrease, faster breathing, increase heart rate)
Processed foods
Sugar
Too much carbohydrates

Physical activity:
Sedentary lifestyle strongly leans towards high blood pressure, higher heart rate, obesity, weak core muscles

Exercise improves breathing volume, improves respiratory gas exchange,produces CO_2, improves core muscles,helps with weight loss,reduces blood pressure and heart rate and helps with stress.
All in all a great way to improve your breathing !

Stress :
Stress stimulates the sympathetic nervous system and triggers the release of adrenaline leading to higher blood pressure,heart rate.
Acute and chronic stress can disturb breathing patterns , your breathing is deeply tied to the nervous system. It is possible to release stress through the connection of breathing.
Many studies have shown that it is possible to decrease stress by calming and slowing the breath and adopting certain breathing exercises .

Food and Breathing ?!? 🤔

How, what, when and why food can effect your breathing !

FACT : Allergies and food sensitivities can disturb breathing patterns.
Difference between allergy and sensitivity symptoms:
Allergies are more severe and sometimes life threatening. The reaction can be almost instant or becomes pronounced within a few hours. Symptoms include anaphylaxis ,shock,rhinitis , hives,eczema,respiratory problems.
Common allergy foods include,lactose in milk,gluten in grains,nuts,eggs.

Sensitivity symptoms are more subtle and can yield multiplicity of symptoms and can manifest in the form of more abstract effects such as fatigue,constant mucus,runny nose, coughing,generally feeling unwell, aches and pains, frequent illness,cold,flu,abnormal breathing. Unlike allergies,sensitivities can take up to three days to play out and can last for long periods. This along with abstract symptoms can make it difficult to pinpoint what food is causing reactions.

How can my breathing tell me if I may have food sensitivity?
Obvious signs : wheezing,faster shallower breathing, sneezing,creating of the throat,coughing soon after eating the food or hours or a day or two after.
If your CP drops few seconds after your meal this could be a sign.
Your pulse is also a good reading, it is normal for the pulse to increase a little due to the body working to breakdown food. If the pulse is unusually high (more than 10 pulses per min from your average pulse rate) this could be a sign that you are sensitive to something you have eaten recently.

Fact : Bloatiness of the belly ,over filling the stomach can disturb breathing patterns.
The fullness of the abdomen area restricts the expansion and contraction of the diaphragm thus having a direct effect on diaphragmatic breathing. This constriction brings the breath upwards causing shallow chest breathing.

Try and avoid foods that cause bloating such as wheat flour based foods, bread,pasta.
Carbonated drinks like beer,soda also bloats the belly.

Fact : Stimulants, e. g coffee,energy drinks,soda,alcohol, increases the heart rate and creates a hyper physiological/ psychological state thus plays direct emphasis on imbalanced breathing patterns.
Although not directly a stimulant, sugar can increase the heart rate and develop hypertension ,interrupting breathing behaviour.

Fact: being overweight will inevitably play a role in dysfunctional breathing in many ways. You are more likely to snore,experience sleep apnea,constriction of the diaphragm leads to upper chest , shallow breathing. Mouth breathing is very common in obesity.

Fact: Eating just before bedtime will affect night time breathing as the digestion system works away during the night, belly full and with the added stress of stimulants,food sensitivities etc.... not good !

A GOOD NIGHT'S SLEEP

When breathing is poor, mood regulation and sleep will be poor. This can create a deep cycle as inadequate sleep quality leads to tiredness and anxiety,imbalancing emotions leading further more to negative breathing patterns .
Disturbed sleep is frequently connected to the way you breathe.
Mouth breathing,upper chest, shallow breathing ,fast and/ or irregular breathing during the day will carry on during the night ,constantly hyper stimulating the sympathetic nervous system,keeping the body and mind awake. In fact if you are a dysfunctional breather during the day it is likely that your breathing will worsen during the night.
The breathing can become heavier,shallower,louder, faster,hyperventilating increases. This results in poor sleep,poor regenerating function of the body and mind , this has detrimental effects on your wellbeing, physically and psychologically.

If you struggle to go to sleep ,if you breathe heavily during the night ,snore or experience sleep apnea there are two powerful methods you can adopt to help.

First of all ensure that you are breathing only through the nose during the day. Practicing the Reduced Breathing exercise just before going to sleep will calm the sympathetic nervous system and stimulate the parasympathetic nervous system,lowering the heart rate and blood pressure,calming and relaxing the body and mind. Slowing the breath and increasing CO2 prepares your breathing to continue as such , helping you to achieve a calmer, deeper sleep .

For those who snore or experience mild sleep apnea, it is important to adopt the mouth tape to ensure the mouth stays closed during the night. (Chronic or severe sleep apnea should seek further advise from Buteyko or functional breathing therapist.)
To overcome any initial anxiety about having your mouth taped, try wearing the tape for 20 minutes before you go to sleep , even better , while you have the tape on do the Reduce Breathing exercise .
You may find if you breathe from the mouth the tape may fall off during the night. This will resolve fairly quickly as your body will re-learn its natural nasal breathing pattern...be patient , although this sounds simple it is a very powerful tool for you to use to normalise your breathing as you sleep.
If your nose is blocked before going to bed use the nose unblocking exercise to clear it before taping your mouth.

SLEEP HYGIENE

Consider influences that can impose on a good night's sleep:
Stimulants such as caffeine (contained in coffee,tea,chocolate,sodas) as well as alcohol and sugar.
Full stomach: avoid eating before bedtime, last meal should be around 3 hours before you sleep.
Temperature: avoid over heating, ambient bedroom temperature should be around 18 celsius.
Good ventilation.
Avoid using computer screens before bedtime as the emitting blue light suppresses melatonin,the hormone that makes you feel drowsy and is released to prepare for sleep.

Fact : Processed foods contain various additives such as sulphites, monosodium glutamate, food colourings,sodium nitrate but to name a few ! Many can trigger symptoms such as heart palpations,breathlessness,headaches, allergies.
Some additives can bring on complex physiological stress and can exacerbate illnesses/ disorders like asthma,rheumatoid arthritis,chronic fatigue,depression etc.

In conclusion it is advisable to keep away from allergens,and try and key into any sensitivities.
Avoid bloating and overfilling the belly and restrain from eating too late at night , the earlier the better. Lower your intake of stimulants,including sugar and when you do have them try and keep your intake to early in the day or when you are going to be at your most active.

What to include in your diet to support your breathing.

It's important to take into account and avoid all the things which can harm your breathing. It is also very important to include dietary components to protect and support your breathing.
Inflammation, infections, higher heart rate and blood pressure and fatigue are the main physiological issues which can generate problematic reactions in breathing .
Therefore it is key to incorporate foods to protect you from these issues.
Firstly, to embrace a well balanced diet is crucial. This includes good fats,protein and carbohydrates from wholesome sources as well as vitamins and minerals,avoiding processed foods and keeping to fresh foods is vital.
All nutrition have particular roles to keep you healthy and there are certain nutrients that play essential roles in protecting you against the above physiological issues .
Vitamin C , found in fruits and vegetables and the sunshine Vitamin D, boosts and protects the immune system, armouring against infection and promoting healing.
Vitamin Bs supports the nervous system. Vitamin B_{12} (found in meats and eggs) is particularly important as B_{12} is involved in the formation of red blood cells , the cells that carry and release oxygen to the body.
Minerals such as magnesium and potassium , when deficient can lead to breathlessness, irregular heart patterns.
Iron is a mineral that plays a key role in red blood cells uptake of oxygen. Lack of this mineral causes inadequate production of haemoglobin, a substance that is needed for red blood cells to carry oxygen. This consequently leads to depletion of O_2 to the body tissues. Symptoms of both B_{12} and iron includes fatigue and breathlessness.
There are also herbs that possess anti inflammatory properties such as turmeric and green tea. Many herbs are helpful to protect against infection,these include ginger,echinacea,sage and garlic.

H_2O !
Let us not forget water !
Hydration is of utmost importance. We are after all around 70% water,every metabolic process needs water to be present !
General guideline is to drink around 1. 5 litres daily and up the amount when you increase your physical activities.

The best overall dietary guideline is to keep your diet well balanced with fresh meat,fish,fruits and vegetables,avoid overeating and processed foods and keep well hydrated!

PHYSICAL ACTIVITY

There are thousands of studies,hard core research that shows how and why increased physical activity remarkably improves the body's ability to strengthen,regenerate,remove toxins,lower heart rate and blood pressure ,boost the immune system ,balance hormones, tone the nervous system,aid the lymphatic system , increase vitality and wellbeing.
All in all protecting the body from injuries,illnesses,obesity,tiredness and depression .
From a functional breathing perspective, keeping active and increasing the heart rate for short periods by exercising contributes several advantages.

* Core stability - improving diaphragm and accessory breathing muscles
* Carbon dioxide increase
* Nitric oxide increase
* Lung volume increase
* Slowing the heart rate
* Lowering blood pressure
* Toning the nervous system

All the above has positive effects on breathing behaviour by calming the breath ,increasing CO2 and therefore freeing oxygen to the tissues and cells.
As long as core engagement and posture is correct during activities , the diaphragm can strengthen and allow deep breathing, thus also having a pronounced affect on the vagus nerve which then promotes calmness .
Lung volume, capacity improves,allowing breathing to move deeper.
Exercise helps to increase the Control Pause , this means that as your CP increases you are developing CO2 intolerance ! 👍

Note:

Once you reach CP of 20 seconds it is important to up the CP by exercising, increasing the heart rate eventually towards maximum heart rate .

If you are used to a sedentary lifestyle and your CP is less than 10 seconds it is extremely important to not only breathe nasally but also to adopt the Reduce Breathing exercise and Small Breath Holds and gentle Step exercises for 1 - 2 hours daily. You should try and include gentle activities such as walking ,yoga,Pilates .

Once your CP is between 10- 20 seconds you should do all the breathing exercises and include increasing Step exercises for 60 minutes a day and be more active.Include for example brisk walking and reduce breathing while being active.

Once you reach 20 seconds CP the best way to improve the CP is by exercising and reaching your maximum heart rate for at least 20 mins daily .

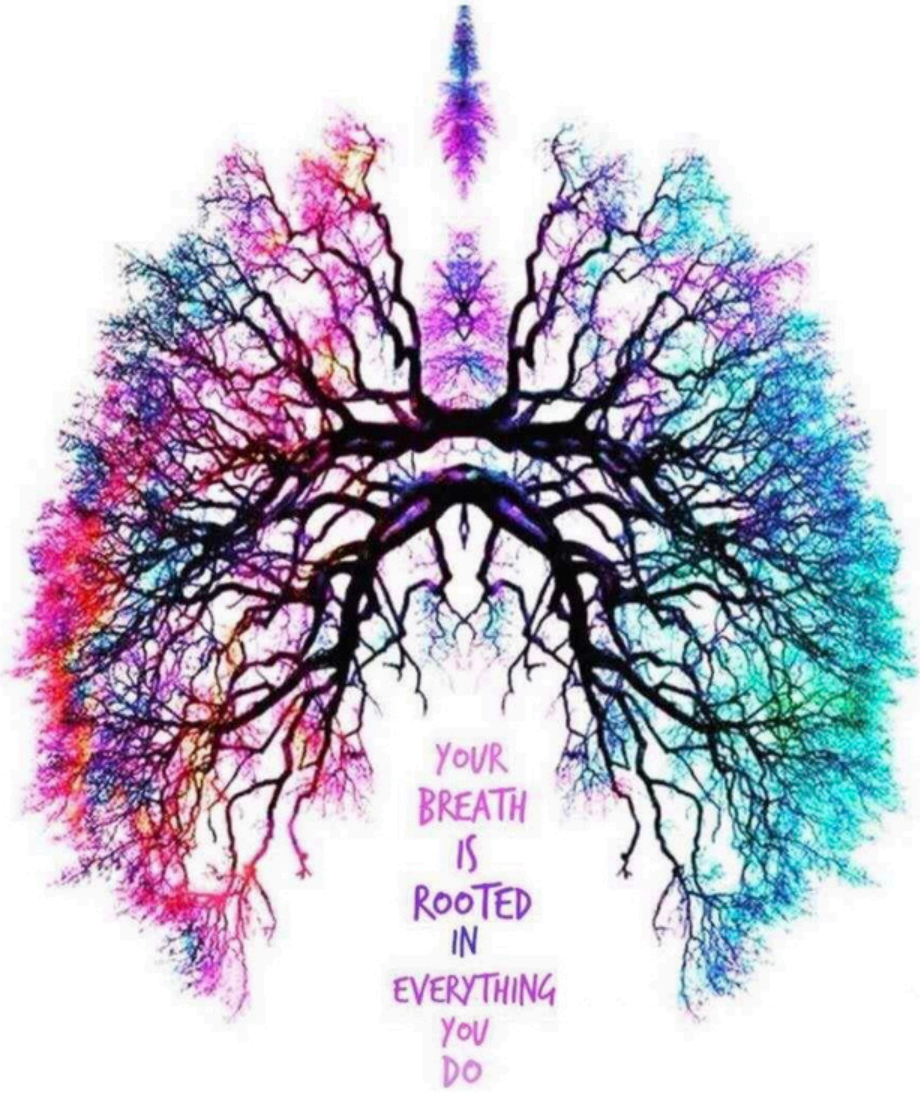
All the healing forces originally resides in the human breathing system.

Rudolph Steiner

buteyko_pow The 'human breathing system ' is not conclusive to the respiratory system nor the nervous system but highly defined by motion and emotion ,behaviour ,the human psyche The human breathing system is undeniably the anatomical,physiological and psychological.

Your breathing is always present with you and involved in EVERYTHING you do. . . talking,walking,laughing,crying,singing , dancing,sleeping. . . it's not just a part of you . . it is you.

REMEMBER...



Look after your breathing and breathiing will look after you.

PRESENTED

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