



MODULE 1: AN INTRODUCTION TO BREATHWORK

LESSON 1: WHAT IS BREATHWORK?

“Breathwork is the use of Breath Awareness and Conscious Breathing for healing and growth, personal awakening and transformation in spirit, mind and body” - Dan Brulé, Just Breathe.

Living and working with conscious breathing is about embracing the gift of life. It is also your birth right.

To open to the spirit of the breath means to commit to living your fullest potential, taking responsibility for your health and your choices.

Making conscious breathing part of your life means that you have gained a lifelong tool that will support health and anchor you to your most authentic self.

In this time of chaos and uncertainty, we are being called on to shift the space from which we are operating and create of new mind body architecture that supports deeper awareness and consciousness. The ability to achieve this requires a special set of skills that could be placed under the umbrella of “mindfulness”. Emotional intelligence, the ability to listen, communicate effectively, focus, and to make healthy choices requires that we live more consciously. The ability to manage our energy requires the ability to live and work with more awareness.

Thus, the role of breathwork has become even more relevant and urgent.

Every psychological, emotional and physiological state has a corresponding breathing pattern or quality. When our state changes, our breathing patterns change too. And vice-versa: by changing our breathing pattern, we can change our state. When we get control of our breathing we get control of ourselves.



Just about everyone has sub-optimal breathing habits and patterns. In fact, it has been shown that poor breathing habits are an underlying cause of many health problems.

Our breathing system is the only system in the body that is both voluntary and automatic, both conscious and unconscious. That is not an accident; it's an opportunity to take part in our own evolution and to determine our own nature. We can look at breathing as an untapped resource. Most people have no idea of the power and potential that it holds. Conscious breathing (or proper breathing if you will) helps us to become more in tune with ourselves. The breath can be used as a tool to transform, change, strengthen, support and enhance various aspects of ourselves.

Sub-optimal breathing results in premature aging and inefficient metabolism. Our cells are not fed properly, we don't sleep well, we have unnatural cravings, we suffer a poor quality of life and we increase the likelihood of many diseases and illnesses.

Breathing optimally gets us to shift out of inflammatory states; activating and supporting the body's innate wisdom, by generating authentic energy vs adrenalised energy. Proper breathing supports the body's natural ability to heal, to repair and recover.

Many people have learned to apply remedial breathing for: asthma, anxiety, pain management, chronic fatigue, high blood pressure-low blood pressure, weight loss, headaches, insomnia, depression, allergies, and auto-immune diseases. "Proper" breathing optimises peak performance, supports clarity of thinking and feeling.

One of the first things we need to do to be optimal breathers, is to practice 'breath awareness'. In other words, we need to cultivate the habit of tuning into our breathing at different times, during different activities, when desiring to accomplish certain things, or to be in certain states.



How do we breathe when we are feeling very calm, peaceful and content? How do we breathe when we are upset, angry, afraid or in pain? It's important to bring awareness to our breathing at those times, because the way we breathe (either consciously or unconsciously) will either exacerbate or relieve the short and long-term effects of those states.

From simple breath awareness on one end of the spectrum of breathwork to dynamic and powerful conscious connected breathing on the other, we will build up and master and expansive repertoire of breathing skills. In getting comfortable with many styles and techniques, we create flexibility in the breathing mechanism and increase our "Breath Intelligence" so that every one of our actions whether it be performing, resting, playing sports or meditating, is supported by the most appropriate pattern of breathing. Breath Intelligence therefore maintains balance and alignment of body, mind and spirit.



LESSON 2: THE HISTORY, SCOPE AND STYLES OF BREATHWORK

From the beginning of recorded history, across many cultures from the East to the West through ancient Egypt, humanity has sought to define, to explain the indefinable - to attribute to all living things something beyond a mechanical explanation of how the body, the animal, the plant functions - to describe what they felt distinguished the living from the inanimate - the spirit that moved within.

In ancient Chinese texts, it is named as Chi or prana. In the times of ancient Greeks and Romans, such as Hippocrates and Galen it was the vital spark - thought to be taken in through the air.

So, it began this connection of breath to medicine and to spirit. Over time Western medicine especially became more mechanistic - focused upon only what could be observed and measured directly. As this Western mechanistic and causal orientation to medicine and to science flourished, the knowledge and understanding of life, of breath, of the forces moving within all life, within the human were ignored, forgotten by some, dismissed as superstitious by others.

The breath, to inspire and transcend, moved from the world of medicine to the world of spirituality and transformation. Beginning in the 20th century awareness and discussion of the power of these “intangible and indefinable” qualities of the breath has returned to the fields of science and medicine. The ancient practices of yoga and breath, of Ayurvedic medicine and breath, the modern marriage of breath and peak performance have returned to the arenas of Western medicine, psychotherapy, and spirituality. As if the disowned/illegitimate child has been accepted, at least provisionally, back into the arms of its extended family.

Breathwork as a form of conscious connected breathing was first put forward by Leonard Orr with Rebirthing in 1974. Later named Rebirthing Breathwork, this work seeks to heal birth trauma memories through the utilisation of a pattern of powerful conscious connected breathing that activates and releases the emotions of birth trauma and birth trauma breath patterns.



In 1979 Vivation as a breathing technique was introduced by Jim Leonard. Vivation is a technique that focuses upon the breather feeling and tracking the most prominent sensation or emotion in their body. The goal is to utilise the breath to breath “through” the sensation/emotion to integrate. The release of the physiological energy used to contain or manage the sensation/emotion results in relaxation and bliss: Integration ultimately results in ecstasy.

There have been many other manifestations of conscious connected breathing. Holotropic Breath Work developed independently from Rebirthing Breathwork by Stan and Christiana Grof also utilises conscious connected breathing. Spiritual Breathwork developed by Dan Brulé utilises conscious connected breathing, with the focus of going even beyond “ecstasy” to connect with the Oneness that we all are. There are many other breath workers and therapists who offer conscious connected breathing as a tool to increase self-awareness, integrate life traumas and bring a new level of health and wellbeing on an emotional, a physical and a spiritual level.

The Scope of Breathwork

Breathwork, its study and application, extend from the ancient Chinese practice of Chi Gong (a physical, mental and energetic practice), through the application of Ayurvedic medicine, the spiritual practices of Buddhism, Zen, Taoism, Hinduism, the yogic traditions that began with Kriya and Tantra Yoga. It is infused into the Western practices of psychotherapy, rebirthing, performance enhancement, relaxation, transformational healing and medicine.

Benefits of Breathwork

The nature of modern life has changed the way that we breathe. As we have become more disconnected from nature, desk bound and suffocated with restrictive clothing and more adrenalised, the more shut down and restricted our breathing has become. The disconnection from our natural open and free breathing pattern is



being reflected in our physical health, global epidemic of fatigue and rising cancer rates as well as our fear based, reactive and addictive behaviour.

The transformation of the automatic physical process of the breath to a conscious focused purposeful action has many benefits.

It affects our sleep, memory, concentration and energy levels. It is the foundation of mindfulness and for living consciously. Every aspect of our personality depends on our breath. Conscious connected breathing is used to transform and release feelings and patterns of thinking, feeling and behaving that create stress and ill health.

Physical: Breathwork can be utilised to alleviate, or eradicate specific physical conditions such as Asthma, hypertension, depression, anxiety and chronic pain. By freeing our breathing pattern, we are optimising oxygenation of the cells and prevent build-up of toxins and inflammation. Breathwork balances the sympathetic and parasympathetic nervous system which is necessary for the functioning of the body-mind system. With modern life pushing us in the direction of adrenalised energy, we succumb to the effects of a chronically activated sympathetic response and build-up of free radicals in the system. It improves sleep, memory, concentration and energy levels.

Emotional: Breathwork allows us to open to, feel and release emotional blockages that eventually manifest physically. It supports us to feel safe in our vulnerability. Breathing not only improves physical functions, it is also a pathway inward, a bridge between the body, mind and spirit. It is the foundation of mindfulness and for living consciously. Every aspect of our personality depends on our breath. Conscious connected breathing is used to transform and release feelings and patterns of thinking, feeling and behaving that create stress and ill health.

Spiritual: Breathwork is a simple and universal way to tap into our spirituality and have an experience of the divinity that resides within. This brings us meaning and a deep sense of peace and fulfilment.



Ways of working with the Breath

1. Breath Awareness

Breath awareness provides the foundation of all other kinds of breathing work but is transformational. It is also the cornerstone of mindfulness. When we are aware of the breath and we turn towards it, we begin to change the way we perceive and respond to our thought, feelings and environment. Breath awareness shifts us from a reactive to a more responsive state and moves us to be more present with ourselves without judgement. By learning to be aware of the breath and to consciously track the inhalations and exhalations without trying to manipulate or change anything, we can gain many insights into the relationship of our breath and inner world.

2. Controlled breathing/Conscious Breathing

Conscious breathing and breath control techniques often practiced as part of yoga serves to support health, energy and balance in everyday life. Its role is to activate the parasympathetic nervous system which serves to relax and rejuvenate the system. It can be seen as “maintenance breathing”.

Breath control exercises can also be used to bring about some kind of effect or change in state. There are thousands of techniques and exercises that are used across the spiritual traditions. The result is brought about by alternating the rate and rhythm of the breath and changing the speed of the inhalations, exhalations and pauses to bring about changes in our chemicals and hormones but also in our mind, emotions and consciousness.

Conscious connected breathing falls on the other end of the spectrum of breathwork. Breathing in a connected rhythm initially activates the sympathetic nervous system and creates a slightly altered state of consciousness. This creates an opening for the release of stuck patterns of thought, emotion and posture that prevent us from accessing our natural state and our potential.



3. Focused breathing

Here, we use our focus and attention to experience the sensations in a particular part of the body and we use our intention to direct the inner and outer movements and energies of the breath to that area. We can use visualisation, but we do not intentionally alter the rhythm and rate of our breathing, we simply visualise a part of our body and imagine or sense that we are breathing into that part of the body.

This technique is very useful for self-healing and can help open to the various breathing spaces, helping us to repattern dysfunctional breathing patterns. When we become aware of where we are not breathing, we can focus on these areas allowing the breath to engage them more fully.

4. Movement Supported Breathing

Movement is a fundamental expression of life force. Life and breath depend on movement. The way we breathe depends on the coordination, flexibility and fluidity of our breathing muscles, fascia, bones, tendons, ligaments and bodily fluids. Every movement we make shapes our breathing in a particular way. Movement can be used to support breathing through, stretching, dancing, tai chi and walking.

5. Position Supported Breathing

The specific positions and postures we habitually take often reflect our needs, hopes, beliefs, physical habits and attitudes towards ourselves and to life. They reflect our openness to ourselves and to others. Every position we take shapes our breathing in a particular way. If we habitually hold a posture that tightens and restricts our back and causes the shoulders to be tight, this will, in time, impede our internal movements associated with healthy breathing which involves learning how to engage all the breathing spaces in our body.

6. Touch Supported Breathing

In touch supported breathing, we use various kinds of touch to awaken the sensory fibres in the skin and areas just below the skin. This can have a powerful effect on our breath as it helps us to release underlying tensions and activates the relaxation



response. Touching can involve gentle touch, rubbing and massage, skin pulling, tapping and pressure.

7. Sound Supported Breathing

The sounds we produce with our vocal cords ride on the waves of our breath and contribute to the harmony or disharmony of our being, perceptions and life. They also shape the way we breathe. Work with sound can help us feel and give healthy expression to our often-unconscious emotions and can release any negatively safely and creatively. Each sound we make and hear has a specific energy frequency that have very specific effects on our system.

The vagus nerve which is responsible for activating the parasympathetic response has tiny branches that innervate the larynx. So, any chanting, singing and sighing with the breath will enhance the effects of the relaxation response.

Assignment:

Research references to breath in the following traditions and philosophies:

- Yoga and Ayurveda
- African traditional wisdom e.g. San tradition
- The Bible
- The Kabbalah
- Chinese Medicine
- Huna (Hawaiian)
- Sufi tradition



MODULE 2: THE SCIENCE OF BREATHING

LESSON 1: ANATOMY OF THE RESPIRATORY SYSTEM

When working with the breath, it's important to have a basic understanding of the anatomy of the respiratory system and all the structures of the body that are involved when we breathe.

Although we are studying the respiratory system in depth, bear in mind that no system in the body functions in isolation.

What makes the human body so perfect is that even though each system has its own unique structure and function they all work synergistically and communicate with other to ensure harmonious balance and the optimum human experience.

You will find that the more you study the structure and function of the body, the more you will begin to appreciate the absolute miracle that it is, and the more you will see that there is something far greater at work within the body that coordinates and orchestrates the functioning of the 600 billion cells that make it up. This is something beyond what we can see under a microscope.

For our purposes, let's call this 'Something', the body's innate wisdom...

As we go through the physical anatomical structures, we will also bring a deeper awareness of what each part is related to from an emotional/consciousness perspective.

The Respiratory Tract

The respiratory tract is a highly sophisticated and organised system that, on a physical level, facilitates the delivery of oxygen molecules to every single cell in the body. It consists of passage-ways that filter incoming air and carry it to the lungs. Here, in the microscopic air sacs, exchanges take place between the external environment and the internal body environment.



The respiratory system consists of the following parts, divided into the upper and lower respiratory tracts.

Upper Respiratory Tract

- Nose, mouth and nasal cavity
- Pharynx
- Larynx

Lower Respiratory tract

- Trachea
- Bronchi
- Bronchioles
- Alveoli
- Diaphragm

Let's begin with the nose.

The mouth and nose are the airways cavities most directly in contact with the outside environment.

In an adult, 18 0000 to 20 000 litres pass through the nose each day.

The nose and nasal cavities have been designed in a way to process and filter the air from the outside environment before it enters and encounters the delicate tissue of the lungs. It prepares the air so that is warm, humid and pure enough to be absorbed into the blood.

The nostrils are found at the entrance of the nasal cavities, which two parallel airways separated by cartilage are called the nasal septum and bone towards the top.

The entrance of the nose or nares are covered by large hairs which serve to trap the biggest dust particles from the air.

The nasal cavities are lined with a respiratory membrane with little vibrating hair or cilia which trap the dust particles entering the nose as well as mucous glands



that not only trap the smallest particles, moistens and humidifies the air but also play an anti-infection role.

The side of the nostrils have an interesting shape, containing 3 folds that make up the turbinates which are funnel like structures that serve to channel the stream of air as it enters the nose, helping to create an interesting pathway to the lungs, giving the air more time to be warmed up and moistened.

Because the nostrils are smaller than the mouth, the air that is exhaled through the nose creates a back pressure when one exhales, slowing the air escape so that the lungs have more time to extract oxygen from them.

Take a deep breath through your nose and then through your mouth and you will find that it takes a longer time to fill your lungs when you breathe only through the nose.

Other functions of the nose:

- Another major function of the nose is that it is the primary organ of smell. When we smell, say a rose, the molecules carrying the scent arrive in the nose and bind to the receptors on a small patch of tissue at the top of the nose called the olfactory epithelium, which then connect to the nerves in the olfactory bulbs which are located directly in the gap between the eyebrows. From there, the signals are sent to the brain.
- It forms part of what we need to produce sound. Try this experiment: close your nostrils and try to hum. You will find it impossible!

For your interest, please check out this website to learn more about Neti, the oldest and most researched method of nasal and sinus irrigation: www.jalanetipot.com

“Through the nose we breathe in life sustaining oxygen so our relationship to life is reflected here. Whether we feel at ease with what we are breathing in, or if we want to opt out for a while; whether we feel clear or blocked. The nose also symbolises those times when we push ourselves into areas where we are not welcome – nose issues may indicate a need to respect other people’s privacy and boundaries.



Perhaps we need to stop being so nosey and give others more space. The nose also enables us to take in both sweetness and the pungency of life.

“The function of breathing in oxygen is vital yet not always welcome. There are many times when life becomes overwhelming and we just don’t want to take in any more. We can’t stop breathing but we can put up a resistance so that everything is shut out, as in a blocked nose. Is something getting up your nose? Is there something or someone you want to push away or resist? Are you wanting to pull back from life for a while? Or are you blocking something within yourself - getting stuffy and airless in your attitude? Are you being particularly prejudiced or closed? What do you need to do to open up and breathe freely again?” From Your body speaks your mind by Debbie Shapiro.

What about the sinuses?

The sinuses are air filled spaces in the head around the nose area. There’s a pair under the eyes, a pair behind the bridge of the nose and another in the forehead just above the eyes. They make the skull lighter, helps the voice to resonate and provide protection for the brain in case of an impact.

They are lined with the same kind of mucous membrane that lines the inside of the nose. Mucous from the sinuses also has a system of drainage into the nose.

“Sinusitis implies either a pushing away of that which inspires or nourishes us or an overload of mental work without enough creative energy. Sinusitis means you are feeling irritated or inflamed by something or someone or even yourself and this irritation is highlighting a sense of being emotionally or creatively stuck. Are you feeling blocked or limited, unable to break free of stuck patterns? Are you resisting inspiration and nourishment?”

“Sinusitis is also connected to repressed grief and unshed tears, especially as there can be intense pain and a high temperature. The pain is expressing the inner anguish; the temperature shows the heat of emotion.” From Your body speaks your mind by Debbie Shapiro



The mouth

The mouth is part of the digestive system but is also another channel that is used to inhale and exhale air.

As we can see from the anatomy of the nose, at rest it is ideal to breathe through the nose, as the nose has a particular structure to filter and prepare the air through the lungs but there are certain circumstances when it is necessary and normal to breathe through the mouth.

1. When the nose is blocked
2. During vigorous exercise to supply more oxygen
3. Naturally when we yawn and sigh!!
4. In breathwork! (we will go into this in more detail at a later stage)

The TM joint

The Tempo mandibular joint does not form part of the respiratory system per se, but while we're at the mouth, and because of its relevance and importance in breathwork, let's look at it here.

The TM joint is a small joint located at the front of ear where the skull and lower jaw meet.

This tiny joint and the big masseter muscle (chewing muscle attached to it) is often where so much stress is unconsciously stored. Many people, when they are dealing with anxiety, clench or grind their teeth at night, causing painful spasms and in severe cases "lock jaw".

The Pharynx

The pharynx is where the back of the nose meets the back of the mouth and it has a very important role: it can decide when a piece of food must go through the food pipe (the oesophagus) or when the breath of air must go through the larynx (voice box). There is a small flap of cartilage called the epiglottis that prevents the food from entering the trachea.

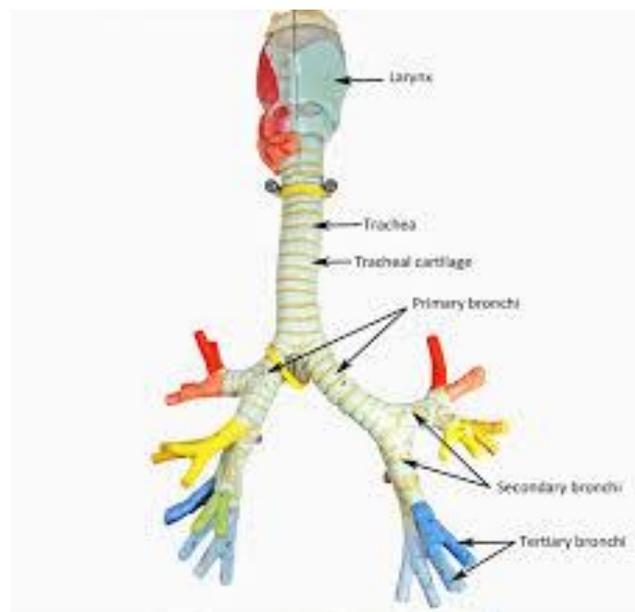


After passing through the pharynx, the warmed, moistened and cleansed air is ready to enter the respiratory passageways.

The lower respiratory tract

The respiratory tract is actually shaped like an upside-down tree, with the trachea or windpipe being the trunk, the bronchi and bronchioles being the branches and the alveoli being the leaves where oxygen exchange takes place. It's so incredible that even on a functional level they are perfect opposites, with trees inhaling carbon dioxide and exhaling oxygen that we then inhale.

It's a perfect system!



The Trachea

The main passageway of the respiratory tract is the trachea, an open tube extending to the lungs.

The first part of the trachea is the larynx. The vocal cords are an important component of the larynx, and are therefore also known as the voice box where sound is generated. It also helps to protect the trachea by producing the strong cough reflex if any solid objects pass the epiglottis.



“Difficulties with the larynx are associated with the fear of speaking, or with a repression of feelings. Conflict arise when it is hard to vocalise our feelings, or if we feel we are always saying the wrong thing. Through our voice we express our needs and ask for what we want. Are you speaking your truth or swallowing it back?”
From Your body speaks your mind by Debbie Shapiro.

The trachea is also known as the windpipe - the tube that carries the air from the throat into the lungs and is mostly situated in the neck and upper part of the chest. It is a flexible cylindrical tube that ranges from 20-25 mm in diameter and 10-16cm in length. The inner membrane of the trachea is covered in tiny hairs called cilia, which also catch particles of dust which we can then remove through coughing. The trachea is surrounded by 15-20 shaped rings of cartilage at the front and side which help to protect the trachea and keep it open. They are incomplete circles because the oesophagus sits immediately behind the trachea and the trachea needs to partially collapse to allow for the expansion of the oesophagus when large pieces of food travels down it.

The Bronchi

The trachea divides into 2 tubes called bronchi, which enters each lung. The left bronchus is narrower and more horizontal than the right as it enters the lung. The left lung has 2 lobes and the right lung 3 – probably to make space for the heart (another clever natural design). Irregular rings of cartilage surround the bronchi whose walls also consist of smooth muscle. Once inside the lung, the bronchi split several ways, forming smaller branches.

Bronchioles

Smaller bronchi divide even further to form even smaller tubes or bronchioles, which are less than 1cm in diameter. They have no cartilage, and end in a bunch of grapes like air sacs in the lung called alveoli

The Lungs

In the lower respiratory tract, the trachea, bronchi and bronchial tree lead to the main organ of gaseous exchange, the lungs.

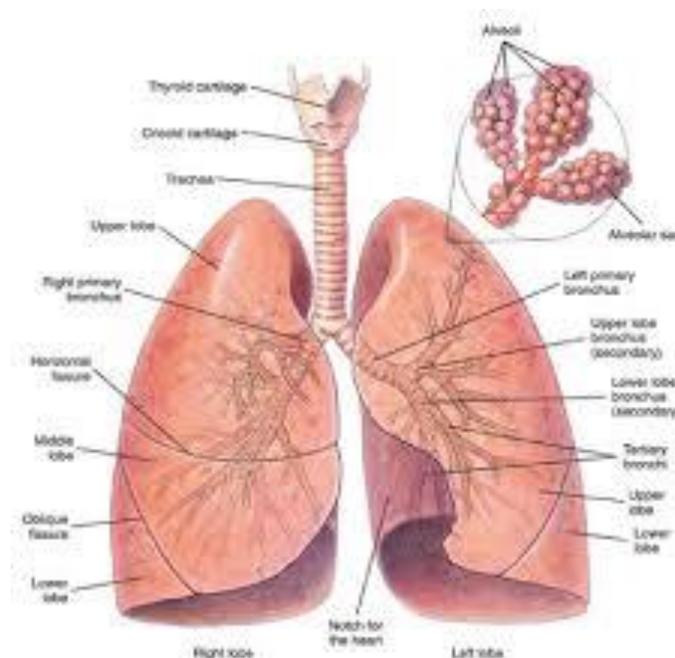
The left and right lungs are separated in the middle by the heart and mediastinum and are enclosed by the thoracic cage and diaphragm.

Each lung is surrounded by a double membrane called pleura. The inner layer of this membrane or visceral pleura is firmly attached to each lung which then folds back to become the outer layer or parietal pleura. This then forms part of the mediastinum and lines the inner wall of the chest cavity. The space between the visceral and parietal pleura contains serous fluid and is called the pleural cavity.

The cone shaped lungs extend from just above the clavicle down to the level of the diaphragm.

The right lung consists of 3 lobes, the superior, middle and inferior lobes.

The left side has only 2 lobes, the left superior and left middle lobes.





Alveoli

These hollow air-filled sacs are where gaseous exchange between the air and the blood takes place. The air sacs are covered by a rich network of capillaries which facilitate this exchange.

Emotionally the lungs generate grief to allow us to dissolve attachments to people, animals and life situations that are no longer part of our life. The consciousness of the lungs is surrender, because we have to release our attachment to the past as we release each breath. When we hold on, our breathing becomes shallow and we feel suffocated and unable to grow. When we can't grieve, we cry instead into our lungs creating pneumonia and other chest infections. The primary job of the lungs is to allow us to breathe in and accept life and surrender out attachments to people and life situations so that we can make graceful transitions.

EXERCISE

There are two aspects to Breathwork: Breath Awareness and Conscious Breathing.

Let's begin with breath awareness.

We need to develop a very conscious relationship to the breath. This means tuning into our breathing. It means observing the breath, witnessing it, looking for subtle details in it.

We are talking about the practice of "meditative awareness". It's what the Buddha was doing when he became enlightened: he was watching his breath!

Most of the time, we are not conscious of our breathing. It's happening outside of our awareness. To compensate for this, and regain a certain balance and stillness, we need to meditate on our breathing.

We can practice Breath Awareness anytime, anywhere, for a minute or two, or for an hour or more.



The more conscious we become of our breath, the more conscious we become of everything: our thoughts and feelings, our habits, patterns, posture, our behaviour.

The more aware we become of our breathing, the more aware we become of life and everything around us.

The more breath awareness we have, the more benefits we gain from our conscious breathing practice. So, let's get right to it!

Put aside some time for your breathing meditation. Ten minutes is good. Twenty minutes is better. See that you won't be disturbed or interrupted.

Be sure to leave some time for yourself afterwards, to move and stretch, to write in your journal, to enjoy a cup of tea, or to do something else that you love.

Do not underestimate the value of this simple practice! It has both immediate and cumulative benefits.

The main thing about the practice of Breath Awareness is that you are not doing the breathing... Not breathing in any particular way.

You are letting the breath breathe you. You are allowing the breath to come and go by itself, the way it wants. You're just an impartial observer, a detached witness.

If the breath moves through your nose, focus your attention on the feelings and sensations in your nostrils and at the tip of your nose as the air passes in and out. If breathing through your mouth, notice the feelings and sensations of the air as it passes over your lips and tongue, the roof of your mouth and your throat.

You can also focus on the feelings and sensations in your chest or belly as the breath moves in and out. Be aware of what moves in your body when you breathe.



When your mind wanders, or you get caught up in thinking, or when something else pulls your attention away, come back to your breathing: focus totally on your next breath.

When feelings and sensations in your body distract you, notice how they affect the breathing.

After the exercise, review/evaluate your experience. What feelings, sensations, or movements did you notice? Where?

How would you describe or characterise your breathing pattern: slow, quick, deep, shallow, smooth, chaotic, forced, natural, effortless?

If breathing is the language of the soul, if your breathing reflects and expresses your relationship to life, what does your breathing pattern tell you about yourself and your attitude toward life?

Begin to pay attention to the breathing in others: people you meet in public and in private, those with whom you work and play. Pay attention to their breath when they speak, move, complain, celebrate, watch TV or listen to music, when they are angry, nervous, embarrassed, etc.

Questions for self-reflection:

- What are the benefits of breathing through the nose?
- In which circumstances is mouth breathing necessary and acceptable?
- What is the difference in the feelings and sensations that arise when we breathe through the mouth as opposed to the nose?
- Which area in your respiratory tract feels blocked?
- Do you notice a difference in your breathing pattern and energy levels when you're in a natural environment? Why do you think this is?
- Has your relationship to your breath changed now that you have a better understanding of the anatomy of the respiratory tract?



LESSON 2: ANATOMY OF THE CHEST CAVITY, DIAPHRAGM AND MUSCLES INVOLVED IN BREATHING

When we work with the breath, it is important to be aware of the dynamics that occur in the two cavities that make up the torso:

1. The thoracic or chest cavity which contain the vital organs of the heart and the lungs
2. The abdominal cavity that contains the digestive organs – stomach, liver, gallbladder, spleen, pancreas, small and large intestines, kidney, bladder and as well as the reproductive organs.

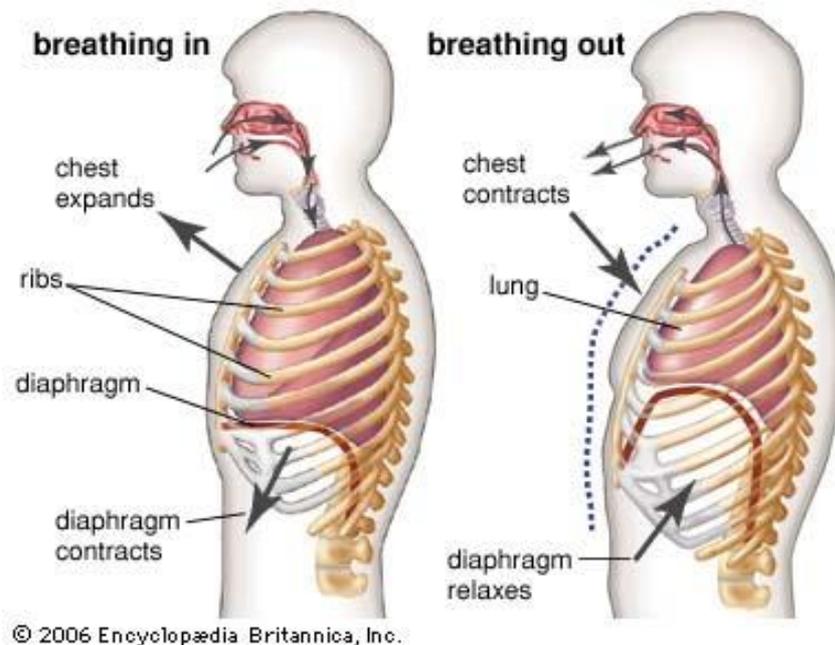
The spine creates the support for both cavities at the back and the diaphragm is the sheet of muscle and fascia that separates these cavities - it forms the floor of the thoracic cavity and the roof of the abdominal cavity.

When we breathe, both cavities change shape, and it's important to understand the different ways that they do.

When we breathe in, the lungs inflate like a flexible gas-filled container, and the entire chest cavity changes its shape and volume. As this happens the diaphragm flattens, and the abdomen changes shape like a water balloon, so in the context of breathing, the abdominal cavity changes shape but not volume.

However, when we eat or drink something, the volume within the abdominal cavity does increase as the stomach, bowel and bladder fills up and this increase in volume will produce a corresponding decrease in the volume of the chest cavity. That's why it's harder to breathe after a big meal, before a big bowel movement or when pregnant.

In a living, breathing body, thoracic/chest shape change cannot happen without abdominal shape change. That is why the condition of the abdominal region has such an influence on the quality of your breathing and why the quality of your breathing has a powerful effect on the health of your abdominal organs.



The diaphragm

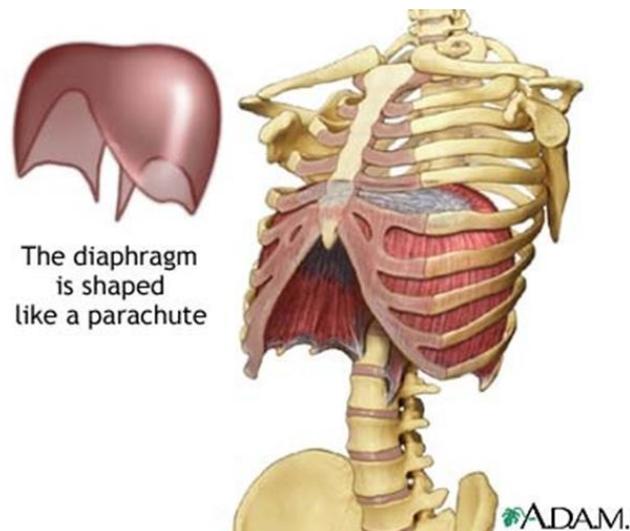
The diaphragm is the primary muscle of breathing and to master your breathing practice, it's helpful to examine this interesting muscle in detail.

Shape and location

This dome shaped muscle separates the chest and abdominal cavities, with the top of the dome reaching the space between the 3rd and 4th ribs and the lowest fibres attach to the front of the third lumbar vertebrae - so basically it extends from nipple to navel.

The diaphragm's shape is created by the organs it encloses and supports i.e. the liver pushes the right dome up and the heart pushes the left side down – and this gives it an asymmetrical shape.

Several different structures go through the diaphragm but 3 main openings in the sheet of muscle make space for the aorta, oesophagus and vena cava to pass through.



Origin and Insertion

The lower edge of the diaphragm attaches in 3 places

- The bottom part of the sternum (breastbone)
- The base of the ribcage
- The front of the lower spine.

All the muscular fibres rise upwards from these 3 origins and arrive at the flattened horizontal top of the muscle, the central tendon into which they insert - so basically, the diaphragm inserts into itself - its own central tendon, which is fibrous non-contractile tissue.

Organic connections

The central tendon of the diaphragm is the point of anchorage for the connective tissue that surrounds the organs of the chest and abdomen. These structures can be remembered as the 3 P's

- Pleura - surrounds the lungs
- Pericardium – surrounds the heart
- Peritoneum – surrounds the abdominal organs

So now, it starts becoming clear that the optimum movement of the diaphragm has a profound effect on the movements of the organs that these cavities contain.



With each breath cycle, the movement of the diaphragm massages and tones all the abdominal organs and squeezes the heart, optimising its function.

Interestingly, it also squeezes the abdominal lymphatic nodes and vessels that sit under the diaphragm. The lymphatic vessels do not contain valves to direct the lymphatic fluid and depend on the movement of the diaphragm to help to channel the fluid.

Actions

Because the diaphragm has two parts - the muscular part on the periphery and the central tendon in the centre, the movement happens in 2 phases

If you take in a deep breath, you will find that either the belly bulges out before the chest expands or the chest expands first and then the belly rises afterwards.

If the belly bulges out first, this means that the base of the ribcage is stable, and the central tendon is mobile and pushes the contents of the abdomen down.

If the central tendon is stabilised and the ribs are free to move, this is a chest breath.

If you breathe fully, slowly and deeply, however both these areas move, but it will happen in two phases.

Try it for yourself - lie flat on your back and place one hand on your belly and the other on your chest. Take a deep breath and see which moves first - your chest or abdomen and then try to reverse it.

Other functions of the diaphragm

The diaphragm's function goes beyond the action of breathing as separating the chest from the abdomen.

It also acts as a "halfway house" of the emotions. In bioenergetics, most emotions find their way to the diaphragm for distribution.



The emotions arrive at the diaphragm from 4 different sources:

1. A current event - such as an argument or bad news
2. A stored emotion that has been activated by something that we have seen or heard
3. An emotion that has been absorbed by an external source
4. Contrived emotions that are created by our minds through conditioned thinking.

From the diaphragm, the emotions can go in 4 directions:

1. Up to the chest and head where they are experienced immediately as expressed emotions, for example - our pet dies and we have the immediate expression of grief
2. They can go down to the intestines to be eliminated from the body. This is the healthiest way to go with any emotion other than the acute emotions which are often better expressed outwardly
3. They can be held in the diaphragm for a while but not let go either up or down. At this stage, the liver decides to take the emotion and store it in the connective tissue for release later. This now becomes an active stored emotion and one of the main the main triggers in disease.
4. Rarely, emotions do not move from the diaphragm especially in a person who finds it difficult to let go. These emotions end up in the connective tissue of the diaphragm muscle and compromise the function of the diaphragm

It is becoming more and more evident how important the movement the diaphragm is on so many levels!

Accessory muscles of respiration

Although the diaphragm is the principle muscle of breathing, there are other muscles that are engaged in changing the shape of the chest and abdominal cavity. These are called the accessory muscles of respiration and once all the musculature of the body is coordinated and integrated with the action of the diaphragm, breathing will be effective and efficient.



The intercostal muscles

As the name suggests, these are the muscles that lie between the ribs.

The external intercostals – there are eleven pairs between each rib and when they contract, they pull the ribs towards one another and elevate the ribcage.

The internal intercostals lie deeper than the externals and lie at a right angle to them.

When they contract, they draw the ribs together and depress the ribcage.

Abdominal and thoracic accessory muscles

The abdominal cavity and its musculature can be imagined as a water balloon surrounded by all sides by elastic fibres running in all directions. The shortening and lengthening of these fibres in coordination with the contractions of the diaphragm produce the many shape changes that can occur with respiration.

Other Accessory muscles

Chest, neck and back muscles can also expand the rib cage, but they are far more inefficient than the diaphragm and external intercostal muscles at doing this.

Considering the degree of muscular tension that occurs in using the accessory muscles in breathing, the net payoff in oxygenation makes it a poor energetic investment. In other words, it is a low effort to energy ratio.

That is why improved breathing results in decreased tension in the accessory mechanism, which allows the diaphragm, with its shape changing ability, to operate as efficiently as possible.

Diaphragmatic breathing

Diaphragmatic Breathing is taught in most yoga schools. And most martial artists learn belly breathing if they want to derive the most... or if they want to reach any level of skill... diaphragmatic breathing is very important.



It is also important to any athlete, or in any athletic endeavour; for singers and performers it is very important. Any activity that requires balance, groundedness, calmness or a sort of serene power... [those are times when you need to breathe]. Belly breathing is a good place to start. And to reach any level of mastery in any of those areas, you pretty much have to get belly breathing down. So, belly breathing is quite simple. You can watch a baby and see how active their belly is when they breathe.

And it seems as we grow, and as we get older, we get more and more “uptight.” This uptightness is reflected in the level of the breathing: that is, the centre of the breathing seems to move higher and higher up into the chest. And when you become very afraid, the breath moves very high up into the chest, and it is quite visible.

But you can also notice it in very subtle ways in just about everyone. You can notice high-level breathing or breathing high up in the chest. You can notice that in people by the activity in their shoulders and their neck as they breathe.

Good belly breathing requires absolutely no involvement of the muscles up around the chest and the shoulders, neck, or the upper back. Those muscles are simply not required for breathing.

When there’s a grave demand for breath, and you can see this in runners and athletes especially recovering after they have run a distance, or you can also see it in emphysema patients, and people with COPD, and asthma, and so on: struggling to breathe. And you can see that the accessory muscles are involved in the breathing.

These accessory muscles, which include muscles around the shoulders and the upper back and the chest, they come into play in breathing when extra demand is put upon the breathing.

But they are not normally used for breathing. In emergency cases they will come into play to support. Using those muscles requires quite a bit of skill and



coordination, and without the foundation of good diaphragmatic breathing it is very likely that the breath, the breathing mechanism will get quite uncoordinated.

What happens is one muscle begins to fight against the other and the breathing gets all jammed up. Another thing that happens is that the natural sense of the flow of breath is lost. And when we deliberately begin to force ourselves to breathe or to breathe deeper or quicker, we artificially begin to manipulate the breathing mechanism, and we cause it to get even further out of balance.

For good practice or good understanding of this “coordinated breathing” you can consider the work of Carl Stough, who has a method called SIMBIC: the Stough Method of Breathing Coordination. He has done over 30 years of work on the mechanics of breathing.

Sometimes you can hear the same thing over and over again and suddenly you hear it for the fourteenth time and you get it! Sometimes you hear it in a certain way and you suddenly get it! You must “get” Diaphragmatic Breathing if you are going to get anywhere in Breath Therapy. It is a real foundation skill.

EXERCISE

You can begin this practice by laying down flat on your back, and putting your hands right over your belly button. And as you breathe in... with the inhale... you should feel movement under your hands... As you pull the breath in, as you pull the breath in, your belly should rise.

What is happening is, as you breathe in, the diaphragm moves down, popping the belly out. The diaphragm is that huge muscle that separates... it's the ceiling of the abdomen and the floor of the chest.

As you breathe in, the diaphragm flattens and sort of moves downward, although it is anchored, it really doesn't move, we use just that as an expression. The diaphragm moves downward, displacing the organs in the abdomen and causing



the abdomen, the belly, to pop out. So, as you breathe in, the belly pops out. As you breathe out, the belly flattens.

So, take in a breath now. Your hands are on the belly. And it is as if you are breathing into your hands and moving your hands with the inhale. Don't use your belly muscles. Send the breath low into your belly. And feel your belly expanding. As you exhale, your belly flattens. It is as if your lungs are in your belly. And as you breathe in, your belly expands. And as you breathe out, your belly empties or flattens.

A good image is given in Nancy Zi's book, *The Art of Breathing*. She talks about a bellows, you know, that old piece of equipment, used to fan the fire. It's got two handles on it, a little spout at the end and you sort of pump it [like an accordion], and you fan the flames in a fire. Well, you can imagine that the bellows... the handles of the bellows... are down, one is at your belly button and the other is at your spine.

As you exhale, the bellybutton moves toward the spine. As you inhale, the bellybutton moves away from the spine and your belly pops out. So, practice that. Breathing in, the belly pops out. Breathing out, the navel, the belly button moves towards the spine, the belly flattens. And, if you exhale completely, as you blow the breath out, as you exhale, the belly button gets closer and closer to the spine. The belly flattens more and more until you are completely empty. Then when you inhale your belly begins to pop out.

It is very much like you fill a glass. If you fill a glass with water, it fills from the bottom up. The same thing with breathing, the first bit of breath that enters you should go very deep, all the way down ...low, into the belly. So, you begin to fill the lungs from the bottom up.

As you breathe in the diaphragm moves down and the belly pops up. As you breathe out, the belly flattens, the diaphragm moves up. This is the natural cycle of diaphragmatic breathing. Very important to learn, very important to practice and



should be a natural, automatic reflex. It should be the normal way that the breath flows.

So, if you don't have this habit, begin to practice so it becomes natural and becomes a habit. It doesn't require effort. It requires awareness and practice.

It is also useful to lie on your back and put a heavy book on your stomach, and as you breathe in, you lift the book with the inhale. As you breathe out the belly seems to empty, and the book gets lower and flattens your belly.

You can also play with the small of your back and your sides around your waist. You can put your hands on your waist, for example, sort of standing arms akimbo, one hand on each side of your waist. And as you breathe in you feel the expansion happening around your waist, as if your belly is filling with air. This expansion should take place front to back, side to side, and you feel the expansion in all directions. Make the belly a very lively place as you inhale and exhale.

In many people the belly is frozen, because of our need to look good, to look like the magazines look, the old-fashioned military posture, the idea of sucking in the belly and popping out the chest. Nothing screws up the breathing more than that posture habitually held.

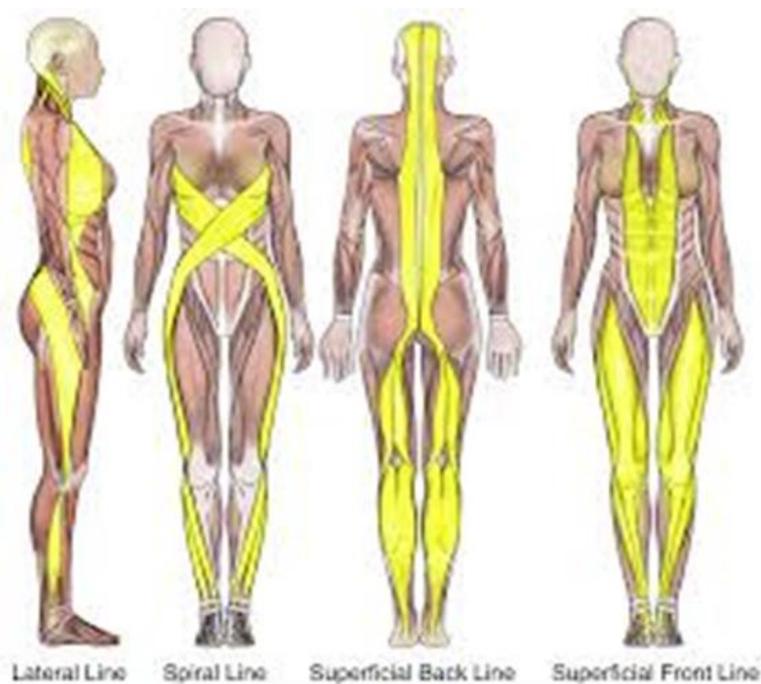
So, the idea here is to relax and soften the belly. Allow the breath to move into the belly, and enliven and awaken that place, so the belly responds easily, effortlessly, as the breath comes in. There is no interference, there is no rigidity in the belly, and there is no holding of the abdomen to prevent those lower spaces in the lungs from filling.

So, now we have diaphragmatic breathing, very simple, very basic fundamental breathing exercises, upon which all of the other breathing exercises are built, without which you won't have balance, you won't have coordination, and you will make very little progress in the end.

LESSON 3: THE FASCIA

Our training of the anatomy as it relates to the breath would not be complete without the understanding of a little understood but vital structure of the body, the fascia.

The fascia is matrix of connective tissue that attaches, encloses and connects all the muscles and organs of the body. It is densely woven, covering and interpenetrating every muscle, bone, nerve, artery and vein as well as all the internal organs including the heart, lungs, brain and spinal cord. On close examination it resembles a spider's web and is one continuous structure that connects the head to the toe without interruption. In this way we can appreciate that each part of the entire body is connected to every other part.



In the normal healthy state, fascia can stretch and move without restriction. When one experiences physical trauma, emotional trauma, scarring, or inflammation,



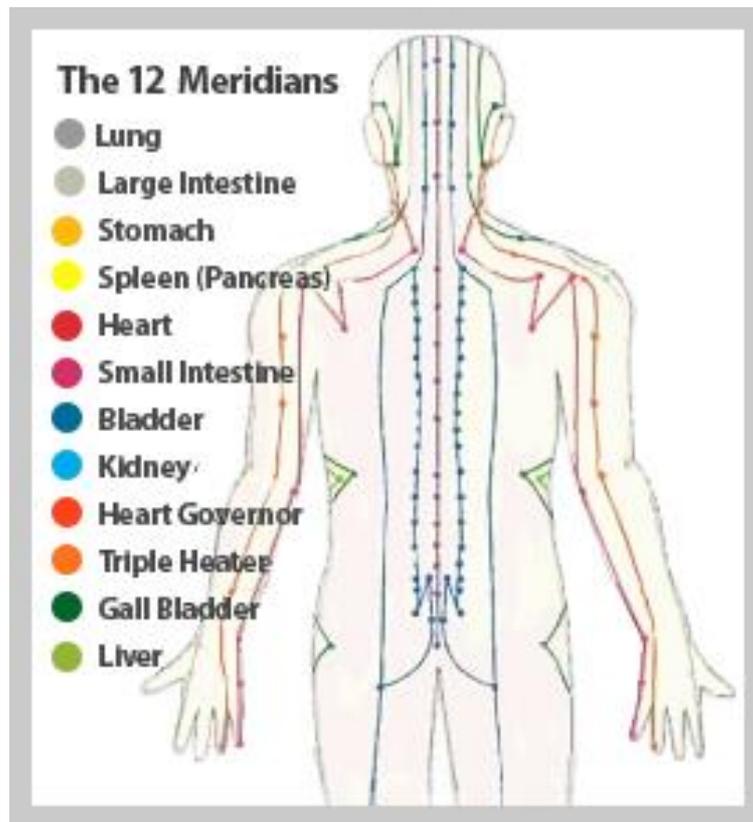
however, the fascia becomes tight, restricted, and a source of tension to the rest of the body. Trauma, such as a fall, car accident, whiplash, surgery or just habitual poor posture and repetitive stress injuries has cumulative effects on the body. The changes trauma causes in the fascial system influences comfort and function of our body. Fascial restrictions can exert excessive pressure causing all kinds of symptoms producing pain, headaches or restriction of motion. Fascial restrictions affect our flexibility and stability and are a determining factor in our ability to withstand stress and perform daily activities.

Much research has been done and is ongoing on the correlation between Traditional Chinese Medicine meridians and our fascial pathways.

'Meridians' are the pathways that life force energy (Chi) flow through in our bodies. There are 14 meridians and along each meridian are acupuncture points where Chi can be manipulated to restore balance, via acupuncture needles or acupoint pressure.

It has now been shown that most of the Qi points occur where fascia planes or networks converge. They showed that acupuncture points mostly lie along the fascia planes between muscles or between a muscle and tendon or bone. When an acupuncture needle pierces the skin, it penetrates through the dermis and subcutaneous tissue, then through deeper interstitial connective tissue. It has been hypothesised that a Chi blockage can be viewed as an alteration in the composition of the fascia and that needling, or acupressure may bring about cellular change in the fascia (Langevin & Yandow, 2002).

Breath energy or prana life force, travels through the energy pathways of the meridians, like the waters of a river. It makes sense that if the fascia is restricted, twisted, scarred or dehydrated, it would interfere with the natural flow of breath energy through the body and thus affect our general health and wellbeing.



As a breathwork practitioner it is helpful to be aware if these fascial tension patterns in your clients and to support the release of these patterns through body work like yoga and stretching. In some cases, getting your client to do some gentle stretches and movement is helpful to do before the session to support more breath energy flow.

In many cases, the catharsis of continued breathwork sessions will support the release of underlying fears and subconscious patterns that caused the fascial tension pattern in the first place.

Ultimately our role is to support the breather to deepen their body intelligence through supporting a strong supple physical body that facilitates optimum flow of life force and consciousness and to use the breath as a tool that facilitates wholeness and connection to all aspects of our being.



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LESSON 4: RESPIRATORY PHYSIOLOGY AND CHEMISTRY

A person can live for weeks without food and a few days without water but only a few minutes without oxygen. Every cell in the body needs a constant supply of oxygen to produce energy, repair or replace itself, and maintain vital functions. The oxygen must be provided to the cells in a way that they can use.

It must be brought into the body as air that is cleaned, cooled or heated, humidified and delivered in the right amounts.

In the previous lessons, we saw how the respiratory system is structured for this to happen. Now, we will look more closely at the physiology or functions of respiration as well as the mechanics and chemistry involved in breathing.

So far, we have learned about the conducting zone:

1. Air containing oxygen enters the body through the nose and the mouth; from there it passes through the pharynx or throat on its way to the trachea.
2. The trachea divides into 2 main airways called bronchi upon entering the lungs
3. The bronchi subdivide into smaller and smaller branches called bronchioles
4. After about 23 divisions, the bronchioles end at the alveolar ducts (air sacs)
5. The oxygen system is finally transferred into the blood stream at the alveoli

Now we learn about the respiratory zone where the process of ventilation, gaseous exchange, and the role of the circulatory and nervous system.

Each alveolar sac is surrounded by capillaries having direct contact with each other. Gas exchange occurs through this alveolar-capillary membrane as oxygen moves into and carbon dioxide moves out of the bloodstream.

Although the 300 million alveoli in the lungs are microscopic, they have a total surface area equivalent to the size of a tennis court!



As we can see, the circulatory system is part of the system that is involved in transporting the oxygenated blood to the body's tissues and the de-oxygenated blood from the tissues back to the heart. Let's follow this process which happens in 4 stages:

1. Ventilation
Air travels through the conducting zone to the alveoli.
2. Pulmonary Gas exchange
Oxygenated blood gets diffused from the alveoli into the capillaries that surround them
3. Gas transport
The alveolar capillaries link up to form larger vessels which carry the oxygenated blood to the left side of the heart. The heart then pumps this blood through the main artery, the aorta which branches out into arteries, and further into tissue capillaries
4. Peripheral Gas exchange
Oxygen then gets absorbed from the tissue capillaries to all the cells and mitochondria within them.

The carbon dioxide produced by the cells gets absorbed by the capillaries and this gets carried in the veins. These micro vessels then gather up to form tiny veins, then larger ones to link up to form the pulmonary circulation and transports this oxygenated blood to the left side (atrium) of the heart via the inferior and superior vena cava.

The heart then sends this blood to the lungs via the pulmonary veins to be oxygenated again through the alveolar-capillary membrane, and the cycle begins again.

The pulmonary veins transport this oxygenated blood to the left side (atrium) of the heart. The aorta is the main big artery that emerges from the left ventricle of the heart, branches out into smaller arteries and eventually into tiny tissue capillaries.

But what drives breathing?

Breathing in humans is both involuntary and voluntary.



Involuntary breathing

Involuntary breathing is regulated by the autonomic nervous system (ANS) which means that the breathing happens automatically without you having to think about it.

There are various receptors in the body that send signals to the respiratory centre in the midbrain (medulla and pons)

- Chemo receptors in certain arteries pick up changes in oxygen, carbon dioxide and hydrogen levels
- Receptors in muscles and joints
- Pain receptors and emotional stimuli which act through the hypothalamus in the brain
- Stretch receptors in the lung
- Irritant receptors in the lung

The respiratory centre in the midbrain then sends the signals via nerves to the lungs and muscles of respiration

Voluntary breathing

Breathing is the only autonomic process in the body that we can override consciously – the processing for this kind of breathing occurs in the higher centres of the brain - in the cortex.

Breathing mechanics

Inspiration

- The contraction of the inspiratory muscles (principal inspiratory muscle is the diaphragm) causes the chest cavity to expand, creating a negative pressure.
- The resulting flow of air into the lungs is called inspiration.
- During a maximal inspiration, the diaphragm contracts forcing the abdominal contents downwards and outwards. The external intercostal muscles, found between the ribs, are also involved. These muscles contract and raise the ribs during inspiration, thus increasing the diameter of the chest cavity. In addition to these muscles, the scalene muscle and the sternomastoid (accessory muscles) in



the neck may be employed during extreme ventilation or in conditions of respiratory distress.

Expiration

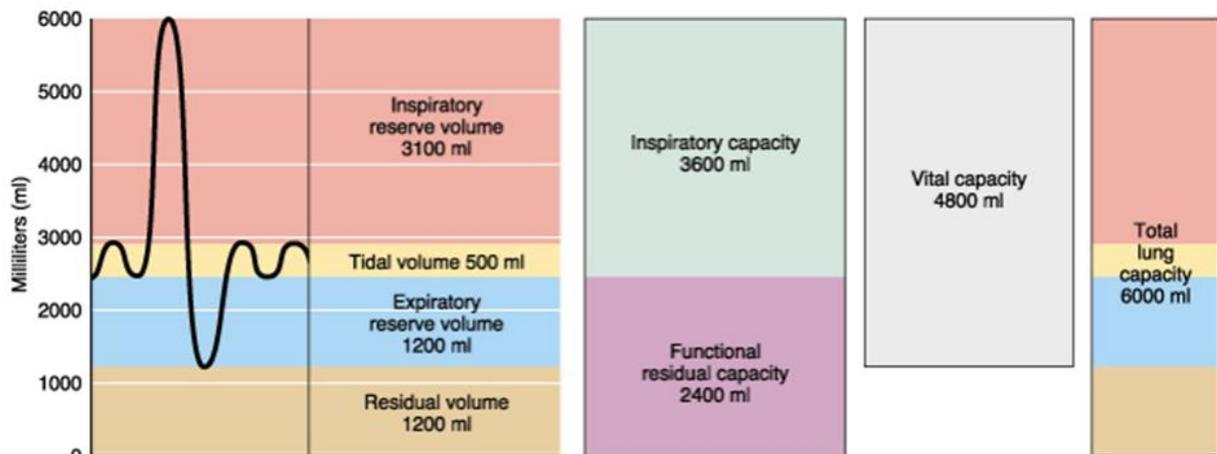
- Normal expiration is a passive process resulting from the natural recoil or elasticity of the expanded lung and chest wall. (However, when breathing is rapid, the internal intercostal muscles and the abdominal muscles contract to help force air out of the lungs more fully and quickly). A lung can be viewed as the opposite of a sponge. When a sponge is squeezed and released, its elasticity causes it to rebound to its larger initial size. At the end of an inspiration, the elasticity of the lung causes it to return to its smaller inter-breath size. The ability of the lung to do this is called elastic recoil.

The degree of stiffness or compliance of the lung tissue affects the amount of pressure needed to increase or decrease the volume of the lung. Lung compliance can affect elastic recoil. With increasing stiffness, the lung becomes less able to return to its normal size during expiration. This happens in conditions like emphysema.

The amount of airflow resistance can also affect lung volumes. Resistance is the degree of ease in which air can pass through the airways. It is determined by the number, length, and diameter of the airways. An individual with a high degree of resistance may not be able to exhale fully, thus some air becomes trapped in the lungs. This happens with asthma.

Lung volumes

As a breathworker, it is helpful to understand lung volumes and lung capacity.



(a) Spirographic record for a male

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Dead space

In respiratory physiology, dead space is the air that is inhaled by the body in breathing but does not take part in gaseous exchange. Not all the air in each breath is able to be used for the exchange of oxygen and CO₂. About a third of every resting breath has no change in O₂ and CO₂ levels. In adults it is usually about 150ml.

The average resting respiratory rate is 12- 16 breaths/minute, but because of dead space, taking deep breaths more slowly e.g. 10 breaths/minute is more effective than taking shallow breaths more quickly e.g. 20 breaths/minute. A large proportion of the shallow breaths is dead space and does not allow oxygen to get into the blood.

Total dead space can be divided into anatomical and alveolar dead space

Anatomical dead space: This is the gas that is found in the conducting system of the respiratory tract - such as the mouth and trachea where the air does not come into contact with the alveoli where gaseous exchange occurs.

The alveolar dead space: This is caused by air contacting alveoli without blood flow in their adjacent capillaries (i.e. ventilation without perfusion). As a result, no gaseous exchange can occur. Alveolar dead space is negligible in healthy individuals but can increase dramatically in some lung diseases.



CO₂: It's good For You and Tasty Too!

Over 70% of the population tested to date shows a deficiency of carbon dioxide in their system: a condition known as chronic hypocapnia. In other words, if you are like most people, you are probably “blowing off” too much CO₂ when you breathe: a condition known as chronic hyper-ventilation. Over breathing means that the rate of ventilation is more than what is required by the rate of production of CO₂ by the tissues. This CO₂ deficit causes the micro vessels to constrict, so that even though one is huffing and puffing, the vital supply of oxygen to your cells and tissues is reduced - a condition known as chronic hypoxia.

You see, we need a certain level of carbon dioxide in the system in order stimulate the transfer of oxygen from the blood to the cells and tissues that need it. CO₂ is responsible for the dilation and the constriction of blood vessels: large and small arteries in the heart, lungs, brain, and intestines. CO₂ also plays the critical role in maintaining your acid-base balance (pH).

The optimum level of carbon dioxide is in the range of 40 to 45 millimetres of mercury (mmHg) or about 5% of exhaled CO₂. But, less than 3 people in 10 tested, measure more than 30 mmHg! In other words, most people are unconsciously, habitually over breathing!

This condition can trigger symptoms and illnesses such as dizziness, insomnia, migraine, poor memory, lack of focus, loss of concentration, etc. Constriction (spasm) of micro-vessels in the heart results in various cardiac disorders, because muscle tissue, and other cells don't get enough oxygen.

The constriction of micro-vessels leads to increased peripheral resistance in the vessels, and results in increased arterial blood pressure. The heart must work harder, causing various symptoms. One may then provoke a crisis through some ordinary activity, or slightly increased stress.

In the case of asthma, the dynamics are the same: bronchioles constrict in response to lowered CO₂ levels resulting from over ventilation. A low level of CO₂



leads to acid-alkaline imbalance (alkalosis) of blood and tissues. This leads to developing of atherosclerosis, arthritis, and formation of “stones,” deposits, etc.

We can now understand the symptoms of breathlessness, shortness of breath, chest tightness and pressure, chest pain, feelings of suffocation, sweaty palms, cold hands, tingling of the skin, numbness, heart palpitations, irregular heartbeat, anxiety, apprehension, emotional outbursts, stress, tenseness, fatigue, weakness, exhaustion, dry mouth, nausea, light-headedness, dizziness, fainting, black-outs, blurred vision, confusion, disorientation, attention deficit, poor thinking, poor memory, poor concentration, impaired judgement and problem solving, reduced pain threshold, headaches, trembling, twitching, shivering, muscle stiffness, tension and spasms, and abdominal cramps. Many people experience the effects of over breathing without even realising it.

It turns out that periodic “overdosing” of carbon dioxide (hypercapnia) is necessary for maintaining healthy physiology. This happens for example as a result of jogging or exercise, and it explains some of the natural benefits of “aerobic” activities.

Have you ever thought why you feel the need to take a breath every few seconds? Is it because the content of oxygen in your blood drops? No! The blood is almost always 96%-98% saturated with oxygen. Our breathing is regulated, first and foremost, by the amount of CO₂ in the blood, not oxygen!

When your muscles work, they burn glucose. This process produces carbon dioxide. This CO₂ ends up in the blood stream, and stimulates the respiratory system in order to remove it.

When blood circulates through lungs, it picks up inhaled oxygen. Molecules of oxygen bind to haemoglobin and are carried by the blood to all the tissues and organs of the body. There, the haemoglobin releases oxygen so the cells can use it. But guess what is necessary for oxygen to be released from the haemoglobin? Carbon Dioxide: CO₂! (that stuff everyone thinks is so bad!). If there's not enough carbon dioxide in your blood, no matter how much oxygen your blood might contain, this oxygen will not be released into your cells and tissues. With conscious



breathing, you can adjust your CO₂ receptor to induce optimal chemistry. Carbon Dioxide is also a natural vasodilator. A vasodilator is a substance that directly influences smooth muscle fibres which make up the walls of the arteries and other blood vessels, and air passages as well. So, we can see how higher levels of CO₂ actually result in better oxygenation of body tissues and cells. This in turn corrects or prevents a number of conditions related to hypertension, or dependent on vasoconstriction and tissue hypoxia. Optimal level of CO₂ in the blood is 6.5%

Breathing Training can produce a significant and sustained reduction in blood pressure. With training, one can go from breathing 8 to 12 litres of air per minute, to 3-5 litres per minute (ideal is 2-4 litres per minute). With training, CO₂ in the blood can go from 3%-4%, to 5%-6% (ideal is 6.5%). Utilisation of Oxygen can go from 25%-40%, to 60%-70% (ideal is 70%-75%).

It is important to note that oxygen saturation of the blood in just about everyone, remains a constant 96%-98%, regardless of breathing rate, volume, etc. That means that "getting oxygen into the blood" is not a major concern in breathing training. Getting that oxygen rich blood from the lungs to the cells is the major concern in training.

A large range of symptoms can accompany respiratory alkalosis (over-breathing): light-headedness, paraesthesia, muscle cramps, angina, nausea, confusion. Severe alkalaemia (respiratory and metabolic alkalosis) causes cerebral vasoconstriction, muscular tetany, and seizures, ventricular arrhythmias. Treatment can vary from paper bag breathing to sedation and intubation.

It is possible to over-ventilate when obstructed airways don't allow for rapid exhale. If rate and volume are too high, the lungs won't have time to deflate, and "breath stacking" takes place: increased lung volumes and intrathoracic pressure that reduces blood return to the heart. Blood pressure can drop rapidly and dramatically resulting in cardiac arrest and death! Reducing the frequency and volume of ventilated breaths can avoid this.



Regular practice of Breath Awareness and Conscious Breathing can restore natural, healthy physiological and chemical states. It is not unusual for people to heal themselves of hypertension and any number of other illnesses in as little as a few weeks. The key is daily practice.

Did you know?

Mosquitoes are attracted not by your body heat, but by the carbon dioxide that you give off?

EXERCISE

POSTPONING THE INHALE

(Lengthening the Pause after the Exhale)

Today we are going to experiment with "Breath Holding"

We all remember as children having contests to see how long we could hold our breath. This game has certain intuitive wisdom.

Breath holding has many physical, psychological and emotional benefits. And being able to hold our breath for a time can come in very handy, for example when swimming (or when visiting certain public toilets!)

The natural physiological breathing pattern at rest is: inhale, exhale, pause... inhale, exhale, pause... inhale, exhale, pause...

When most people hold their breath, they hold it after the inhale and before the exhale. In other words, they postpone the exhale.

But since a natural physiological pause already exists after the exhale, we are going to hold the breath at that point: in other words, we are going to postpone the inhale.

When you hold your breath, one of the things that happens is that carbon dioxide (CO₂) begins to build up in your system. This triggers many thoughts, feelings and sensations, and emotions.

The longer you hold your breath, the stronger these triggers become. The urge to breathe becomes stronger and stronger, until finally it borders on panic, and you simply **MUST** breathe.

A healthy person at rest should be able to manage a controlled pause of thirty seconds or more after the exhale, with no discomfort. However, many people begin



to experience "air hunger" and the feeling that they "must" breathe after a pause of only five to ten seconds!

The practice of lengthening the natural pause after the exhale is a very healthy and revealing exercise.

You can use the second hand on your watch or clock, or you can count your heartbeats. The point is to see where your comfort level is, and gradually increase the length of the comfortable pause after the exhale.

The idea is to practice postponing the inhale... longer and longer... without experiencing any stress or strain or discomfort of any kind.

This is not about forcing yourself to turn blue, or trying to break the world record! This is about gently training your system to tolerate higher levels of carbon dioxide. This has profound physiological, emotional, and psychological benefits because carbon dioxide is a volatile acid, and therefore it affects the pH balance in your body.

Carbon dioxide also acts as a vasodilator, affecting the smooth muscles that form the walls of blood vessels, bronchial vessels, and your intestinal passages.

As CO₂ increases in your system, it causes micro-vessels to dilate (to open and expand). This sets the stage for oxygen delivery and transfer of nutrients and metabolic wastes to and from the organs, tissues, and cells.

EXERCISE

This exercise is best done sitting.

Enjoy a normal inhale, and let the breath out naturally.

Then, without tensing any muscles... simply wait... don't breathe in.

During this pause, notice the feelings and sensations arising in your body... And notice your REACTIONS to these feelings and sensations. Relax into them.

Look, listen and feel inwardly as the urge to breathe get stronger... Remain relaxed during this growing sense of urgency... And when the feelings begin to get too strong... simply let a natural inhale happen.

If you have to recover, that is if you find yourself gasping for air... or if you need to take several big breaths after the pause... it means that you have held your breath too long. After a few moments, try again, this time back off on the length of your pause... not holding the breath out as long.



Practicing this method several times per day (increasing the length of the pause by only 1 or 2 seconds every day or two), over the next several weeks, you can increase your controlled pause to a comfortable 30 to 45 seconds.

Many people around the world have healed their asthma using this method, and they have overcome anxiety attacks and panic disorders, as well as many other conditions...

It is a very powerful Breath Therapy Exercise/Technique!

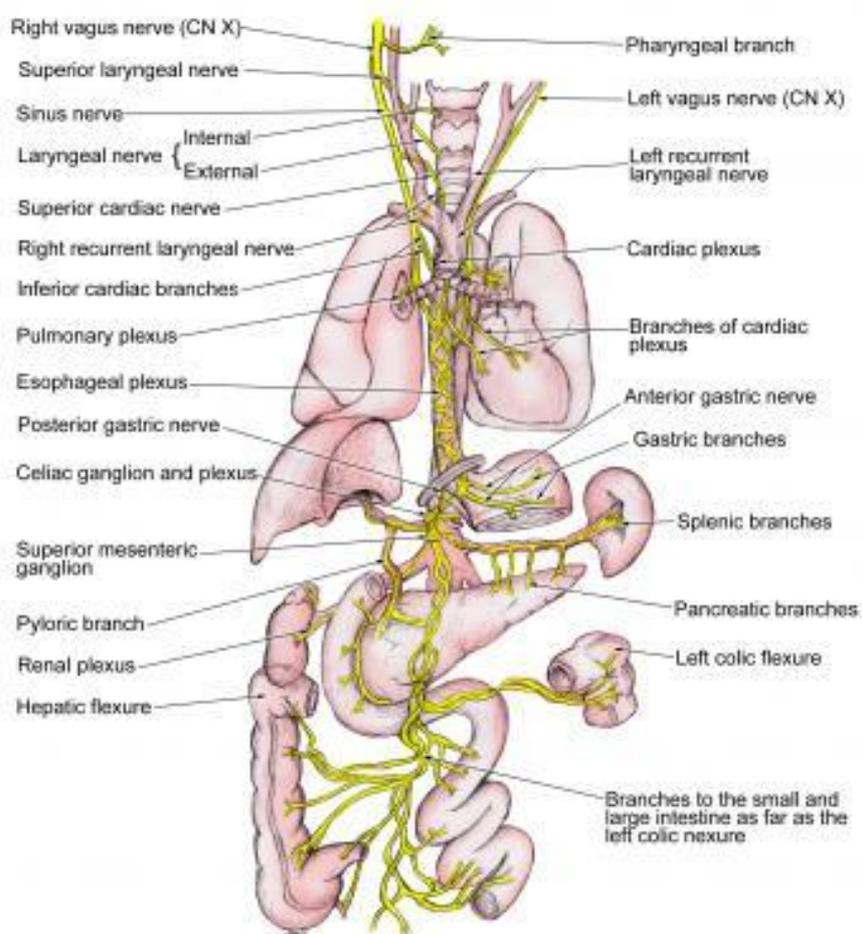
Good luck with your practice! Remember to be gentle and patient with your system. Absolutely no forcing or straining!

LESSON 5: THE VAGUS NERVE

All the functions affected by the autonomic system occur automatically: heart rate, blood flow distribution, temperature regulation, blood pressure, breathing, digestion, glandular functions, reactions of the immune system. However, there is only one that can be controlled with conscious intention, and that is breathing.

The study of the vagus nerve will help us to understand the mechanism through which this happens.

The Vagus nerve or “wandering nerve” is so named because it is the longest of all 12 cranial nerves connecting the brain to the periphery, including the gastrointestinal tract and organs such as the pancreas and liver.





It is primarily through the function of this nerve that the body can apply handbrakes on itself and prevent adrenalised energy from completely running the show. This fascinating and complex nerve is essentially responsible for the “body-mind” connection.

Besides being a parasympathetic nerve, sending fibres from the brain to the body (efferent functions), it is also an afferent nerve which means it sends sensory information from the body back to the brain.

The body uses the vagus nerve to deliver the neurotransmitter, Acetylcholine into the system. Acetylcholine is responsible for learning and memory. It is also calming and relaxing. New research has found that acetylcholine dampens inflammation in the body.

Exciting new research has also linked the vagus nerve to supporting the growth of new neural pathways, repair of brain tissue, and to actual regeneration throughout the body through stimulation of stem cells.

Because the vagal tone both influences and is impacted by breathing, we can increase vagal tone through manipulation of the breath. The vagal tone increases during exhalation. By slowing down our respiration through deep, intentional breathing and elongating our exhalation, we can activate the vagal brake and elicit the relaxation response almost immediately.

The lungs, airways, throat, chest wall, and diaphragm contain thousands of receptors (pressure, stretch, chemical) sending thousands of messages about your breathing through the vagus nerve. These messages travel through pathways leading to the emotion processing centres (limbic system, amygdala, hippocampus), hormone regulation centres (hypothalamus), and processing centres for perceptions and thoughts throughout the cortex (via the thalamus). Through these routes, breathing patterns exert a strong influence on how we think, feel, react, and perceive ourselves and others. By voluntarily changing the pattern of the breath, we can change the messages the body is sending to the brain and thereby change the way we think, feel, and react.



Once this response is initiated and PNS is dominant, our brains cease to be governed by the limbic system and fear circuitry that limits our capacity to effectively think, plan, reason and respond to others. This means that we are no longer subject to a narrow range of defensive or knee jerk reactions. Through consciously deepening the breath and prolonging exhalation, we access not only the relaxation response, but also the capacity to be mindfully present in relationship.

With time and practice, intentional breathing can be used as a powerful tool to diffuse stress and manage difficult or conflictual interpersonal circumstances. Through changing the body via the breath, we have the capacity to not only change our mindset, but also our relationship to others.

Skilful control of breath patterns can be used to calm the emotions, eliminate anxiety, stop obsessive worry, reduce stress over-reactivity, and induce greater mental clarity and focus. There are many forms of breathing derived from Yoga, Qigong, Buddhism, Christianity, Judaism, Zen, American Indians, martial arts, and other traditions. One of the simplest methods and most researched methods is to slow the breath rate down to between 5 and 6 breaths per minute.

References:

YogaU and Marlysa Sullivan, MPT: Your Well-Being Power Switch: The Role of the Vagus Nerve in Health and Healing

Richard P Brown and Patricia L Gerbarg. Part I. Longevity and Aging Advancements. Yoga Breathing, Meditation, and Longevity. Annals of the New York Academy of Sciences. 2009, 1172:54-62.



LESSON 6: THE BRAIN

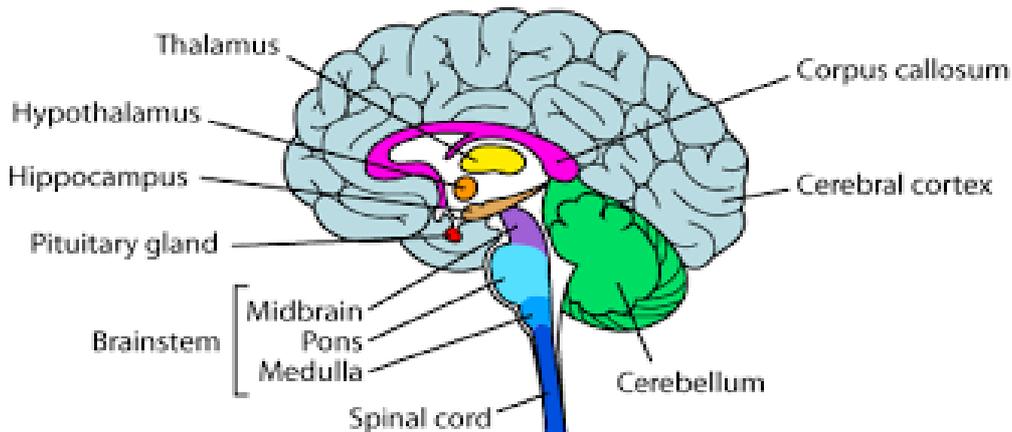
Breathing and the Brain

Thanks to cutting edge research in the field of mindfulness, neuroscience and psychoneuroimmunology, we are beginning to unravel the inner workings of the brain, how it functions, its ability to shape itself and how this all relates to health, behaviour and to consciousness itself. Yet it remains a mystery. And even though the breath is our most intimate experience of life, we are only scratching the surface of its potential. In this lesson, we will explore how the breath relates to the brain in the context of conscious connected breathing. We discuss the basic design of the brain and the possibilities for conscious breathing to be a tool that sculpts it to support our highest potential as conscious beings.

The brain contains billions of nerve cells arranged in patterns that coordinate thought, emotion, behaviour, movement and sensation. A complicated highway system of nerves connects the brain to the rest of the body, so communication can occur in split seconds. While all the parts of the brain work together, each part is responsible for a specific function — controlling everything from your heart rate to your mood.

The three-part structure of the brain, or 'triune' as it's known, tells a long story of human evolution, each part reflecting our development through three distinct eras of our evolution.

They are the Reptilian brain, Limbic brain and the most evolved part, the Neocortex.



The Reptilian Brain

About 500 million years ago, the brainstem, the most ancient part of the brain evolved. This is the junction where the spinal cord connects to the base of the brain. Old school scientists named this the reptilian brain because it looks like an entire brain of a reptile. Directly connected to this is the cerebellum at the base of the brain. The brainstem, together with the cerebellum, makes up the reptilian brain. It is responsible for supporting basic life functions such as the control of heart rate, respiration, wakefulness and sleep. According to studies, the cerebellum is the brain's most active area, responsible for balance and coordination of movement. Learned movements and memorised habitual behaviours are also stored in the cerebellum.

The Limbic brain (Emotional brain)

The next part of the brain to have evolved was the midbrain, which is made up of some interesting structures which influences our feelings, behaviour and basic survival instincts. Thus, it is also known as the 'emotional brain'.

For the purposes of this discussion we will only look at some key structures.

- **The Thalamus** acts as the relay station, integrating all the incoming information from the senses and external world.
- Connected to the thalamus is the **Hippocampus**, the database of the brain, the store house of memories of all our experiences from the beginning of



our lives, both conscious and unconscious. It is responsible for encoding long term memories and processing information through learning.

- **The Amygdala** is a small almond shaped structure that works with the hippocampus to generate primary emotions from the interpretation of events based on the memories stored there. Essentially, it is the brains panic button which mobilises the bodies resources to deal with a threat. It sends signals down to the adrenal glands to secrete adrenaline and cortisol, kicking the body into high gear.

A primary emotion (anger, fear, sadness or joy) response is activated when an incoming stimulus from the external environment (or an internal thought) links to a memory in the hippocampus.

For example, a child might have had a nursery school teacher who was strict and who always wore rose scented perfume. This association gets imprinted in the hippocampus. The child then grows up and his boss wears rose scented perfume. He can't understand why he always feels anxious when he is around her. The scent of rose unconsciously triggers the stress response. Think about the implications of this understanding....

New research has revealed that the amygdala has two parts. The central core seems to store primal or instinctive fear while the more plastic outer part is formed from learned fears based on traumatic fearful experiences. It has been found that people who have PTSD have a larger amygdala and thus the stress response is more easily activated.

The Neocortex

This is the new or most evolved part of the brain that is highly plastic and able to sprout new neural connections based on our thoughts, behaviour and actions. There are 4 lobes of the neocortex each responsible for various functions and yet interconnected.



It is the home of the conscious mind. Of particular interest to us is the left prefrontal cortex responsible for decision making, concentration and focus and that lights up during meditation. It sends fibres into the limbic brain inhibiting the acting out of primal instincts.

The neocortex is also the last part of the brain to develop and remains very malleable until the mid-twenties. This gives the brain an opportunity to grow, learn, evolve and entrench the initial neural pathways until early adulthood.

As we mentioned earlier on in our discussion, the limbic brain responds to both internal and external signals, either interpreting them as safe or fearful.

Our breathing pattern i.e. rate, volume and place from where we breathe is a language, constantly sending signals back to the limbic brain about our state of being.

A long deep inhalation, a fast rhythm and breathing high up in the chest is interpreted by the body as a high demand state. The stress/energy/sympathetic response will be triggered, and the limbic system will be activated.

A conscious connected breathing session opens up the opportunity to 'see' and relate to the stressful state by learning to consciously relax through what is surfacing. Breathing from the belly, relaxing on the exhale and slowing the breath down helps the body to trust the intensity and change our relationship to the intensity of the physical sensations and emotional experiences. It helps us to refine our ability to respond with relaxation rather than react to what is coming to the surface. Thus, the breath opens us up to the visceral experience of the subconscious, and through skilled facilitation gives us the opportunity to work through, release and integrate it.

Further reading:

Evolve your Brain - Joe Dispenza

The Buddha's Brain – Dr Rick Hanson

Behave - Robert Sapolsky



Overview of the brain

Part of the Brain	Location	Function
Medulla Oblongata	Lower part of the brain stem	Carries out and regulates life sustaining functions such as breathing, swallowing and heart rate. The medulla is easily the most important part of the brain. Its functions are involuntary, or done without thought. We would not be able to live without the medulla because of the myriad of crucial tasks it performs including regulating blood pressure and breathing. As a part of the brain stem, it also helps transfer neural messages from the brain to the spinal cord.
Cerebellum	Lower area of the brain, below the pons	Responsible for balance and coordination of muscles and the body. It is extremely important for being able to perform everyday voluntary (done with purpose and intent) tasks such as walking and writing. It is also essential to being able to stay balanced and upright.
Hypothalamus	Above the pituitary gland and below the thalamus	Responsible for behaviours such as hunger and thirst, as well as the maintenance of body temperature The hypothalamus is mainly responsible for motivational behaviour. It is the reason we know

		<p>when we are hungry or thirsty. The hypothalamus also helps our body maintain a constant temperature. This part of the brain also controls the pituitary gland, which is the master gland that controls all the other endocrine glands in the body. Thus, the hypothalamus plays a key role in connecting the endocrine system with the nervous system.</p>
Amygdala	Part of Limbic System, at the end of the hippocampus	<p>Responsible for the response and memory of emotions, especially fear. The amygdala is the reason we are afraid of things outside our control. It also controls the way we react to certain stimuli, or an event that causes an emotion, that we see as potentially threatening or dangerous.</p>
Hippocampus	Part of the Limbic system, in each temporal lobe	<p>Responsible for processing of long term memory and emotional responses.</p> <p>It not only assists with the storage of long term memories, but is also responsible for the memory of the location of objects or people.</p>
Thalamus	Part of the forebrain, below the corpus callosum	<p>Responsible for relaying information from the sensory receptors to proper areas of the brain where it can be processed.</p> <p>It diagnoses different sensory information that is being transmitted to the brain including auditory, visual, tactile and gustatory signals. After</p>

		that, it directs the sensory information to the different parts and lobes of the cortex.
The Pons	Area of the hindbrain that sits directly above the medulla Connects upper and lower parts of the brain	The Pons serves as a message station between several areas of the brain. It helps relay messages from the cortex and the cerebellum. Without the pons, the brain would not be able to function because messages would not be able to be transmitted. It also plays a key role in sleep and dreaming, where REM sleep, or the sleeping state where dreaming is most likely to occur, has been proven to originate here.
Corpus Callosum	Above the Thalamus, under the cortex	Connects the right and left hemispheres of the brain The Corpus Callosum is the part of the mind that allows communication between the two hemispheres of the brain. It is responsible for transmitting neural messages between both the right and left hemispheres.
Cerebral Cortex	Outermost layer of the brain	Responsible for thinking and processing information from the five senses. The Cerebral Cortex is made up of tightly packed neurons and is the wrinkly, outermost layer that surrounds the brain. It is also responsible for higher thought processes including speech and decision making. The cortex is divided



		into four different lobes, the frontal, parietal, temporal, and occipital, which are each responsible for processing different types of sensory information.
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LESSON 7: ENERGY MANAGEMENT AND THE ROLE OF BREATHWORK

The mechanism of our neurobiological system is innately designed to provide us with high energy in times of high demand and then to restore itself so that restoration, recovery, growth and rejuvenation can occur in times of rest. As human beings however, given the complex nature of our mind-body-consciousness system, being in this “mode” gives us the opportunity to create, innovate and grow.

To get a clearer understanding of what is meant by this, let’s look at what happens to the body and brain when the stress response kicks in:

The Fight-Flight Reaction (Sympathetic Nervous System)

We respond to stress via two pathways, the neurological response and the chemical response

1. The Neurological response: The Fast Track

- the autonomic nervous system (ANS) turns on in response to something real or imagined in the environment
- The ANS passes along information directly through the spinal cord and spinal nerves that are connected to the adrenal glands that sit on top of the kidneys
- Once this lightning bolt of information reaches the adrenal glands, they push out a surge of adrenaline that goes directly into the bloodstream to mobilise resources for action

The effect is:

- increased heart rate and blood pressure
- reduced flow to digestive organs (thus the dry mouth and feeling of butterflies which is blood being shunted away from the intestines)
- increased blood flow to the extremities for action
- glucose is mobilised in the bloodstream for energy
- brain becomes super aware
- pupils are dilated, and lenses cleared to facilitate seeing greater distances
- airways dilate allowing greater oxygen transfer in the lungs



2. The Chemical response: The Slow Track

Like the neurological response, the chemical response can be triggered by a reaction to something outside of ourselves or an internal thought:

- the neural signal is sent to the part of the midbrain called the hypothalamus
- a chemical peptide called Corticotrophin releasing hormone (CRH) is released, sending a message to the pituitary gland in the brain
- the pituitary gland makes another chemical peptide called Adrenocorticotrophic hormone (ACTH) and sends it to the adrenal glands
- The adrenal glands in turn release cortisol which effects certain biological reactions

Recovery Mode

This acute stress response creates a tremendous surge of energy that is meant to be used to act. However, once the action has been taken and the threat has been dealt with, the system returns to its resting state, the parasympathetic response, the rest and digest mode:

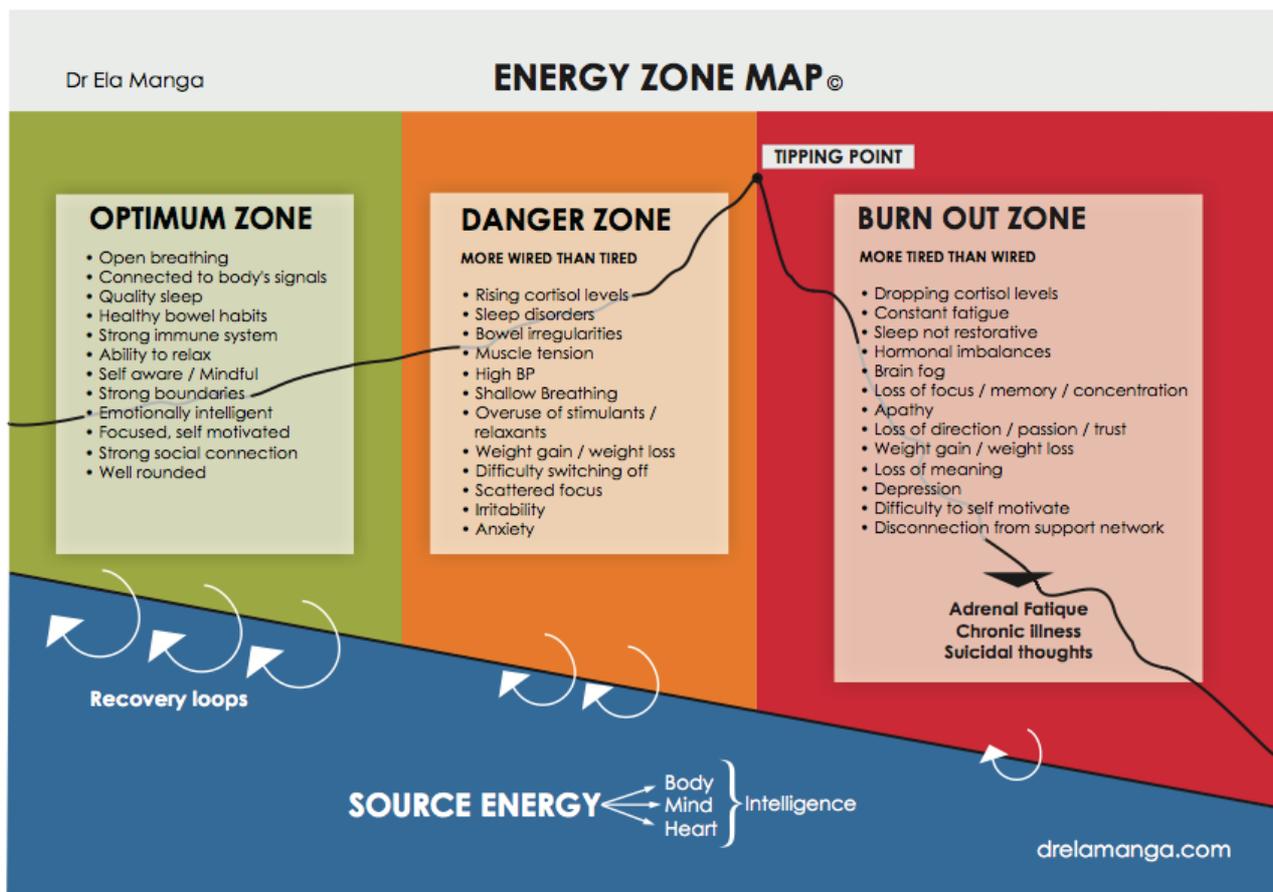
- where the body's responses are slowed down
- heart rate and BP decreases
- respiratory rate slows down
- blood flow to the digestive system increases

Unlike animals, humans perceive a whole host of other experiences as stressors. In fact, everyday life experiences, the act of multitasking and the constant contact with technology triggers the stress response. We also turn on the stress response without the actual stressor being present.

As a result, we get locked into a state of chronic stress. The body is not designed for long term stress so when the stress response is chronically activated, we are headed for burnout and disease.

Energy Zone Map

The following map illustrates the physical and behavioural symptoms that we experience as we move from a state of living in accordance with the energy laws (Optimum Zone) to Danger Zone and eventually to Burnout Zone.



Optimum Zone

Living in this zone means that we are living in perfect harmony with our inner rhythms and cycles, and the rhythms of nature. We are mindful, conscious and self-aware. We fully tap into our three sources of natural energy. We support the physical body with healthy nourishing food, we exercise intelligently, are well hydrated, sleep well and use the stress response wisely. We are open hearted and live by responding rather than reacting to situations. We are energised by living in the present moment.



Physiologically, in this ideal state, we might experience bouts of stress, but the system would return to a state of homeostasis. Cortisol would be released according to its natural circadian rhythm i.e. high in the morning and low in the evenings.

In balance, we have adequate amounts of serotonin in the gut to promote the production of melatonin at night. When we can fall asleep at night easily and feel rested, and have good energy throughout the day, we are in good balance.

We experience 'authentic energy', meaning, purpose and inspiration when we:

- use adrenalised energy wisely and replenish our energy resources through recovery loops.
- tap into source energy through StillPoint moments.
- tend to all Body Intelligence (sleep, regular meals, healthy movement), Mind Intelligence (mindfulness) and Heart Intelligence (connection with self and others)
- move and express our energy through the three channels

Danger Zone – More Wired than Tired

As the circulating levels of the stress hormones adrenaline and cortisol start to rise, we begin to experience the physical and behavioural effects.

Cardiac effects

High circulating levels of adrenaline cause a high heart rate, increases tone of arteries leading to hypertension

Gastro Intestinal Tract (GIT) effects

Blood is being constantly shunted away from the digestive system. This impacts the way food is digested, and nutrients absorbed which leads to a whole host of digestive disorders, bloating, constipation, irritable bowel syndrome (IBS) symptoms

Muscle tension and headaches

- in chronic stress mode, the muscle tone increases causing chronic tension in the neck and shoulders



- tension headaches
- poor posture impacts on breathing which feeds stress response.

Neurological effects

When we are in chronic stress mode, most of the blood flow to the brain is diverted to the reptilian brain and midbrain and away from the forebrain, which is our higher cognitive centre. As a result, we become more reactive and anxious which further exacerbates the stress response. It also causes degeneration of the cells in the hippocampus which is responsible to form new memories and acquire new knowledge.

Glucose levels

Cortisol mobilises the release of stored glucose (gluconeogenesis) into the bloodstream. The effect is glucose spikes into the bloodstream, which in turn raises insulin levels, triggering further sugar cravings and the cycle continues which creates a predisposition to insulin resistance and development of fat deposits around the belly.

Thyroid function and metabolism

High cortisol levels desensitise the thyroid hormone which slows down metabolism, causes fatigue and weight gain.

Immune system effects

Cortisol is an immune system suppressant and anti-inflammatory, so if levels are chronically raised, the immune system gets suppressed causing an increased susceptibility to infections. Cortisol is also a potent anti-inflammatory.

Burnout Zone – More Tired than Wired

In this phase, the adrenal glands are unable to keep up with the body's demands for stress hormones and the stress hormone levels begin to drop. Energy levels begin to drop, and symptoms may include lethargy, depression, lack of motivation, apathy, constant fatigue. Physically, health conditions are more chronic as the imbalances become more driven into the cells paving the way for chronic illness



and full on adrenal fatigue. Common conditions we see with people in this zone: Fibromyalgia, auto immune conditions, diabetes, cancer.

NOTE:

When explaining the energy zone map, the following needs to be noted:

- The energy zone map is a tool of awareness which illustrates the general flow of energy in people with chronic stress
- Some people may be mentally resilient (in phase 1) but physically in phase 2.
- Therefore, the gauge and the map create an awareness of what dimension or sources of energy requires more attention and support.

Recovery Loops

The key to staying in the high-performance zone and managing our energy is the ability to consciously break the stress cycle and activate *recovery loops*, so that the body can restore, replenish and recover.

The most powerful and effective recovery loop is the breath, the bridge between mind, body and soul.

Our breath is the most exquisite example of innate wisdom in action. It quietly sustains our life force while we get on with the business of our lives. Most of us have never even considered the gift and value of the breath until something comes in the way of its flow.

Our breath moves, flows and adapts itself under the radar of our conscious awareness and yet, when we come alive to it, notice it and harness it, it becomes the very force that shifts us from operating at baseline level to expanding and growing in ways we never imagined possible.

The breathing cycle, the inhale and the exhale, is the perfect expression of the Law of Cycles. With every inhalation, high energy stress response is balanced by the exhalation and relaxation state. This can even be measured in our heart rate. When we inhale, the heart rate increases slightly, and as we exhale it decreases slightly. This elasticity of our heart rate is known as *heart rate variability*.



Authentic energy is reflected in the heart rate variability. In other words, the more balanced the breathing pattern, the higher the heart rate variability, the more robust our energy system and the less prone we are to the symptoms of adrenalised energy.

If we are stuck in danger zone or burnout zone, the breath will reflect that with a habitual pattern of breathing that is shallow, fast and restricted. In addition, our breathing pattern, posture and tone of voice is constantly sending feedback signals back to the brain. If the body is sending stress signals to the brain through a shallow breath and tight muscles, the brain will react accordingly by feeding adrenalised energy. Eventually, over time, adrenalised energy becomes a habit and an addiction.

While our breathing is part of this autonomic nervous system (automated energy management system), it is the only function that we can consciously override. In just one breath, we can break the cycle of toxic adrenalised energy and shift our energy state.

If that can happen with just one breath, imagine what we are able to achieve if we bring conscious breathing into our daily awareness and integrate it into our lifestyle.



MODULE 3: THE PRACTICE OF CONSCIOUS BREATHING

LESSON 1: THE CORNERSTONES OF BREATHWORK

Three Cornerstones of Breathwork: Awareness, Relaxation and Energy

In the first few sessions with a client, it's best not to have any focused intention for the session. Rather work on establishing the basic foundational skills of breathing which will serve to break any dysfunctional patterns that the client has developed. Remember that the aim in breathwork is to train a way of breathing that is free, full and responsive, a reflection of freedom from fear and living the highest expression of self. Breathing in this way will naturally support optimum cellular respiration and flow of subtle energies in the body. In later sessions bring in the idea of intention where you can work with specific issues and challenges.

The 3 foundation skills - "Formula for Transformation" - in Conscious Breathing are Awareness, Relaxation and Energy.

1. Breath Awareness.

Breath awareness is the foundation of Breathwork.

Most of the time we are not conscious of our breathing, because we don't have to be. Our breath is under the control of our autonomic nervous system that also regulates our heart rate and temperature which maintains homeostasis and balance. It's only when breathing becomes difficult or when we need more of it, do we become aware of its importance.

Before we can start using the breath and controlling it, first we must learn to get to know it, make friends with it, establish a relationship with it.

We need to support the client to develop a level of non-reactivity to the inner experience and the ability to hold intensity, without getting caught up in it.



The more aware we become of the breath, the more we become aware of our feelings, thoughts, habits and posture, giving us an opportunity to make more conscious choices.

Breath awareness is a mindfulness practice and is the first step in breaking out of habitual patterns that stand in the way of accessing our potential. The more breath awareness we have, the more benefits we can gain from all the conscious breathing exercises that follow.

Observe natural breath and dysfunctional breathing habits in your client.

- Posture: The military posture of “belly in, chest out” projects an image of strength and courage or in other cases, a self-consciousness about weight. These can become unconscious chronic postures that block full breathing into the belly
- Ability to relax: Relationship with body. Fear of sexual energy, sexual trauma and self-consciousness can cause people to freeze and contract the pelvic and lower abdominal area. Tension or discomfort due to digestive problems or menstrual problems can also cause habitual holding, tension and contraction
- Restrictive clothing: Bras, tight belts and tight jeans all restrict the flow of natural, flowing open breathing
- Breathing through mouth or nose: Often people with anatomical problems in their nasal architecture e.g. deviated septum or chronic sinusitis develop a habit of breathing through the mouth at rest
- Breathing mechanics: Respiratory rate, volume, location i.e. chest or belly

When we observe these details, all the subtle and not so subtle aspects and patterns, we can trust our intuitive minds to synthesize and collate all the information and inform how the session will unfold.

Get your client comfortable with their bodies and inner world. Guiding them to notice and become aware of their thoughts, feelings, sensations and emotions throughout the session.



Guide breathing with attention, willfully and deliberately, supporting the development of a very conscious relationship with the breath. Observing the movement and flow of air, action of muscles, and resulting sensations. Encourage the focus on these details of the experience and to keep turning inwards to look, listen and feel.

In this exercise, we are letting the autonomic system regulate the breathing, all we are doing is bringing our attention to it, bringing our conscious attention to an automatic function, linking conscious to unconscious.

This exercise can be guided sitting in a chair in a relaxed posture that 'embodies dignity' maintaining a relaxed awareness or lying down. Hands can rest on the lap, palms facing up or placed gently on the belly.

Remember that when you are guiding this practice, you are probably dealing with someone that is caught up in layers of mind activity and relaxation is a process.

Asking someone to place their 'feet on the floor', helps them to feel their body, get grounded and come into the present moment. A deep breath followed by a sigh will help with this.

You can play around with the 4 dimensions of focus here

- Broad outer: 'Keeping your eyes open, bring attention to the broad environment around you, becoming aware of everything at the same time, engaging all your senses.'
- Become aware of the room you're in, the colours. Tune into the different layers of sound, notice if there's a scent in the air.'
- Narrow outer: 'Now narrow your focus, hone in on just one thing, a sound, a leaf on a tree and keep your focus there.'
- Broad inner: 'Close your eyes now and turn your attention inwards noticing your whole body at the same time, all your sensations.'
- Narrow inner: 'Now narrow your attention on just your breath. Without controlling the breath in any way, simply enjoy its natural gentle rhythm,



just watching, just observing. Feel the sensation of the breath in your nostrils, the cooler air of the inhale vs the warmer air of the exhale. Feel the breath passing down the back of your throat. And feel the gentle rise and fall of your belly as you inhale and exhale. Notice the texture of your breath, its natural rhythm or pattern. Notice if you are feeling any restriction or tightness. Notice the nature of the inhale and exhale. Which is longer? Notice the gaps and pauses between the breaths.'

Some prompts:

- Choose a point of focus of the breath, whether that is the breath in your nostrils or the belly.
- As soon as you notice a thought, simply notice what the thought is and without judging it, getting annoyed with yourself or engaging the thought, gently guide your awareness back to the feeling of the breath.
- Don't fight what is coming up inside you whether it is a thought, emotion or sensation, simply be the neutral watcher and keep returning your attention to your breath.
- Stay alert, keeping a relaxed awareness, feeling the turbulence of your mind settling and allowing yourself to rest in your StillPoint.

Homework for client:

- Develop the habit of observing your breath in different situations throughout the day.
- How are you breathing when you are concentrating on a task, feeling stressed, feeling relaxed, exercising, listening to someone, having a shower.
- Practice breath awareness for 1 week - self practice 20 mins a day and journal your experiences

2. Relaxation - Let Go

True relaxation is the forgotten art of the 21st century and the new paradigm in peak performance. More work is done in a state of relaxation than we realise.



Being in a constant state of 'high energy' or adrenalised energy is useful in the short term but toxic to the system in the long term. Most of us are holding habitual patterns of tension that need to be unraveled so that energy can flow effectively throughout our system.

We 'react' to relaxation by falling asleep but conscious relaxation is a skill that is fundamental to self-mastery. Breath holds the secret to letting go and activate the relaxation response. We use the breath to relax more quickly, more deeply, and in more situations.

Most people struggle to relax and are not even aware of the amount of tension the body habitually holds. Test the ability to relax on the exhale. Deepen the inhale slightly through the mouth or the nose. Invite a full free exhale and notice any holding patterns and areas of chronic tension. Encourage an open jaw, relaxed throat, full and free yawning and release of joints and muscles with the exhale. Invite and enhance a very natural breathing reflex: the sigh of relief, which is an built in recovery loop that nature has provided to help us to deactivate the stress response and reboot the system.

You might need to use props, loosen restrictive clothing, or use touch to facilitate deeper relaxation. Encourage sound on the exhale, the sound of an exaggerated sigh. Use the passive soft exhale to relax and release tension from the body. The idea is to snap the exhale loose, to release the air quickly and completely, allowing the elastic tendency of the muscles, gravity and atmospheric pressure to facilitate the exhale. You may need to encourage the feeling of complete exhale by pushing gently on the chest, encouraging more 'emptying'.

Homework for client:

- Dedicated practice for 10 minutes daily
- And at random moments throughout the day whenever you notice a buildup of tension.
- Train relaxation recovery loops into your system by consciously practicing the sigh of relief throughout the day.



- Rather than habitually holding the breath in times of stress, release the exhale together with stressful thoughts and physical tension.

3. Energy - Take Charge

We use breath control to access more energy and more power and aliveness.

This exercise is about experiencing the breath as life force energy and getting comfortable with intensity. In the last exercise we engaged the exhale to deepen relaxation. In this foundational exercise, we are engaging the inhale to activate energy in the system by increasing lung capacity and optimising oxygenation of cells.

Using the inhale, draw the breath up into the chest, expanding the lungs to 'charge the heart'.

The inhale is about 'taking charge' of the process and of your life, drawing in life, energy, nourishment with the air you breathe. Get clients to stretch, reach gently beyond limits and open into new spaces. Encourage opening into all three breathing spaces.

Experiment with other techniques to open up breathing areas, such as using breath sounds, equalising the flow, pursed lip breathing to achieve balance and harmony, or access surpassed or forgotten energy.

When you challenge a deeper inhale, chronic tension patterns will show up. Use of neck, accessory muscles. Work on a better **energy to effort ratio**, i.e. how much effort you use to accomplish a deep breath. If we struggle or use too much effort to breathe, we use up all the energy we get from the breathing and there's no net gain. Sometimes, when the client is trying to 'get it right' it is normal to use extra effort. Encourage the skill of taking in big powerful breaths while keeping the neck and shoulders very relaxed.



Encourage the feeling and way of breathing that expands the heart in the dimensions: top to bottom, side to side and back to front.

Homework for Client:

- 10 minutes every morning for 5 days beginning with breath awareness.
Practice together with the sigh of relief, bringing all 3 cornerstones together
- For 2 minutes whenever you're feeling a slump of energy



LESSON 2: PRINCIPLES OF BREATH THERAPY

There's more to breathing than just moving air in and out of the lungs. Breath-Energy needs to get to every cell of your body. Breathwork is ultimately about supporting the infusion of every cell with breath energy.

From our exploration of the mind-body design in module 2, we can appreciate that its optimum functioning is reliant on a breathing mechanism that facilitates adequate cellular respiration and energy exchange. As we delve deeper through our study, we will realise that these two factors are in fact one and the same.

When we can support the repatterning of healthy breathing in a client, we are not only supporting the flow of pranic life force to every single cell, but we are actively supporting the process of gene expression. We are actively participating in the re-engineering of a physical body that is the optimum vehicle for consciousness and an expression of it.

When we are working with clients, our aim is to restore all the following basic parameters of breathing. Every technique that we work should save these core breathing principles.

The qualities of a healthy breathing mechanism:

1. Establishing a Natural Rhythm

“Inhale, exhale, pause... inhale, exhale, pause...” This is nature's way of breathing our body when we are at rest and when the breath is directed by the autonomic nervous system.

“Inhale, exhale, pause...” describes our normal, healthy, chemically driven, biologically-based breathing pattern. Notice that it is not “inhale, pause, exhale.” A natural pause should come after the exhalation.



Notice how your client is breathing at rest.

There should be a natural rise of the inhale and immediate turn into the exhale with a momentary pause after the exhalation.

A good way to start a session is making your client aware of this rhythm and guiding them to meditate on it. Letting the awareness ride the waves of the breath. The pause after the exhale should feel like a comfort zone. like coming home after each movement and cycle of breath. Allow them to relax into that pause and not rush into the next inhale.

Ensuring that your inhale and exhale are smooth, and that the pause after the exhale is in place keeps us from over-breathing and becoming anxious or out of balance. And this breathing pattern keeps everything in our system in order and functioning at its best.

This is also a good take home exercise:

- Simply meditate on the natural rhythm
- Notice if and when this natural pattern becomes disturbed, and re-establish it to keep yourself in a calm, centered state.

2. Energy to Effort Ratio

Every breath delivers energy to your body and to your whole being. And every breath costs us something in terms of energy. Some people use so much effort to move the breath in and out, that it ends up costing them more than they get! Making sure that each breath delivers the maximum amount of energy with the minimum amount of effort.

One of the most common dysfunctional breathing habits is when we use unnecessary muscles to breathe and waste energy in the process. Using smaller accessory muscles to breathe uses up more muscular energy than the energy we get from the breath.



The diaphragm and the intercostal muscles (between the ribs) are our primary and secondary breathing muscles. Accessory muscles are muscles of the neck and shoulders, chest and back.

The idea is to make our breathing a more energy efficient exercise through diaphragmatic breathing and the use of primary and secondary muscles.

We will notice this pattern of breathing immediately when we ask the client to take in deep breaths. The habitual use of accessory muscle to breathe creates a chronic energy deficit leading to fatigue. And it is also reflective of chronic adrenalised energy and anxiety.

Training the client to use their diaphragm to breathe will help to reestablish a healthy effort to energy ratio. Exercise to build core strength and flexibility and bodywork can also help assist to break chronic physical tension patterns.

3. Diaphragmatic Breathing

As we learned in Module 2, the diaphragm is a dome-shaped sheet of muscle that separates the chest from the abdomen. It serves as the primary breathing muscle. As the lungs inflate on the inhalation the diaphragm flattens pushing the belly out and on exhalation, the diaphragm relaxes back up towards the ribcage and the belly flattens.

Diaphragmatic breathing is also called “belly breathing” because of the natural movement of the belly when breathing. If you notice that the belly moves in on the inhalation and out on the exhalation it is an indication of a dysfunctional breathing pattern which needs to be corrected. The practice of supporting and strengthening the natural pattern of diaphragmatic breathing is a basic parameter of breathwork.

To train diaphragmatic breathing, an effective method is to place a heavy book on the belly and ask the client to inhale and try to move the book towards the ceiling and bring it back down again slowly on the exhale.



You can also ask the client to bring their hands together over the belly button and interlace their fingers loosely. On the inhale, the fingers should come apart as the belly 'fills' with air. When you exhale, the hands come back together.

When standing, they can create resistance to this movement by placing their hands on each side of their waist, thumbs toward the back and fingers toward the front. On the exhale, they can squeeze their hands together as if slimming your waistline, then feel the inhale pushing the hands apart and spreading the fingers.

4. Nose Breathing vs Mouth Breathing.

The nose and mouth represent the two channels that breath can use to come and go. As previously discussed, the nose is meant for breathing: it has hairs that filter dust, mucous membranes that trap microscopic particles. It warms or cools the air, conditioning it; and it has structures that spiral the air as it enters the lungs. And so, the nose should be the normal 'default' passage that we use automatically or unconsciously whenever we breathe.

However, when we speak, laugh, cry or express emotions, the air needs to be able to flow through the mouth.

In order to establish a fluid, flexible and adaptable breathing mechanism, the practice is to play with these channels, explore, experiment and meditate on them.

For you and your client, consciously breathing in and out the nose, in and out the mouth, in the nose and out the mouth, in the mouth and out the nose, and practice breathing in and out through both the nose and the mouth at the same time. (This exercise or meditation is called equalising the flow) For now, get comfortable with both passages and all the possibilities; and make sure that the unconscious habit is to breathe through the nose when at rest or when performing normal everyday activities.



5. Three Breathing Spaces

The whole body is involved in the act of breathing. On a physical level, our whole breathing apparatus is connected by the fascia, the body's glue. The lining of the lungs (pleura) is connected via the fascia to the diaphragm which in turn is connected to the muscles that extend deep into the pelvis. A full natural breath involves the movement of all three breathing spaces, which engages the diaphragm, the spinal column and opens up the dead unused spaces of the lungs, thus maximising the effects of a full breath. On an energetic level, the movement of the breath through all the breathing spaces clears stuck psycho-emotional energy that is stored in these areas.

This lesson is focused on bringing awareness to all three breathing spaces, assisting you to repattern your breath back to its natural state. It will also help you to work with your clients more easily if you can identify the breathing space that is restricted or stuck in them. Many psychological and emotional patterns can be released in this way.

Lower breathing space

This is the area from the tip of the tailbone to the navel. To feel the breath moving into this space, place your hands under your belly button with your middle fingers touching. Inhale very slowly into your pelvis, so that your hands are moving away from each other. If you find this difficult, start by bending your knees and feel the pelvis rocking as you inhale and exhale. Exaggerate this movement. This will help you to activate energy in the lower breathing space. You can also imagine that you are breathing into your lower back.

When you exhale from the lower space, the belly button should travel toward the spine; you draw the belly inward as you exhale.

For many, breathing into the pelvis is challenging as it is locked and tight because of our posture, but also because this is where suppressed guilt and shame is



stored. When we breathe into this space, many suppressed emotions can be triggered, so be aware of this when working with yourself and your clients.

The lower breathing space is also the seat of our creative energy and power (Kundalini energy), and activation of this energy can be very powerful, especially when we breathe with intention

Middle Breathing Space

This is the area from the navel to the nipple line. To activate this space, lie on your back, resting your hands on your belly above your navel with middle fingers touching.

As you inhale deeply, the diaphragm flattens, and the belly will rise to move your hands away from each other. You should then feel like your ribcage is spreading like wings. You create a hollow under your armpits, and you also tend to round your back and breathe into your back as you expand from side to side.

As you exhale, feel like you are moving the belly button towards your spine, emptying the lungs completely.

Breathing in this way is deeply relaxing as it activates the vagus nerve through the alveoli and diaphragm.

The Upper Breathing Space

This is the space from the nipple line to the chin. Place your hands just underneath your collar bones and feel like you're breathing into them. Breathing into the upper space raises the sternum and the collar bones. Most people breathe in this area unconsciously, especially when they are stressed and anxious.

However, breathing into this space opens your lungs right to the apex, facilitating a feeling of energy and vitality.



6. Flexible Rhythms

Breathing patterns are associated with physical, emotional and psycho-spiritual states. When we are comfortable with a wide range of breathing rhythms and patterns, volumes and speeds, we will automatically and naturally be stronger, healthier, and more flexible in other ways. We will be more comfortable and at ease in more situations, regardless of what is happening in you or around you.

If we would like to move to the realm of peak performance and optimum energy we should be able to breathe as quickly as 60, 120, or even 180 breaths per minute and as slowly as 3, 2, or even 1 breath per minute or less.

By experimenting with breathing fast and slow we can find our limits of comfort and lean on them. Get comfortable with breathing quickly and slowly for a few minutes at a time. You can also integrate nose or mouth breathing into this practice, as well as targeting the three breathing spaces. Make sure to rest and meditate between rounds of practice. Notice the feelings and sensations, and the habits and patterns that you bring up or bump into when experimenting with different breathing rates

7. Balanced Breathing:

The act of breathing is creating a balance and interplay between energy and relaxation.

With every breath that we take, we are balancing our neuro-endocrine energetic and psychological systems. Every inhale and exhale is balancing the sympathetic and parasympathetic nervous system, yin and yang, reason and passion, masculine and feminine.

Our whole anatomy and way we breathe is designed to create and maintain this balance.

By breathing consciously and playing around with certain parameters we can re-establish this balance. This is the key in energy mastery.



When working with any technique, be aware of what each is able to achieve based on the above.

ENERGY	RELAXATION
Inhale	Exhale
Sympathetic	Parasympathetic
Upper breathing space	Lower breathing space
Fast Rhythm	Slow Rhythm
Mouth	Nose
Right Nostril	Left Nostril

A good technique to establish balance is Coherent breathing ie breathing in for five seconds and breathe out for five seconds... In for five, out for five... inhale five, exhale five... Gently, continuously, consciously.

Even five minutes of Coherent Breathing results in measurable changes in cortisol levels (stress hormone) in heart rate, blood pressure, and mood. Coherent Breathing quickly and dramatically increases heart rate variability (HRV), and the benefits of high HRV are well proven and documented by thousands of medical studies.



LESSON 3: ANALYSIS OF BREATHING

Our aim as a breathworker is to support the client to break dysfunctional breathing patterns that could have been caused by physical and/or emotional factors.

Identifying the primary dysfunction is a good starting point of focus for the sessions.

The following is a guide to identifying what the most common patterns are and what the focus of the sessions should be.

1. Reverse Respiration

Looks like:

- Abdomen moves in with the inhale and out on the exhale

Causes:

- Wearing restrictive clothing
- Compensation in lung disease
- Sometimes seen in children, eventually becomes a fixed pattern

Effects:

- Muscles of respiration are uncoordinated
- Chronic tension in upper body
- Body and breath disconnected
- Confused state of mind

Focus:

- Work on training diaphragmatic breathing (buck on belly) and 3 breathing spaces

2. Chest breathing

Looks like:

- Breathing mainly happens in upper chest



- Braced upper body
- Shoulders hunched up towards ears
- Belly is held tight

Causes:

- Chronic stress and anxiety
- Startle reflex gets 'stuck' in body
- Jim Morningstar Body types

Effects:

- Chronic tension in upper back, shoulders and neck
- Impaired digestion (IBS) and circulation
- Hypertension
- Hyperventilation

Focus:

- 3 breathing spaces
- Conscious connected breathing to unravel emotional root cause

3. Collapsed Breathing

Looks like:

- Chest looks collapsed, shoulders rounded
- Core is collapsed/weak
- Shallow puffs of air centred in chest

Causes:

- Possible abuse/trauma
- Depression
- Feels disempowered/stuck in victim consciousness

Effects:

- Lack of muscle tone in lower body
- Obesity
- Disconnection from body

Focus:

- Breathwork in combination with core strength training/yoga/Pilates



4. Frozen Breathing

Looks like:

- Little physical movement of the body
- Body appears 'frozen'
- Protective/defensive body language e.g. arms folded across body, legs always crossed

Causes:

- Childhood physical or sexual abuse
- PTSD
- Fear of not being good enough, doing it wrong etc.
- Psychic sensitive Body Type (Theme 1 - See Module 5 in Manual)

Effects:

- Inability to relax and let go
- Outer layer contracts suppressing the breath

Focus:

- Expand the inhale
- Open up breath in all directions
- Support relaxation on the exhale
- Conscious connected breathing

5. Split breathing

Looks like:

- Belly breathing with range from partially full to full
- Breath does not move up into chest
- Shoulders may be drawn in or frozen

Causes:

- Wounding of heart and compensatory armouring around the heart
- Emotional suppression

Effects:

- Inability to connect on heart level
- Prone to breathing difficulties like asthma



Focus:

- Bring breath up into chest and heart
- Expand and open up ribcage

6. Hyperventilation

Looks like:

- High respiratory rate at rest > 18 breaths/minute
- Chest breathing characteristics

Causes:

- Chronic stress
- Being stuck in state of adrenalised energy
- Obesity
- Compensation for chronic illness

Effects:

- Blood flow reduced to extremities (cold hands and feet)
- Dizziness
- Palpitations
- Muscle tension

Focus:

- 365 technique to slow breathing down.



LESSON 4: FACTORS THAT INFLUENCE A SESSION

We know from our own experience, that every breathwork session is different. Many factors come into play that will determine where the session goes and what is experienced.

Five factors that influence a session:

- The Technique
- The Atmosphere
- The Teacher
- The Mind of the Breather
- And Something Else

1. The Technique.

Breath therapy is based upon many breathing approaches, style and practices, each having a different focus and effect. The foundation of breathwork practice lies in the ancient practices of Prana Yoga, Kriya Yoga and Chi Kung, as well as the more modern methods of rebirthing and Holotropic breathwork.

We can make use of several specific breathing techniques in Breath Therapy depending on:

- The level of health of the breather
- The degree of skill in a particular technique
- The purpose in training

Every technique has a specific and predictable result.

Depending on the above factors, one technique may make more sense than another.

At the beginning of a breathwork session, take some time to observe, do a bit of probing and experimenting to check the state of a person's health, the degree of



their skill, the amount of breath control and breath awareness that they have and the range and the scope of their breathing mechanism.

I begin by sitting with the person and noticing and observing, first of all, yourself. Take account of our own presence. Notice your own breath. Get a sense of your own presence and relax into your centre.

Then I begin to allow information from the other person to enter my awareness. I focus on the breathing and I notice...

- Where does the breath go?
- What moves?
- What does the breath touch?
- Is there a rhythm to the breathing?
- Is it chaotic, ragged?
- Is it deep?
- Is it shallow?
- Does the belly move?
- Does the chest move?
- Are their shoulders involved?
- Are their neck muscles tense?
- What is the expression on their face?
- Do they breathe through their nose or through their mouth?
- What does the breathing pattern tell me?
- If I had that breathing pattern, what emotions would be just under the surface?
- What would I be feeling if that was the way that I was breathing?

Gradually I will move towards a rational, logical decision about a technique or an intuitive or spontaneous urge to give the person an exercise or a test of some kind, some practice, some method.

It may be the basic technique of simply observing the breath, whether it be the technique of engaging the exhale (using the exhale to release tension, to relax,



triggering that relaxation response via the exhale). It may be a “charging” of a part of the body or a “directing of flow of breath” into one part or another.

Any of these techniques will have a certain specific and predictable result. And during the process or the practice of Breath Therapy, we can move from one technique to another, from one exercise to another. And the process itself begins to become organic, quite natural.

Once you begin to apply a technique, then the work is done by the technique itself. There is little else to happen. A shift will occur, a movement will occur, an adjustment will occur, and the next step will be obvious.

2. The Atmosphere

The atmosphere in which the technique is practiced. That atmosphere is physical, it involves things like temperature, the comfort of the room, a soft floor, a comfortable chair, a ventilated room, a peaceful place.

And it also involves a psychic atmosphere. Is there tension in the room? It includes the group atmosphere. The people that are there create a certain atmosphere. You notice there are some places that are just charged with energy.

You can find sacred places on the earth where miracles have happened, where powerful events have occurred; and the energy of those events seems to hang in the air. You move into that atmosphere, and the atmosphere itself does something to you.

Certain people have a healing presence. And when you move into their bubble, when you are in their aura - in their influence, something happens to you. In a church, sacred places...There are atmospheres that are far more conducive to practicing Breath Therapy than others.

Obviously, you practice a certain technique... you practice it in the middle of a highway with cars coming... you are going to get a different effect than if you



practice that technique in the peace and the comfort of your own home, or within the loving atmosphere of a like-minded group of individuals, or you practice it out in nature where the smell of flowers makes the experience more beautiful... or the cleanness of the air or the sound of a waterfall... Just the presence of life and nature around you, enhances the atmosphere.

Consciously choosing the atmosphere or consciously creating the atmosphere in which to practice Breath Therapy often has just as much effect or more effect than the technique itself.

3. The Facilitator

The presence of the teacher makes a big difference. The energy of the teacher whether actually physically present, or invited psychically or spiritually or mentally... The presence of the teacher adds a certain force to the session that is unmistakable.

Simply having another person there, a breathing guide, someone who has breathed their way through certain cycles, has relaxed and breathed in and out of certain spaces... Their presence creates an opportunity for you to breathe through those same things.

It makes your process easier when there is someone with you who has made the journey before.

And there is something to be said about the process of initiation. Since ancient times, when one human being absorbed a skill or mastered something... and they can pass that on to a student or someone else...

4. The Mind of the Breather

Everything that happens to you, everything that you experience, is quite dependent upon your mind: upon your attitudes, your beliefs, your thoughts, your intentions,



your will, your ideas, your fantasies, your imagination, your interpretation, your perception. The mind is at work constantly.

And it is the mind that probably brought you to Breathwork, in one way or another. And it needs to be honoured, because the results you get from practicing Breath Therapy will depend upon... to a great degree... will depend upon your beliefs, your attitudes, your thoughts, what you think is possible, why you are doing something, the reason for practicing, your purpose in selecting a breathing technique. The mind is at work here.

Just as in life, what is happening in your mind has a great effect on the outcome. Certainly, this is true in Breathwork. There is a particular aspect of the mind that is, I think, required for Breathwork. We talk about this in our Formula for Transformation: that is “Meditative Awareness”.

There is a certain way of relating to the mind. Developing this ability to be the observer, the detached observer, the watcher... just noticing, just paying attention... not analysing, not trying to understand, not thinking, not rationalising... just being a witness is important.

The state of your consciousness of the breather will certainly make a big difference in the outcome of the techniques that you practice when you do Breathwork.

So, we have four Principles of Breath Therapy so far: The Technique, the Atmosphere, the Teacher, the Mind of the Breather, and there is a fifth principle. I don't really have a name for this. I call it “something else”.

5. Something Else

There is another factor that without a doubt is present when working with the breath, despite the technique, the atmosphere the facilitator or the breather.



It could be called Grace - something beneficial that is just showered upon us for no apparent reason: not dependent upon deserving, or not in response to any request, or not the result of any effort. It's grace, a mystical or magical factor...

You can get the technique wrong and still something wonderful can happen! You can practice the technique in a terrible atmosphere - the worst of situations - under terrible conditions, and still something wonderful can happen! You can learn the technique from a terrible teacher and still something wonderful can happen! You can practice the technique for all the wrong reasons - with the worst of intentions, and still something wonderful can happen!



MODULE 4: CONDUCTING A CONSCIOUS CONNECTED BREATHWORK SESSION

LESSON 1: CONSCIOUS CONNECTED BREATHING - TECHNIQUE

There are Five Principles of Breath Therapy.

- **The Technique** (there are many techniques, each with a certain purpose or effect).
- **The Atmosphere** in which one practices (physical, psychological, emotional, energetic).
- **The Teacher** (making use of what has been called the purity of personal presence).
- **The Mind of the Breather** (thoughts, beliefs, attitudes, intentions, desires, purpose, will).
- **"Something Else"** (a mystical or magical factor... grace).

Today we will look at the **Technique of Conscious Connected Breathing.**

The 5 elements of the Conscious Connected Breathing Technique

- **Active Inhale:** Conscious expanded inhalation. You pull the breath in.
- **Passive exhale:** Letting it go with a reflex, you simply let the breath out.
- **Use the same channel:** Either inhale and exhale through the mouth or inhale and exhale through the nose, not in through the nose and out through the mouth
- **Continuous Connected Circular Breathing:** No gaps or pauses between the breath. The breathing should take the form or pattern of a smooth steady uninterrupted flow of breath, like a wheel turning.
- **Breathing Rhythms:** You can use different breathing rhythms for different effects.



1. Active Inhale

Support a state of relaxation and awareness. Relax any tension or tightness. Relax the jaw. Create a space between your teeth and invite the breath in through that space.

Slow the inhale down. Using the inhale to become aware of subtle sensations and tension. Feel the stretching and expanding from side to side, front to back, and top to bottom.

Don't use any unnecessary muscular effort to breathe. Try not to use your neck muscles. Remain as relaxed as possible. More breath energy will flow through a state of relaxation than through muscular effort.

You can guide the breath from the feet all the way to the top of the head or focus on the belly or the heart and spread the breath out in all directions.

You can double up the inhale to draw in more breath and energy and then exhale. That means taking two inhales, one on top of the other, and then let go, relax and exhale.

The inhale awakens energy and activates a sympathetic nervous system response. Try to stay relaxed, focused and alert to everything that you are sensing as you pull the breath in without triggering tension.

The inhalation also represents taking in life, self-support, and self-nurturing. You are taking action. You are focusing. You are directing your energy and your life in an upward and forward direction.

Visualise drawing energy in, and filling the body, every cell, with the breath.



2. The Exhalation

The ability to relax on the exhale is where the magic of this technique resides.

The exhale is a reflex. There is no doing involved on the exhale, you simply let it go softly and completely. Many people who feel the need to be in control or have practiced other breath control techniques find this letting go difficult. Often you can detect an element of control, either dragging the exhale out, or forcing or pushing it out. To encourage a complete letting go on the exhale, use the imagery of 'puddling out', melting and softening.

Encourage relaxation and softening of specific muscles and muscle groups. With each exhale, let the body release tension, allow it to flow out with the exhale. Relax the jaw, the back of the neck, and the shoulders.

Let the body become soft and heavy.

Use the imagery of something rewarding, relaxing, blissful. For example, slipping into a hot bubble bath, cuddling with a loved one. Think of a time when you felt completely free and safe, a time when you could let go completely and be yourself, with no masks, no pretenses, no "should and should not's, no musts and must not's, no responsibilities, no obligations, no agenda".

The exhale is about reaping the rewards of your actions.

3. Using the Same Channel

We use the same channel, either the nose or the mouth. When you breathe through your nose you activate an energy circuit. When you breathe through your mouth, you activate a different energy circuit. When you breathe in and out the same channel, you are creating a closed energy circuit. There are other techniques where it's useful to breathe in through the nose and out through the mouth, but for the purposes of this technique, we use the same channel.



You can start the session with simple awareness, letting the breath come and go by itself naturally. It's ok to let the client connect with their breathing in whatever way is most comfortable. However, once you get into the actual technique, coach the person into using the same channel, either breathing in and out the nose, or in and out the mouth.

4. Continuous Connected Circular Breathing

Let the breaths flow in a continuous connected circle: inhale connected with exhale, exhale connected to the inhale; with no pauses or gaps or holding between the breaths. This creates a powerful energy charge in the system, where suppressed tension and holding patterns come up for release and integration.

5. Three Breathing Rhythms

Rhythm is another fundamental universal principle. Building it into the technique assures us that what we are doing with the breath is in harmony with 'what is' naturally happening in the nature, life, and in the universe.

A simple way of approaching this practice is to play with these three breathing rhythms:

- **Fast and Full:** Use a fast and full rhythm when you want to activate a lot of energy, or when you find yourself spacing out or going unconscious, or if it seems that nothing is happening in your session.
- **Slow and Full:** Use slow and full breathing when you want to integrate something wonderful - when you want to take in a beautiful moment, when you want to take pleasure into every cell of your body, your whole being. Use it when you want to maximize your enjoyment of something.
- **Fast and Shallow:** Use fast and shallow breathing when you are experiencing something intense or uncomfortable, or when you simply want to have fun - when you want to play with the energy!



How to Guide a therapeutic Conscious Connected Breathing Session:

- 1. Settling in.** Make client comfortable. Observe natural breathing cycle. Notice any holding patterns. Pay attention to subtle aspects of their posture, facial expressions, muscular activity. Focus on breath awareness and relaxation, remind the body how to breath in a full free natural open and uninhibited way.
- 2. Coaching the client into a Conscious Connected Breathing Session.** You may need to use words, touch, props, demonstrations, imagery, breath sounds, or you may need to experiment with adjustments in posture.

An example of how to guide a session:

“While breathing in this connected circular rhythm, stay awake and be aware. Watch your thoughts. Pay attention to the sensations in your body. Notice what you are doing with your muscles. Don’t judge or analyse or think (that is different than simply observing or being conscious and aware). Maintain a conscious open minded and uninterrupted focus on the breathing cycle. Pay attention to the unfolding of your inner experience.

“Simply feel your feelings. Allow and accept whatever happens in you, without acting on it, or reacting to it. Don’t judge or censor your feelings. Turn every thought, every reaction, into another conscious inhale, and another releasing exhale. Get out of the way. Let this ‘something else’ have its way with you! Surrender. Let go.

After several minutes of connected breathing, the ‘energy experience’ begins. This energy is called prana or chi or ki. Allow this energy to come up, to move, and to take over your body. Use every inhale to draw in more energy and use every exhale to relax into the energy. Keep letting go into the experience.

Don’t try to control the energy. You can always relax more. Keep relaxing with each exhale. Pay attention to tightness in your muscles. Deliberately release this tension with each breath. Keep expanding with each inhale. Various ‘symptoms’ will come and go throughout the process.



It is not unusual to experience dizziness, tremors, vibrations, sensations of heat, cold, spontaneous laughter, crying, primal sounds, emotional releases, memories, images, insights, etc. Simply allow and observe these things along the way of this inner journey. Be the accepting witness (more about this in future lessons).

Don't let any of these things interfere with, or interrupt, the breathing rhythm, or your relaxation. Don't let them send you into thoughts and judgments. Simply breathe and relax into each new feeling, sensation, and emotion.

Think 'soft and open, soft and open', 'expand and relax, expand and release', 'pull in and let go, pull in and let go', 'keep your jaw, neck, shoulders, hands, back, belly, legs relaxed'. Keep your throat open and your chest loose.

Don't be afraid of the unknown, or of losing control. You are surrendering to a higher part of yourself. Say 'yes' to everything that happens inside of you. Send love to all parts of yourself. Practice Forgiveness and Gratitude.

Just breathe, in and out, without stopping, without holding, pushing, forcing, avoiding, or resisting...it helps to give the inhale an "oohh" shape; and to give the exhale has an "aahh" shape.

Remember that under every emotion, behind every emotion, is love, is peace, is joy. Keep moving through everything, all the levels, until you arrive at your 'Highest Center.' Touch the deepest part of yourself. Then come back, bringing with you the essence of that centre.

Be renewed by the experience, moment to moment.

There will be a point when the breathing pattern shifts, as if energy comes into the breath, and the breathing 'takes over'. Let that happen while supporting awareness of relaxation.

This is when the deepest relaxation happens and when the breather tends to fall asleep or zone out, split off.



Encourage awareness of the sensations of relaxation and peace. Your client needs to stay awake to enjoy this best part of the process. This is when integration will happen.

Applications:

- Releases chronic physical tension and holding patterns
- Resolves and integrates traumatic past experiences, low self-esteem, negative belief systems, limiting cognitive tendencies. Releases thought patterns that lead to chronic tension
- Taps into potential for adaptation, innovation and creativity
- Taps into natural inner resources, and awakens healing and creative energies

The goals are wholeness, healing and wisdom. Not necessarily the experience. The experience is a means to these goals.

LESSON 2: HOW TO CONDUCT A CONSCIOUS CONNECTED BREATHING SESSION

Before the session:

- Prepare the room for comfort
- Have tissues, water, pillows, blankets available
- You might play certain music
- Establish a ritual (light a candle, prayer, affirmation)
- Settle in to your centre, your intuitive self
- Focus your own breathing, awareness, relaxation
- Open and expand out to merge with the “information space” around us
- Create an atmosphere of freedom and safety
- Generate unconditional love and non-judging acceptance
- Get clear of your own expectations, agenda
- Voice any intentions or goals you have
- Clear any attachment to the outcome



- Ask client their intention, or help the person to choose one

During the Session:

- Focus on:
 - The atmosphere: creating emotional psychological, energetic freedom and safety
 - Something Else: trusting the mystery, calling upon spirit of love, guides, angels, etc.
- Support and encourage:
 - Circular Breathing
 - Complete Relaxation
 - Awareness in detail

Connected Rhythm Coaching Assists:

- Make the inhale more conscious
- Make the inhale more active
- Snap the exhale loose
- Set the exhale free
- Let the exhale go
- Release the exhale
- Don't control the exhale
- Don't strain
- Don't push
- Don't force
- Smooth out the connection between the in-breath and the out-breath
- Round out corners between the inhale and exhale
- Bring the breaths closer together
- Start the inhale sooner
- Make the inhale longer, fuller, richer
- Pull the inhale through the stickiness/shakiness, and release
- Let go with a big sigh of relief
- Feel the expansion on the inhale in all directions (top-bottom, front-back, side-side)



- Take your time on the inhale
- Let the exhale go more quickly and completely
- Make the rhythm a little quicker
- Take little baby breaths
- Slow down, no hurry...
- Breathe in a quick rhythm for a few minutes, then take a cleansing breath or two.
- Breathe into the upper space (under your collar bones)
- Breathe into your belly
- Breathe into your back
- Breathe into your heart
- Breathe into that feeling/sensation
- Breathe into that part of the body
- Relax into it, relax around it, relax with it
- You are feeling your own energy...
- Welcome the energy
- Invite the energy
- Say yes to the energy
- Say yes to yourself... say yes to your body...
- Say yes to your emotions, your experience
- Be gentle with yourself
- All your feelings are perfectly safe.
- It's perfectly safe to feel all your feelings
- Your feelings can't hurt you
- It's just a feeling
- It's just a thought
- Everything is perfect just the way it is
- Perfect! Do that again!
- Surrender
- Be the witness
- Notice/watch your feelings and sensations and thoughts
- And your reactions to them
- Relax your jaw, forehead, neck, shoulders, etc...



- Encourage visualisation... flow of water, energy, etc.
- Use breath sounds (ooh... ahh... eeh... etc.)
- Create a space between your teeth
- Guard that space, check on it, return to it, keep re-creating it
- Use touch to bring awareness to holding, tightness, unnecessary effort, etc
- Use pressure to guide people into breathing into certain breathing spaces
- Use movement of limbs, extremities, head, neck, etc to bring awareness and relaxation
- Use recording of breathing rhythms
- Model the breathing quality, speed, rhythm, pace, volume, sound, etc.

What to do when people keep going unconscious, zoning out, or forgetting to breathe, when people keep stopping breathing. Intuitively determine if they are holding the breath to hold in feelings, or if they are zoning out, spacing out, and forgetting to breathe; touching (or avoiding) something in their unconscious, etc.

- Remind them of their intention.
- Use the sound of your own breath
- Use touch (tap on chest, etc)
- Get them into a faster and fuller rhythm
- Have them open their eyes
- Breathe sitting up
- Breathe standing up
- Use touch
- Use Baskakov methods (sensory bombardment, slow movements, gentle stretching)
- Encourage movement to get the body breathing, then keep it going while relaxing

- What would happen if you were to breathe more right now?
- What would happen if you were to let go completely?

Assists for when people talk too much during the session:

- Focus on your body



- Notice how you are breathing
- Notice what you are doing with your jaw, shoulders, fists, etc...
- Where does that thought/feeling live in your body?
- Focus there and just breathe
- Just experience that
- Let's talk after the session

How to end a session or wind it down:

- Come back to the room.
- Turn on your side...
- Encourage gentle stretching, moving, rocking, rub hands together
- Encourage yoga, tai chi, meditation, dance
- Use music, use lighting,

After the Session:

- Some completion ritual... change music, etc
- Have snacks ready, water, juice
- Debriefing: sharing observations, getting feedback/report
- Encourage mandala drawing, doodling, journaling,
- Connect with nature.

Possible areas of adjustments, variations, focus, parameters to coach about during a session, things to watch for:

- Breath sounds
- Quality of the breathing rhythm: fast and full, fast and shallow, slow and full
- Length and time of inhale and exhale; speed, volume, rate, depth,
- Pauses, gaps, breaks, or changes in the breathing rhythm
- Location and focus of breathing movement: high, mid, low
- Expansions from side to side, front to back, top-to-bottom expansion
- Anything blocking expansion?
- Body-breath coordination: (breath moving the body / body moving the breath)
- Are they in synch, in harmony?



- Amount of effort or ease in the breathing
- Smoothness, shakiness, gasping, rushing
- Holding, controlling, avoiding, forcing, pushing
- Conscious vs. unconscious expressions, reactions
- Muscular tension, contractions, body movements, tremors, twitches
- Forehead, brow, facial expressions, eyes, (closed, open, focused, glazed) pupils
- Position and angle, and activity of head
- What's happening in the jaw, lips, mouth, tongue, throat
- Adjustments of neck and shoulders, chest, spine, belly, pelvis
- Position and movement of hands, fingers, legs, feet, toes
- Skin tone, colour and temperature changes, visible veins and arteries, pulses
- Overall state of comfort, focus, all actions and reactions
- Anything visible in the Aura?
- Energy movements, sensations, accumulations, releases, tingling, vibrations
- Not expressing obvious feelings, emotions, desires, etc
- Over dramatising feelings, emotions, desires, urges, etc.

The most important thing to remember is to make the client feel safe, be mindful of not projecting your need to rescue and control the outcome of the session,

What can happen in a session:

- Laughing
- Crying
- Screaming
- Tetany
- Spontaneous movements
- Support the client's safety to express fully and ensure that the client is left feeling contained.
- Follow up with the client after the session if necessary.



LESSON 3: THE PHASES OF A SESSION

In lesson 2, we described the technique of the Conscious Connected Breathing Session and how to facilitate it. Today we will be exploring the typical pattern that a session like this follows and how to deal with the possible reactions that might occur when breathing a client. While this pattern may not show up in every session, it is helpful to understand what may be happening and be prepared for how to deal with it. Every breathing session that you facilitate will be different based on where the client is at, the technique and the rhythm of the day.

Remember that you don't have to feel pressurised into taking someone into CCB in the first session. Sometimes it takes a few sessions to get your client to connect with their breathing and establish a healthy breathing pattern. However, in some cases, taking someone into a CCB session may be the very thing they need to break the dysfunctional pattern. The more experience you gain, the more confidence you will develop in knowing how to guide the session and when to introduce CCB.

Phases of a Conscious Connected Breathing Session:

Phase 1: Setting the scene.

Make some space to check in with the client, including how they felt after the last session, insights gained, memories triggered and physical changes.

Is there an intention for the session? There may or may not be a theme. Sometimes it is helpful to leave it open ended and other times the client might have a particular focus or intent.

Depending on the situation, the client may lie down, sit up, or in some cases, even walk around.

Phase 2: Tuning into the breath

Spend some time supporting the client to tune into their breathing with some breath watching and watch for any dysfunctional patterns as you ask the client to deepen their breathing. In this phase, focus on supporting relaxation.



Phase 3: Building up an energetic charge

Once the client has relaxed enough, there is more space to open up to the breath and ability to expand the inhale with using minimal muscular effort.

Encourage letting go on the exhale and experiment with how to sustain a connected full rhythm. Already they will begin to feel a tingling, a buzzing or lightheadedness. Encourage a feeling of safety, relaxation.

If the session is going in the direction of a conscious connected breathing session, encourage this, leaning into the direction of energy. Get them to speed up the breathing, keeping the rhythm, all the while using the exhale to relax.

You will see the energy starting to build up in the system. Sometimes this may be obvious as the face gets flushed and muscles start to contract but in the early stages it may not be obvious at all. However, you can assume that this is happening, so you would like to reassure your client that these feelings are normal, especially if you are breathing them for the first time.

What is happening on a physiological level is that this breathing pattern is activating the sympathetic system. It is imperative that you support a space of safety and relaxation while maintaining the rhythm of the breath. Use your voice, a blanket or a comforting touch.

Sometimes, you might notice that there is no energy in the breath at all and as a facilitator you need to activate a voice of strength and confidence to fuel a deeper faster rhythm. The aim is to balance energy and relaxation, power and peace.

Once energy starts to build up, either the breather will approach the energy by relaxing into it or will start to react to it in fear by 'over breathing' or hyperventilating, thus creating more tension and resistance. Especially in the first few sessions, the energy that is experienced might take the breather by surprise and the reaction to what they are feeling will exacerbate the symptoms.



Faster breathing extended for a long period of time shifts the chemistry in the system in such a way that deep-seated fears/chronic holding patterns begin to surface. Physical and emotional energy associated with various traumatic memories are released and become available for discharge and processing.

The breathwork session is an opportunity to bring these patterns to the conscious mind for release and integration.

Tension in the body can be expressed in two ways:

1. Tetany or muscular contractions:

By sustaining these muscular tensions, a great deal of previously pent up energy is used and then released. If you see this happening, don't pathologise or react to it. Encourage more relaxation on the exhale, a more passive exhale.

Help the breather to soften up and relax into the experience.

Often what happens is that the breather will focus on the area of tension and exacerbate the tension in that area.

Encourage them to send the breath and attention to other parts of the body.

For example, if there is tetany in the hands, let them breathe out through their feet. Encourage them to send the breath in the whole body.

Support the client to feel an element of safety and control by allowing them to adjust the rhythm to what feels comfortable.

2. Catharsis:

The energy builds up to a point of release or discharge of pent up physical energies and blocked emotions through:



- Tremors
- Crying
- Laughing
- Screaming
- Vomiting (very rare)

The breather client might experience this catharsis or emotional release after the tetany.

Encourage the client to breathe through whatever they are feeling. For example, if there is intense sobbing, encourage deep breaths between the sobs. Use conscious breathing to get the breather through the feelings rather than bypassing or suppressing them.

If a feeling or memory comes up guide the breath through the feeling until it is discharged or released.

Usually, these severe reactions happen in the first few sessions and then give way to the experience of more subtle energy experiences in further sessions.

The breather might also report the following experiences:

- recollection of previous memories
- recollection of birth experience
- transcendental experiences
- past life memories
- seeing colours/images.

Just hold the space for expression without trying to overanalyse or rescue.

There may be a point in the session where you notice that the breathing takes on its own rhythm or pattern. Let this happen and just keep encouraging a sense of safety.



As the breather starts to relax, their body temperature will drop, so ensure that you have blankets on hand.

Phase 4: Integration

Once the energy and tension has been released, the breather usually enters a profound state of relaxation. At this stage, let the breathing find its own natural rhythm again. Keep the focus on relaxation and awareness of the relaxation.

Sometimes the emotional release will happen at this stage of the session.

Often the relaxation is so deep that the breather might either 'float off'/dissociate or fall asleep.

Gently guide the breather back to their body, encourage them to move and stretch. They might want to process what they experienced. Allow this without over-analysing or judging the experience.

Stan Grof, the father of Holotropic Breathwork, used to make his breathers draw mandalas to integrate after the session.

Ensure that your client leaves feeling grounded and contained. Giving them a glass of water to drink often helps.

Additional Notes:

1. The full cycle from setting the scene lasts an average of an hour but always set aside extra time as sometimes the client might go into another cycle or stay in the intense phase for quite a long time.
2. Sometimes, I consciously take people into another intense cycle once they have entered the relaxation phase. It allows for even deeper processing, but you should feel intuitively when this is appropriate.



3. I also find that it is helpful to get clients to do 20 connected breaths in their session to keep them focus.

4. You can use music or not. The music helps to establish a rhythm and supports emotional release and integration, however, it's not always necessary and may even sometimes be a distraction.

5. Support relaxation with words of comfort and whatever is intuitively coming to you to do or say.

There are some measurable chemical changes that occur within a CCB session. Some of these have been well documented and can explain some of the symptoms. Peter Litchfield, a well-known expert in the field of behavioural breathwork created a capnograph which measures CO₂ levels during the session of CCB and found that the CO₂ levels dropped, causing a degree of vasoconstriction and changes in the calcium magnesium balance. According to Dr Litchfield, these changes are more related to breathing behaviour than the actual breath. For example, the more comfortable the client is with the energy and relaxes through it, they experience breath as the subtle energy rather than just in terms of gaseous exchange.

This can be a very beautiful experience.

While studies in the field of CCB demonstrate improvement of emotional states and physical symptoms, not enough research has been done in terms of the measurement of certain neurological and chemical changes within an actual session, but the evidence of the positive benefits are undeniable.



LESSON 4: KNOWING WHEN A SESSION IS COMPLETE

How do you know when a session is complete, and it's not just resistance showing up or the client pretending to be complete? - Judy Gee

When a conscious breathing cycle completes naturally, the client will enter a state of deep relaxation. Their breathing rhythm will be softer and slower than it was during the session. You will also observe a peaceful facial expression and a regular bilateral pulse beat in the throat. It may even appear that the client is sleeping (and perhaps they will actually doze off for some minutes). The whole session space will feel full, soft and peaceful.

Having followed the inner journey of your client during their session through both observation and dialogue, you will be easily able to verbally verify their state towards the end of the session. The client's report and the tone of their voice will confirm the sense of completion.

Several minutes of relaxation time (rest and silence with no further intervention - and above all, no talking), will allow the client's internal system to integrate the various phenomena that have been activated during the session. During this phase, the client will often receive crucial insights. Therefore, the integration phase plays an important role in achieving fruitful completion.

If the client is resisting and/or pretending that the session is complete, you will perceive it through observing their body language (uneven breathing, tension in the shoulders, arms, face, plexus, legs...) and from receiving mixed messages when you investigate their state of wellbeing. Have confidence in the lucidity of your perceptions and above all, trust your intuition.



LESSON 5: WHEN THE BREATH CEASES IN A SESSION

Presented by Judy Gee

When a breath client “checks out” and stops breathing altogether during the middle of a session, what is happening for them? Do you intervene or leave them alone?

It may happen that a client stops breathing for an extended period of time (up to a minute or so) during a session. This phenomenon is known as suspended breathing. When this happens, there is almost no discernable physical movement, and the client’s lips may even become quite blue. Then suddenly, they will start gasping for breath and come back to wakefulness with a deep moan, or even a terrified fright, as though they are returning from a nightmare. When you investigate, they may be unable to report tangibly; it appears they have been lost in a dream state or were deeply unconscious. Otherwise, they may report on a very agreeable, light-filled state of emptiness in which they would have loved to linger.

Some practitioner’s link suspended breathing to the client’s prenatal biography and to anesthesia administered to the infant’s mother while they were in utero, or during their birth. It may also be attributed to anesthesia given to the client at other moments during their lives, the traces of which get released during a breath session. Interestingly enough, during such a session a chemical odor can sometimes be detected in the room, and those assisting the breather have reported acute drowsiness.

In other cases, it appears that the material being processed by the client is so intense that they are incapable of maintaining conscious awareness of it; therefore, they ‘check out’ for a time, coming back to conscious awareness only ‘once the coast is clear’.

Losing awareness during a session can be extremely frustrating for the client. Despite their best intentions, they simply cannot stay awake. They are dragged into the unconscious depths of their psyches by a force that dominates their conscious



will to be present. They may well touch feelings of impotence during such a phase, and often report a distinct absence of emotion and/or physical sensation during these episodes.

It is worth re-investigating the client's biography for possible related causes. Following verbal clarification, some clients will re-live past medical interventions or birth memories involving the use of anesthetics, and others may access any range of hitherto suppressed traumas including accidents, illnesses and abuse issues.

Whatever appears to be the cause of the phenomena, the practitioner is well advised to investigate related limiting belief systems such as, "I'm powerless", "I'm overpowered", "I can't get ahead", "I'm a failure", "It's my fault".... A thorough exploration of activating associated belief systems will often lead back to the original causative trauma, and from there transcendence of the problem can begin.

It can be equally frustrating for the practitioner when their client chronically 'goes unconscious' on them. At times no amount of prompting, poking, tapping or shaking will awaken them. It is only the client's physical need for oxygen that seems to bring them around. Luckily, they have usually been breathing deeply and fully for some time before they go under, so there is an abundant supply of oxygen in their system to tide them through their 'unconscious' episode.

The practitioner is well advised to cultivate patience once this phenomenon appears, as it may take several sessions (or even more) to work through.



LESSON 6: TETANY AND EMOTIONAL OUTBURSTS

By Judy Gee

What is the best way to handle tetany in a session? Does everyone get tetany, do just some people get it, or is it just a result of improper breathing during a session?

Tetany is an interesting phenomenon. Some people never get it. Some people get it all the time. Some people love it. Others detest it. The first time it appears, it is always startling, and often quite frightening. People are scared that it is a condition that will never go away; they fear that they will be stuck with hands like claws and a twisted jaw-line for the rest of their lives. They will be immediately relieved to learn that it is only a temporary condition, and one that they can learn to master during their breathwork sessions.

When tetany appears, first of all, look to the out-breath. Often it comes because the person is pushing too hard on the exhale. If you get them to let the out-breath “just drop like a stone falling to the ground”, the tetany will often dissipate and even fall away entirely.

Another way to approach tetany is to instruct your client to take smaller breaths – smaller inhales, and smaller exhales. Once they feel secure again with their breath, they can again expand the breath.

With tetany problems, there is usually an issue involved with holding back energy and personal power; or of hiding one’s power. On an emotional level, tetany is often related to fear; usually to the fear of expression, of showing or revealing oneself. There may also be fear about reaching out to others (with the arms and hands), fear of going forward (in the legs and feet) or fear of speaking (in the mouth and jaw).

A person who has a tendency towards tetany can learn to co-exist quite happily with it. Encourage the client to breathe into it, to become more present with it, to



get closer to it, and to penetrate it with their conscious awareness. Acceptance of what *is*, is a vital key in the mastery of this phenomenon.

When a client starts to exhibit emotional outbursts during a breathwork session, do you always let them express their feelings until completion, or do you intervene? How can you tell if the client is just dramatizing their emotion or if it's an authentic expression?

Authentic emotional expression has a ring of truth to it. You will feel touched by it – perhaps in your belly, and probably also in your heart. Your *Being* will respond to it instinctively and intuitively... And when the cycle of expression is complete, the emotion will drop away and the person will move into the next phase of their breathing experience.

Drama tends to go on and on and on...Dramatisation in a session will test your patience. You will find it noisy, jarring, invasive, artificial... And you will instinctively want to put a stop to it. In this case, trust your feelings. Instruct the person to let go of their outward expression and focus back into their breathing.

Emotional dramatisation is often nothing more than a bad habit, or a misguided interpretation of what the client thinks is expected of them in a session. Pay attention to the way you guide your client into the session and be sure to give them clear signals that the key to this method is acceptance; and that it's successful outcome is a deep sense of relaxation and wellbeing.



LESSON 7: PERINATAL MATRICES

The opportunity to guide somebody through a session of conscious connected breathing is a true gift and privilege. Each time we breathe with someone we are provided with an opportunity to facilitate a process of returning people to their natural state of wholeness, peace and joy and share in the magic of someone being in this state.

In a session, we can experience our own personal events, we can tap into the collective human consciousness and we can even access the cosmos, and the consciousness of nature: animal, vegetable, and mineral kingdoms.

Any filters, beliefs habits and patterns that disconnect us from our natural peace and bliss state will be reflected in a pattern of breathing that is most likely dysfunctional. Many of the imprinting or conditioning that creates mental, emotional and physical tension patterns surface when we create a high energy state in the session.

As we know, the imprinting of the subconscious mind and tension patterns occur in the following ways:

- Inherited through maternal and paternal DNA
- Womb experiences
- Religious conditioning
- Cultural and social conditional
- Specific life experiences especially those that have occurred in the first 7 years of life.

The power of a conscious connected breathing session is that it unlocks the subconscious mind where all the imprinting resides. As breathing guides, we should to be able to create a safe space to hold anything that surfaces as a result of this imprinting.



In this lesson, we will delve a little deeper into the influence of the prenatal and birth experience on the psyche.

Breathwork awakens us to the unconscious memories of the womb. During times of undisturbed life in the womb, conditions are ideal. However, physical, chemical, biological, emotional and psychological factors can interfere with this ideal state. One can re-experience the different stages of birth and moments in the womb physically, emotionally or symbolically through images.

This is taken from an article by Stan Grof, founder of Holotropic Breathwork on Basic Perinatal Matrices.

BPM I: From conception to the beginning of birth.

This matrix is the home of feelings of unity and oneness. Fetus and mother are one, indivisible continuum. This matrix is the source of feelings of cosmic unity or mystical union. We can experience this sense of no boundaries and a feeling of deep reverence and love for all of creation.

BPM II: The onset of birth and delivery.

In this stage, chemical changes and then physical contractions disturb the original harmony and bliss of the womb. This is the basis of “no exit terror.” The cervix is not yet dilated, the forces are pushing the child out, but there is nowhere to go! Paranoia is born. Life is turning against them. Heaven is becoming hell. Pleasure is turning into pain. Feelings of helplessness and hopelessness are born.

BPM III: Second clinical stage of birth.

In this stage, contractions continue but the cervix is now dilated. The journey through the birth canal begins. The struggle for survival against overpowering, crushing forces, and suffocation begins. The earlier feeling of helplessness and hopelessness are transformed into struggle, control, violence. This matrix forms the basis of human experiences of torture, sadomasochism, etc.



BPM IV: Third stage of clinical birth: emerging into the world.

The struggle comes to an end. There is sudden release and relaxation. But emerging from darkness, one faces for the first time the bright lights of the world, and the unfiltered sounds. The umbilical cord, the connection to the mother is cut. It can be an experience of “the end of the world” (life in the womb). The experience of death and rebirth: coming out into the light.

By the very nature of the physical and psychological changes that conscious connected breathing brings about, it seems that the connected breathing alters the physiological processes occurring in the limbic system, allowing us to revise the imprints we have stored there from our earliest experiences, especially birth. It "works" because it allows us to re-institute the state of having the high-oxygen titer of the blood characteristic of the newborn. When this state is re-created, we gain access to our imprints. Using our conscious mind, intelligently aware of the Here and Now, we can access and revise previously inaccessible imprints which have been creating our reality. We can let go old mistaken negative thoughts. We can truly affirm that we are whole and tune with the harmony of the universe.

References:

The Logic of Magical Thought and The Dance of the Breath by Eve Jones Ph. D.
Stan Grof: Basic Perinatal Matrices



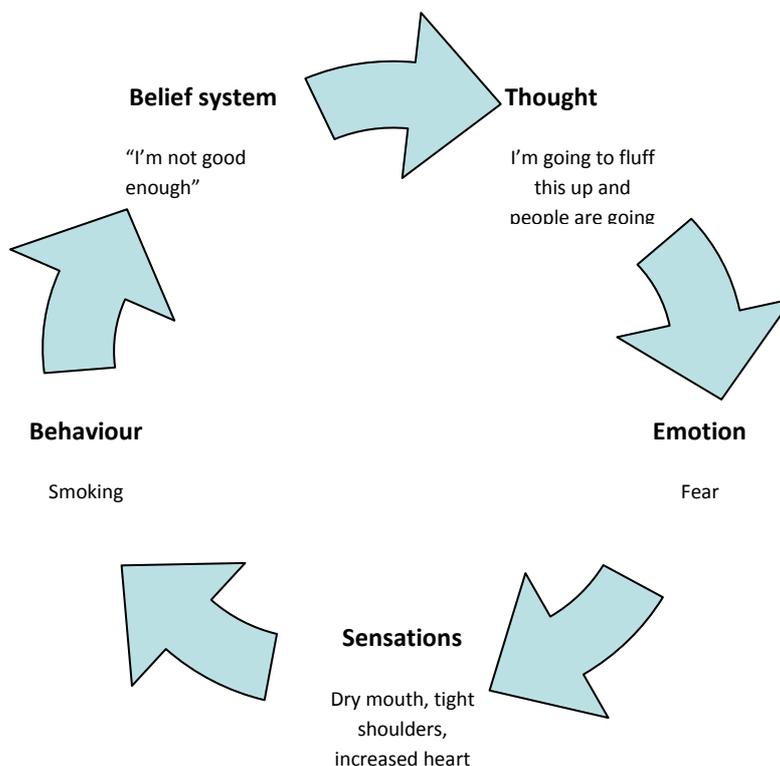
MODULE 5: THOUGHTS, EMOTIONS AND BELIEFS

LESSON 1: WORKING WITH EMOTIONS

Before embarking on a journey through the landscape of emotions, it may be important to clarify at the outset the difference between ‘thoughts’, ‘feeling’ and ‘emotions’.

A **thought** is an activity of the mind that formulates and creates an idea, opinion, memory, fantasy, plan, story line or projection into the future. When a thought occurs, it means that the mind is fixated on that activity for a certain amount of time. Thoughts can be triggered by present circumstances and are coloured and directed by subconscious belief systems, memories, other thoughts, images, smells, tastes etc. Some thoughts are neutral whereas others elicit an emotional and physiological response.

It is important to differentiate between a **‘thought’** and a **‘feeling’**. A feeling is the **sensation** that occurs in the body as a result of the emotion. For example - you are about to go on stage to deliver a speech.





Emotions are a fundamental part of the human experience, having a place in guiding and informing every aspect of human life from the most primal to the most evolved.

Safety, procreation, self-regulation and healing, motivation, inspiration and our interaction with our fellow human beings are all driven by emotion. Like there are primary colours, we have certain core/primary emotions that have a certain energy frequency and a very specific purpose.

According to Chinese Medicine, the core emotions are happiness, sadness, worry, grief, anger and fear. However, there are other schools of thought that would add love, surprise and disgust to the palette of primary emotions.

It makes sense that for an emotion to qualify as 'primary', 'natural' or 'pure' it would have to

- a. Have a purpose
- b. Have a specific corresponding physiological response.

There has been a wealth of research done in the last few years particularly, the ground-breaking work by Dr Candace Pert, to show that neuropeptides are released during different emotional states and that these chemicals are found not just in the brain, but in the immune system, endocrine system and throughout the body. Emotions previously thought to be purely psychological, can be linked to specific processes that take place throughout the body. Let's look at each of these natural emotions with reference to the above.

Anger

The primary purpose of anger is to act out against an injustice or to motivate us to change something that is not working. When we are angry, blood flows to the hands making it easier to grasp a weapon or strike out against a perpetrator, the heart rate increases and a surge of adrenaline fuels the energy necessary for action



Fear

The role of fear is to protect us from entering a potentially dangerous situation or to deal with a threat. When we experience true fear, the sympathetic nervous system kicks in, making us hyper alert and primed to fight or flee from the situation. In his book titled *Emotional Intelligence*, Daniel Goleman identifies surprise as a core emotion, but the facial expression of someone who is surprised gives us a clue that surprise is a less intense form of fear.

Happiness and Love

Happiness is a state of being that offers the body a rest from the other emotions that expend a lot of energy. In this state of being, endorphins and chemicals are released that have shown to modulate healthy gene expression, strengthen the immune system, and facilitate regeneration. When we are happy, it is easier to feel tenderness and love. These emotions foster human connection, harmony in relationships and society.

Disgust

Like fear, the emotion of disgust is protective. For example, if we see or smell something that is foul or poisonous, the curled upper lip and wrinkled nose is a primal response of the body to protect against an offensive substance - the nostrils close off to prevent poisonous fumes from entering it and the lips snarl simulating the spitting out reflex.

Sadness and Grief

These emotions typically create a state of 'low energy' or guide us to become more quiet and introspective and allow us time to see and integrate the gift or lesson of the loss, but more importantly, it fosters a feeling of compassion and empathy. When we know and experience loss and suffering, we can identify with the pain of another. Sadness stretches the heart, increasing our capacity for love and compassion. The energy of sadness is close to the energy of gratitude - there is sweetness in sorrow.

Interestingly the following emotions have the same energy resonance:

- Anger/determination



- Sadness/gratitude
- Fear/excitement

Emotions are neither 'positive' or 'negative'. When we can experience them as they are, without getting caught up in the judgements of them, they can be a doorway to deeper understanding, awareness and growth.

Through time and evolution, and as we moved away from nature, we became disconnected from the purpose of our pure emotion and began to judge it as good or bad thereby striving to retain the permanent feeling of the 'good' emotions, and suppressing or denying the uncomfortable ones or the ones that we perceived to be negative or bad.

Charles Eisenstein expands on this concept in his book *Sacred Economics*. Eisenstein reminds us of the time of the hunter gatherers who found their gods everywhere in nature and who lived according to its laws, cycles and rhythms. There was no aspiration to rise above nature or conquer it. That aspiration arose with the domestication of plants and animals and the wild realm became disconnected from and judged by the domestic realm. Natural forces became threatening – something that needed to be 'tamed' for the good of humanity.

According to this theory, it then makes sense that natural emotions were seen as part of our wild nature and that it was a force that needed to be contained, suppressed and managed. As society became more complex, so did the emotions, and like colours, they began to mix and blend to form more complex emotions like shame, guilt, anxiety, frustration, devotion, contempt, amazement etc.

Conflict within ourselves and in our world, illness and disease, wars and disharmony are fed by the fact that we are living in a time when our emotions have become suppressed, layered and confused by the complexities of our belief systems, life experiences and conditioning.

Research done by scientists Candace Pert and David Spiegel show that the ability to express emotions like anger and grief can improve survival rates in cancer



patients. And these studies are clearly indicating that because emotional expression is linked to a flow of peptides in the body, chronic suppression of emotions results in a huge disturbance to the body-mind complex.

Emotion is purely ENERGY IN MOTION, so when we create a blockage to the flow of emotion, and we suppress its natural movement, the stress it creates in the body through the disruption of these peptides is what leads to pain and dis-ease.

Freud was on to this when he interpreted depression as “anger directed at oneself”. Another modern-day physician, Dr Sarno, has also done fascinating work on the subject of “Narcissitic Rage” which manifests as chronic back pain in people who show absolutely no structural defects on x-ray.

Pure emotion, when it is allowed to be felt, experienced in its pure form, causes a release of neuropeptides which last for no more than two minutes and then naturally subside. If the ‘feeling’ lasts longer than that, it means that the emotion is being contaminated or fed by a thought, story or belief system.

Tying into this is the research done on people who suffered or experienced a traumatic event. It was found that what differentiated those who suffered from post-traumatic stress disorder from the ones who didn’t was the experience of being able to take action in that moment, whether it meant running away or making an attempt to find help or assist in that situation. So, in that moment, the intense emotion was able to be channeled and moved into an action, and the suppression of the emotion and the consequences thereof was prevented.

Why is all this information relevant to the breathworker?

Conscious connected breathing is an effective tool for promoting relaxation and awareness. Data from a wealth of research is now showing that conscious breathing has very powerful effects. Changing the rate and depth of breathing produces changes in the quantity and kinds of peptides that are released from the brainstem, allowing the peptides to diffuse quickly through the cerebrospinal fluid and restore the body’s natural balance. Many of these peptides are also natural



opiates or pain killers which is why conscious breathing is such a powerful pain-relieving technique.

Breathwork facilitates a level of awareness of the sensation that the emotion is creating and the moving into the sensation without judgement and attachment. Fully experiencing diving and relaxing into the sensations in the body allows space for the energy to move, flow and dissipate, preventing the buildup and accumulation of pathological stress and emotion. It allows us to practice being comfortable with intensity and eventually ecstasy.

A valuable breathing technique that the supports the ability to work with and integrate emotions is called Vivation.

Vivation is a specific circular breathing method developed by Jim Leonard in 1979. It is used as a methodology to integrate at the feeling level. The Five Elements are the essence and definition of Vivation.

This technique is used to become more conscious of the network of feelings and sensations in the body. Every thought and every emotion has a corresponding pattern of energy that can be felt in the physical body.

1. Circular Breathing

Breathing consciously will intensify your enjoyment dramatically. Breathing consciously helps you to trigger relaxation and dissolve negative emotions. Breathing consciously brings you more into the present moment, energises your nervous system, and fills your body with pleasurable feelings of aliveness.

Conscious Breathing develops an 'energy level rapport' with whatever you are feeling in your body. During the process, you make use of full and fast, full and slow, and fast and shallow breathing patterns depending on what is required at any given moment. The idea is to breathe in a free and unrestricted way: an internal dance with life.



2. Complete Relaxation

This is all about learning to relax, regardless of the situation or circumstance. It is about re-programming the tendency to contract, especially in the presence of your strongest, most disturbing feelings. It is during those moments that we need to relax our body and our mind the most. This will accelerate integration and resolution of any negative material. Not only in a session, but also in daily life.

3. Awareness in Detail

Awareness is the key, not only in Vivation but every other healing modality as well. We are referring to awareness of the actual feelings and sensations that arise in the present moment. This is the first step in healing. Be constantly aware of the feelings and sensations in your body. Give priority awareness to the 'strongest feeling'. This is the outside layer of the onion peel that is surfacing to be re-integrated into our overall energy system. This feeling or sensation may be connected to an emotion, a thought or a memory. You can remember and practice this lesson during any activity or event.

4. Integration into Ecstasy

Integration can be thought of as the 'Skill of Happiness'. It is the essence of Vivation. Simply put, integration is the skill of enjoying all parts of life. This includes enjoying those things that you already enjoy even more and enjoying the 'seemingly un-enjoyable' things a little bit more than you might expect. People normally think that to be happier means that something must change, get better, or be different in some way. This is not the case. The art of integration is about focusing on what is enjoyable in whatever you are experiencing and maximizing your enjoyment of that. The skill of integration is experiencing what is, as it is, and finding a positive way to relate to it. In Vivation this is called changing 'context' or perspective. A shift happens at the body level without the need for mental understanding. When the shift happens at the feeling level of the body, the mental perspective changes automatically to one of choice, resourcefulness and empowerment.



5. Do Whatever You Do, Willingness is Enough

Point 5 is all about cultivating 'willingness'. You might think of this as the positive intention to 'do your best' under any and all circumstances. This has two components: the willingness to feel the feeling in your body honestly, and the willingness to find some positive way of embracing it. This is the skill of allowing things to be the way they are, of giving up all resistance to 'what is'. Embrace every part of your internal and external experience. This triggers the healing process within the body and mind and awakens us to the state of oneness and wholeness.



LESSON 2: BELIEF SYSTEMS

What is a belief system?

Beliefs are embedded thoughts, feelings, ideas, patterns of thinking that we have about ourselves, others, the world. Beliefs become the bedrock, the foundation upon which we filter experience and know 'the truth...'. They create the lenses through which we relate to ourselves and the world.

Whether loving, grudging, fearful, affirming, or judging, conscious or unconscious, everyone has belief systems. They are normal and part of the human experience; we need them to survive, to operate in the physical world. Many belief systems are healthy, necessary and helpful, while others are limiting and cause us to self-sabotage and stay stuck in destructive habits.

When our beliefs are conscious - when we are aware of them, they structure our responses to life experiences; they give form to thoughts and actions. However, when our beliefs are unconscious, we react - with no thought. Life experiences become the trigger and our thoughts are filled with the words like 'it makes me...', 'if only ...', 'they shouldn't....', or 'it's hard...'.

When we react, we tend to see ourselves as the victims - life is doing this to us, to others - because of qualities 'I am ugly', 'I am stupid', etc, or events - 'I was just lucky', 'you can't trust men', 'the government always lies', etc. We often experience feelings of lack, of not being appreciated or that life is hard.

It is tempting to say that some beliefs are the TRUTH and some are LIES. This is the way we support our own beliefs, and discount others. If the belief system of another agrees or aligns with ours, it is valid and true. If it conflicts with ours - we discount it, dismiss it as unrealistic, not TRUE, a LIE.

Belief systems can become pathological when are they become fixed and hard wired and can manifest in physical illness, dysfunctional relationships and suffering - when we become attached, defined and identified by them.



Many belief systems were formed as a survival strategy or as a way to keep us safe. They may also have been useful as a driving force to move ahead or grow for a certain period of our lives. However, sometimes these old belief systems, while they may have been helpful for a time, are no longer relevant and in fact may be standing in the way of our growth.

Working with, identifying and breaking free from belief systems and patterns is very powerful as it allows us to live from a more authentic space.

How are belief systems/powerful personal truths created?

Here are several threads, or possibilities to consider:

- **Inherited from DNA** - there is research both scientific and psychological to suggest that we can inherit a belief, fears and trauma through our DNA. Refer to Bruce Lipton: *The Biology of Belief* and Bert Hellinger: *Family Constellation Therapy - Love's Hidden Symmetry*
- **Past life factors** - the soul carries experiences below conscious thought from one life time to another
- **Womb experience** - babies are conscious beings and can, while still in the womb, learn, experience emotions and develop beliefs about themselves, life and the world as either a safe or fearful place. Babies are affected by the external environment of the mother and father, the internal state of both parents, their reactions to world events, the biochemical balances within the mother's body, and whether she herself is feeling safe and loved. They are also influenced by whether the conception is conscious on the part of the parents as well as the emotional bond between the mother and the father. Babies perceive through the mother, they sense and feel as one being.
- **The Birth Experience** - birth is our first experience of life in the physical world. Prolonged or traumatic experiences can stay locked within the cellular memory and can also reveal itself in certain postures, habitual muscular tension or dysfunctional breathing pattern.
- **Family conditioning** - Family systems have certain beliefs and patterns of behaviour and communication that can be passed through the generations.



- **Religious conditioning** - Religious conditioning forms our first idea of a higher power, who we are in relation to this power. The idea of heaven and hell and a judgemental punishing 'God' can install deep feelings of guilt and fear.
- **Cultural/Social conditioning** - in the world of social media, this is becoming an even greater influence on what we believe to be important and ideas of what success means.
- **Specific experiences** - we form strong beliefs based on the life experiences that are charged with emotion, especially those that occur early on in our lives when our brain is more plastic.

As belief systems develop within us, they begin to filter our life experiences, further embedding themselves within us, first at an unconscious level.

Whether conscious or unconscious, our beliefs grow, strengthen and take only from life experience those events, thoughts and feelings that support and validate their existence. When we find ourselves reacting strongly, embracing or rejecting a thought, a person, or an action quickly and intensely it is a great signal to us - that a belief system has become activated and is actively strengthening or defending itself.

Belief systems are dedicated to proving their truth, either through:

Experiences that validate - a thought that includes language such as "I knew I was right"

- Feelings of self-righteousness or satisfaction
- A thought that dismisses e.g.: "that's so dumb"
- A thought that diminishes - "I was just lucky; how can he love me?"

As the belief grows, it spreads its roots everywhere, in our languaging, actions and feelings. Our beliefs are vigilant, always looking to confirm, and embed even more. When belief systems become hardwired, the brain automatically filters out and forgets any counter evidence, and carefully retains any supporting evidence for the belief. They search for agreement and support to validate their truth.



Some of their principle unconscious strategies are:

1. **The law of Attraction:** You will tend to attract people to you who will act according to your belief or who think or 'believe like you'. For example, if you believe you are ugly, you will tend to seek out or attract people who will tell you that you are ugly. If you believe abortion is wrong, you will bond with like-minded people who agree with you.
2. **The law of Projection:** Your friend does not return your phone call - you have thoughts - he must be interested/involved with someone else, I am not important to him as I once was, she doesn't love me etc. You put onto others your own thoughts of unworthiness; your belief about yourself finds confirmation in your projection onto the actions of others.
3. **The law of Manifestation:** You set others up to act as you believe. What you focus upon you manifest - therefore when you are fearful, when you believe the world is unsafe, you find yourself only paying attention to the news that focuses upon danger, you are fearful where you walk, who approaches you - you interpret the events and actions outside of yourself in ways that support your beliefs- e.g.: people are selfish, no one cares, I am alone - when you hold on to these thoughts, they strengthen the beliefs, they allow no room, no possibility for another thought - I am connected, people are generous - what energy and thoughts you put into the world, are reflected back. The world and your life experiences are a mirror that reflects to you your beliefs.

Beliefs may be either positive or negative:

Examples of beliefs

- I don't fit in
- I must earn love, happiness etc., to deserve it.
- People are kind and generous
- The universe is abundant
- I am connected to everyone and everything
- I am alone in the world
- There are no such thing as past lives
- The people in my life circle are my soul family
- Each of us comes here with a mission, a soul purpose
- If you really knew me, you wouldn't love me



- You make me happy
- I am only complete with you
- I am a victim of abuse
- My husband/wife/partner betrayed me

Belief Systems are circular:

Belief » thought » feeling » an action.

Behaviour » reinforces the belief » thought » etc. The more opportunities the belief has to be activated and reinforced, the stronger it becomes, the more embedded it is and the more actively it filters future experiences.

How do belief systems manifest within us? Belief systems can manifest in positive ways - you can believe in a life of service and dedicate yourself to improving the lives of others, protecting the environment, creating more supportive experiences of safety and love for children. They can also manifest in more subtle, indirect and negative ways: physical illness, depression, relationship challenges as you attract and seek the rescue triangle of: victim, persecutor, rescuer, and challenges in everyday life in relationships with yourself in eating disorders, addictions, and anxiety.

We can change this pattern through conscious awareness. The change is more a form of replacement therapy combined with 'belief starvation'.

"Beliefs exist as energy structures in our mental environment - our mind. Since beliefs exist as energy, they cannot be destroyed. Beliefs can only be transformed. And we do that by transferring their energy to another concept: one that serves us better, one that better allows us to achieve our goals or fulfill our desires."

We starve the beliefs that do not serve us by observing without judgement, breathing, and making a different choice with clear intention, focus and action.

We need to embrace a process that begins within ourselves. It is very easy, as the 'healer', the coach to focus upon fixing your clients. The most powerful and important work that you are invited to begin is within yourself. We are suggesting



here a focused, dedication to be in this journey - first within yourself. Become the model for your clients - be able to speak from the first person - make I statements. As you begin this journey of change, your own belief systems undergo a magical transformation: some become dormant; some shrivel until they no longer have the capacity to filter and affect your life experiences. It shows in your languaging, your choices, your presence. Your being-ness becomes an agent of change for yourself, your family and your relationship with life.

EXERCISE

RECOGNISE YOUR BELIEFS: No matter what clothes they wear.

1. Read the following phrases/thoughts. Indicate whether you use it or think it, whether it is voiced or unvoiced.

2. Rate the frequency of the thoughts

never - 1 seldom - 2, sometimes - 3, frequently - 4

He/she should.....

I am never going to.....

No matter how hard I try, it's not enough

I always do my best

They don't appreciate how hard I work

I deserve more money.....

My husband/wife/partner doesn't appreciate how hard I work

My husband/wife/partner/boss is never satisfied

People on welfare should just get a job

Poor people just don't work hard enough

.....people are just lazy

Men and women can't really be friends

Pit bulls are dangerous

GMO's are dangerous to my health

Eating animals is unethical

They would be successful if they just worked harder

When women say no they don't mean it.

Add phrases or thoughts that you notice within your self



Read the following responses - indicate which ones, you use:

Rate the frequency with which you use them

never - 1 seldom - 2, sometimes - 3, frequently - 4

1. You make me so mad when.....
2. I would love to but.....
3. I am late because.....
4. If you loved me you would.....
5. I will do it when.....
6. If only.....
7. add three of your own

For the next 3 days, carry a small notebook with you everywhere.

Step 1. Pick your top 2 thoughts and responses for the next 3 days. Your task is to write down, each time you observe yourself, thinking the phrase or thought, or through your thoughts or actions strengthening or defending your belief and what the person or situation is.

Step 2. At the end of 3 days review your journal - what pattern do you see. What are your 'core beliefs?'

Step 3. Changing the belief: select a replacement phrase or word: for example - You identify that you experience yourself thinking: "If he loved me, he wouldn't yell at me" your belief is - that when people love you they do not yell at you. You can change your experience, and change your belief by:

1. Take a cleansing breath
2. Consciously choose:
 - A different thought
 - An affirmation
 - A question: such as:

What is the highest priority here?

What is he really saying here?



LESSON 3: THE SUBCONSCIOUS MIND

There are two operating systems at work in our lives at any given time:

The conscious mind is what is at work when we are in our normal waking state. It is aware of time, is responsible for learning, reasoning and making conscious choices. It is the mental activity of which we are aware. The mental activity that occurs in the conscious mind, including emotional reactions can be seen and measured by modern imaging techniques. For instance, the prefrontal cortex lights up when a decision is being made, and a different part of the brain lights up when one is engaging in a creative activity.

The subconscious mind, on the other hand, is primal, instinctive and impressionable. It is where we store every memory, sight, sound, smell, and taste that we have ever experienced. It is through these experiences and through conditioning that all our beliefs are created. Although some beliefs are conscious, the subconscious mind is where many of these belief systems are housed.

The subconscious mind is not just in the brain but resides in every single cell in our body.

Our mind-body systems are programmable in the same way that computers are. Your mind is not your brain. The CPU chip is not the same as the memory in a computer. Your brain is a physical mass, the mind is an energy field that permeates and surrounds your whole body. Everything is energy. And every cell of your body is a programmable computer chip - capable of input, output, and memory storage.

Most of the deep impressions that occur in the subconscious occur at a very young age - some of the imprinting or hard wiring occurs even before we are born and the effects of this imprinting influences our thoughts, behaviour, addictions and biology without us even being aware of what that imprinting might be.



By the time we reach adulthood, most of this imprinting has occurred and the neural pathways set.

According to Bruce Lipton in *Biology of Belief*, the reason for this is quite interesting. Between birth and two years of age **Delta** waves in the brain predominate which facilitates the absorption of a huge amount of sensory imprinting and it is also when we are most impressionable.

Between the ages of two and six, **Theta** waves start to dominate which also allows for deep imprinting and absorption of information. This is why children of this age are able to pick new languages so quickly!

With breathwork, it's very easy to drop into the theta state and in fact, the first re-birthing centre was called Theta house!

Hypnotherapists drop patients into delta and theta state.

Brainwave States

Beta State

- 13-100 cycles/sec
- associated with the waking state
- fear based and reactive
- very identified with thoughts/emotions
- driven by ego programming
- we interact with thoughts/feelings and emotions as real and consistent with the character with which we have identified

Gamma (subset of Beta)

- 40-70 cycles/sec
- associated with high IQ, empathy and compassion
- this state important for learning, memory and information processing
- needed for senses for new input for memory imprinting
- increased in meditation
- can be experienced in REM phase



Alpha

- 8-12 cycles/sec
- from relaxed wakefulness to dreaming to REM
- brain activity slows down, thoughts are further apart
- associated with state of relaxation and ease
- children have higher alpha and theta activity to help them to assimilate information
- increase in serotonin production
- deep recovery loop
- ability to access the subconscious mind
- less alpha wave activity when awake in people with insomnia, restlessness and anxiety
- more activity in those who are more resilient and are in a state of equanimity

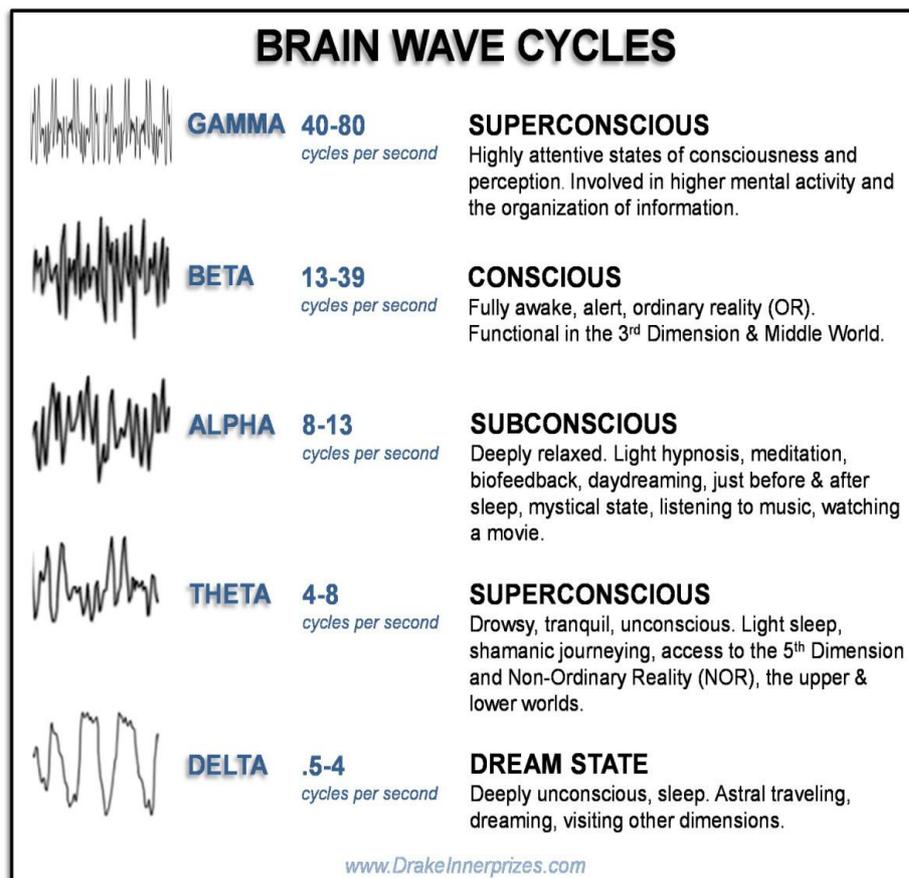
Theta

- 4-7 cycles/sec
- associated with deep sleep and deep meditation
- also increased creativity
- high activity in artists, inventors and children
- creative solutions, inspirations and answers come through in this state
- able to access subconscious patterning and make changes in these behaviours
- activity increases from childhood to puberty
- important for learning
- poor sleep affects brain ability to consolidate learned memories
- entry into delta state preserves cognitive ability after trauma
- slow wave sleep after brain injury helps prevent axons injury
- associated with thickening of pre-frontal cortex
- emotional integration and completion if incomplete experiences

Delta

- 0.5-3.9 cycles/sec
- fluctuations of mind down to basic survival functions

- seen when in a coma or knocked unconscious
- most restorative state of body
- human growth hormone released
- reduces cortisol
- monks and meditators have more delta in waking state than usual
- associated with empathy, compassion, intuition and spirituality
- we need a certain amount delta brainwave sleep to wake up refreshed



Subconscious beliefs are often the reason that we experience challenges manifesting our conscious desires. Will power can temporarily override a subconscious program. When the program is not rewritten, little change will occur - the old pattern will most certainly return and win in the end.



As humans evolve the conscious mind sees itself as the master of instincts and desires. However, most of us are in fact, still asleep and the unaware servant to the subconscious.

The conscious mind is volitional. The subconscious mind is habitual and reactive. The conscious mind sets goals and judges results. The subconscious mind, below the awareness - maintains a flowing connection to muscle movement, autonomic activities such as breathing, heart rate, digestion and production of hormones and chemicals of fight, flight, pleasure and pain. The conscious mind thinks abstractly. The subconscious mind reacts literally. The conscious mind is time bound - separating past and future. The subconscious mind is timeless, thoughtless and seamless - the past automatically triggering reactions in the present.

The conscious mind has limited processing capacity (about 2,000 bits per second). The subconscious mind has expanded processing capacity (about 4 billion bits per second). The conscious mind has very short-term memory (about 20 seconds). The subconscious mind has very long-term memory. It remembers every single thought, wish, attitude, belief, event, or experience.

The conscious mind usually holds 1-3 events in its awareness. The subconscious mind can process thousands of events at the same time. If your conscious mind desires a goal that is not aligned with the stored memories in the subconscious/body memory, guess which will win? The most effective and long-lasting changes are created when we bring the conscious and the subconscious/body minds into alignment.

We have both conscious and subconscious beliefs. Conscious beliefs are affected by education, information, and persuasion. Subconscious beliefs are like hidden software programs and our day to day experiences are often automatic printouts of those programmed beliefs. For most of us, our subconscious programs, determine that we spend most of our lives reacting to situations and circumstances, rather than responding to or creating them.



Most people are surprised to learn that almost all their behavioural and thought patterns are directed by their subconscious mind, not their conscious mind. Have you noticed that you can drive a car while day-dreaming? It is estimated that as much as 99% of cognitive activity is non-conscious! - this is an example of unconscious competence.

In a way, our subconscious mind is more child-like than it is wise. We need to give it conscious instructions. We can't depend on it for advice or understanding. When looking for advice, direction or understanding we invoke our conscious mind. We can turn to something like our 'super-conscious' mind for instructions and advice, and also to get confirmation about the wisdom of our conscious choices and decisions. Breathwork is the perfect tool for this.

If you have a conscious desire that you are not manifesting, then you may have a subconscious belief that is in opposition to it. If there is a conscious intention but there is difficulty in achieving it, then there may be a subconscious belief that conflicts with it. If your conscious and subconscious minds are not aligned, then fulfilling your heart's desire will be a constant challenge and living your dream will be next to impossible.

Habits of thinking, habits of feeling, emotional and behavioural habits...these things can either weaken or strengthen our creative and healing abilities. For example, constant anger can cause illnesses like arthritis, heart disease, and cancer. Anger is an immune suppressant. It has been said that generating anger is like drinking poison and waiting for someone else to die!

Health issues are often (if not always) associated with our subconscious beliefs. Symptoms are messengers. We shouldn't automatically try to kill them or eliminate them with drugs or surgery. Instead, we can learn what they are trying to teach us. We can download new potential beliefs, new software programs, for example by using affirmations, prayers and breathwork!

There is no such thing as an 'incurable' disease. If you are going to doubt anything in life, doubt your own limitations! We are divine beings having a human



experience. It's time to release yourself from the self-inflicted prison of your own thinking. It's time to clean up your subconscious mind!

You can communicate with your subconscious mind in order to rewrite outdated programs that no longer serve you and align them with your current desires and goals and the brain actually responds to that! Recent studies have been able to demonstrate the plastic nature of the brain - and the phenomenon that occurs when we break down old beliefs to create new beliefs, thought patterns and behaviour is called *neuroplasticity*.

In the practice of Breathwork we focus on changing the negative or limiting subconscious beliefs that lead to our suffering or limit our freedom and power. We clear the beliefs that block our awareness of the love, joy, peace, and pleasure in life. Breathwork involves rooting out self-sabotaging beliefs, and replacing them with self-supporting beliefs

It is important to realise that an old deep-seated program is no harder to change than a new shallow one. Energy is energy, whether it's been held in the mind for three minutes or three decades. Like a computer file: you can open it, edit it, or delete it in the same amount of time, whether it has been stored in your hard drive for ten minutes or ten years.

In breathwork, we consider difficulties as opportunities - opportunities to grow. As Breathworkers have learned, that very often, the big challenge you want to get rid of may be the solution to a much bigger challenge. What may seem to be an inability to do one thing may be the ability to do (or to avoid) something else. So, it may not be in your best interest to remove the challenge without realising the purpose that it serves.



LESSON 4: BREATH AND THE NEUROBIOLOGY OF CHANGE

We are a bunch of tangled threads of habits. Habit of beliefs, thought, feelings and behaviours. We have already explored how these habits are formed, what influences them and how the body mind system keeps them alive through neural networks in the body mind system.

Breathwork reveals to us the essence of our nature beyond habit and gives us the opportunity to create new habits or neural pathways that support conscious awareness, freedom and growth. It supports us to live from a deeper more authentic place and to contribute to the world from that place.

To summarise what we have established thus far:

- There are many factors that create belief systems
- Some beliefs support us while others do not
- We are conscious of certain beliefs, but many are subconscious
- Beliefs inform our thinking, feeling and behaviour patterns which eventually become habits that are ingrained in the system.
- Habits are neural pathways or grooves in our body mind systems
- This can show up in the form of anxiety, chronic stress, physical tension patterns and dysfunctional breathing patterns. They also show up when we are 'triggered' or have an unconscious reaction to something.

From the latest advances in neuroscience, we now understand that these neural pathways are not cast in stone. The brain and body are plastic and can be shaped and morphed by creating new neural pathways. This is essentially what the process of growth and change is about.

You will know from your own journey know that while this is possible, it is also not easy. It is a process that requires patience and perseverance.

Through my work in the field of healing, growth and personal transformation, I have noticed a universal pattern or process of change that we typically go through.



This model is also helpful when understanding where your clients are at. This model is called 'The Neurobiology of Change' or the 7 Steps of Change.

- 1) Excuses.** We are usually motivated to make a change in our lives when we feel dissatisfied, uncomfortable or concerned about our lives. We are still at the point of wanting to alleviate our symptoms of anxiety, fatigue, we want to lose weight, make more money, be more productive. Basically, we want something to change but we want to feel better quickly. So, we opt for quick fix solutions that give us temporary relief. At this point we are usually 'unconsciously incompetent' at the new skill that is required. We don't know that we don't know. We are not aware of the underlying beliefs that are driving our behaviour. We avoid any attempt to go deeper and will typically find excuses not to disrupt the status quo. We fight with ourselves for not doing what we think we should be doing and an inner battle rages. In other words, the desire to change exists but constructs the obstacles in the form of excuses. We stay in a state of comfortable misery because it's what know and requires less energy.

- 2) Blocks:** We may be able to move past step 1 through our own mental effort or from pressure around us and begin to muster up the energy to make some changes, but we come up against some big obstacles that seem to be 'out of our hands'. Life keeps getting in the way – the tyre bursts, we get stuck in traffic, a friend needs our help, there's a crisis at work. A block is just a cleverly disguised excuse that we pin on someone or something else. It seems like 'life's way of preventing the change' and relieves us of the responsibility of making the change.

This makes sense from a quantum physics perspective where physical objects, thoughts and emotions are merely waves of energy vibrating at different frequencies. Fear and subconscious belief systems resonate at frequencies that will draw the experiences and situations with a similar vibration. In other words, we attract what we fear. Like attracts like, and so the cycle gets perpetuated. This is where many of us halt the process of closing the gap and the old, entrenched neural circuitry takes over as the



operating system. Behaviour and body trigger emotion, which feed thoughts, which in turn reinforce the belief systems. The old tired rusty wheel keeps turning.

- 3) Awareness:** This is the major crossroad on the path that will determine whether the change will actually be made. At this point, there is an opportunity to create an inward shift that arises from the ownership and acceptance of the old pattern. There is a recognition of the belief system, habits and patterns, and what has given rise to them. There is also a deep acknowledgement of the fear. We become ‘consciously incompetent’ at the new skill. In other words, we are aware that we do not have the new skill in place.

At this juncture, as the white flag is raised, an alignment occurs between the desire to change and our most deeply held authentic value systems. The shift is made from being motivated to being inspired. There is a willingness to stand at the top of the cliff and get a bird’s eye view of this undiscovered interior territory and ask the questions: What got me here? What is my greatest fear? What will this change really mean? Where does this desire to change come from? What’s the alternative? What will I give up or lose as I make this change? Is this choice in alignment with my most deeply held values? This is the first choice point. Courage, acceptance, self-compassion and support are required as preparation for the further journey inward.

- 4) Taking Action:** As we begin to close the gap, we arrive at the point where our intention aligns with our internal state and value system. There is a real and genuine attempt to take the action steps of change. As the new skill set is being learned, neurons begin to spark up different connections and a new neural circuitry is created in the frontal lobe of the brain, the seat of choice and self-awareness. This is usually experienced as quite exhilarating, but sometimes scary as new territory is being discovered.

We can relate to the giddy exhilaration we felt when we did our very first breathwork sessions. It is easy and natural to want to retreat to what is



familiar, and it is important to be vigilant and mindful of how and when the old behaviour shows up. And guaranteed the old behaviour will creep in as soon as soon as the guard is dropped, and we might find ourselves at step 1 or 2 again. “This is taking too long”, “This is too hard”, “It’s not working” is what we will say to ourselves. This is a normal part of the process.

Remember that the new pattern has just been fired up, but the old circuitry is still deeply entrenched.

But the challenge is that the new skill needs to be practised for the new pathway to be entrenched. We constantly crave that same feeling of thrill and exhilaration and new experiences that feeds the adrenaline addiction. The more familiar an experience becomes the more boring and dull it feels. The trick in creating new energy-supporting habits is getting over the part that is boring and mundane until it becomes habituated. Like learning any new skill, it requires daily practice, consistency and patience. Initially, it demands effort and requires energy. We need to constantly affirm the inspired and deep commitment to ourselves and gather the support, encouragement and guidance of those who we trust and who have our best interest at heart, whether that is a friend, coach or mentor.

5) Crossroads: All these baby steps on the path of change lead us to another crossroads or major choice point. The new habit has been formed but the old circuits and the old ‘self’ feels threatened and begins its fight for survival. The new circuitry is being entrenched through the new thoughts, feelings and actions. The cells are no longer receiving their fix of ‘feel bad’ hormones and will begin to pick fights with the new self. If we engage these battles, the conscious brain and the old subconscious brain will begin a full-scale war.

Remember that the subconscious mind is the stop house of habits and is an energy saving mechanism so when we are mentally and physically exhausted it will be easier to default to old patterns. It feels easier at this point to throw in the towel than to continue.



Be aware that this is not a linear process, rather, it is akin to walking a labyrinth. As we head toward the centre, we can feel as if we are moving away from it. It's easy to feel despondent and default back to the old circuitry. The key to entrenching the new pathway, is to maintain an open awareness and to keep catching the old behaviour and gently guide ourselves back. Once again, courage, support and realignment with value systems and compassion for yourself are required here.

6) Practice: The process of change requires perseverance, practice and commitment to self. We are becoming consciously competent. More than all that, it requires patience and support. Practically speaking, I find that making time to plan helps us to create a loose structure and support to make the changes easier. I also find the idea of 'habit stacking', described by SJ Scott in his book *Habit Stacking* quite useful and interesting. Basically, this is about stitching the new habit onto a habit that is already there. In other words, you are piggy-backing off a neural pathway you have already created to save yourself from creating a new one. For example, you would like to take a Vitamin supplement, but you always forget. You could use something that is already a habit as a reminder to take it, for example, after brushing your teeth.

'Nerves that fire together wire together', so the more the skill, habits, behaviour, feelings and emotions are practised, the more deeply the neural pathways will be entrenched. In response, new receptors become switched on and primed on the surface of the cells and the physical body begins to transform.

7) The Shift: Now we have become unconsciously competent. The new neural pathways have become deeply embedded and the new habit is permanent. The entire body-mind system has become rewired to create a new habit or way of living and being. This is the 'new normal'. The software of the subconscious mind has been reprogrammed. While the old programme will probably rear its head every now and again, it passes quickly as the new



default programme sets in. This, however, requires constant awareness and vigilance. By now, the skill of mindfulness has become more finely tuned.

Give some thought to the habits of thoughts, feelings and behaviour that might be depleting your energy system. Is there one small thing that you could work on reprogramming? Go through the 7 steps. Where do you think you are?

Studies are showing that it takes about 55 days of daily practice to create a new habit. Experts in the field of sports science suggests we need 2 000 repeated actions to embed the pathway. How many breathing sessions in this? We may not know for sure, the process is layered, but what we do know for sure, is that change is possible. We just have to remember why we're doing it in the first place. Our ability to grow, adapt and change is what makes being human truly amazing and wonderful.

The breath is a fundamental tool and guide in the process of growth and change and is a powerful way to navigate through the above steps in 3 key ways.

It supports:

- 1) Self-Awareness** through breath awareness. When we train ourselves to become aware of the breath, we become more aware of our bodies, our feelings, emotions and thoughts. We cultivate a deep relationship with our inner witness and develop the ability to observe what we are experiencing without getting tangled in it. We become less reactive and more responsive.
- 2) Self-Regulation.** Once we have expanded our awareness, we can then use the breath to self-regulate by breathing into the feelings, sensations and tension points. We can consciously breathe in a way that supports more relaxation, more energy and more openness by using the principles of breathing. When we can breathe in a way that reflects openness, and freedom and trust, we spark up the new neural pathways and build a new body mind habit. The more conscious breathing skills we have in our toolkit, the more we can call on them in every situation in our lives and use it for whatever it is we are needing.



3) Self-Transformation. A deep dive conscious connected breathing session gives us the opportunity to have a visceral experience of our true nature. We can access the place of peace, power and purity in just one session and wake up to our true nature. Through the session, old tension patterns and belief systems will reveal themselves and we are given the opportunity through the breath to release and integrate them.



MODULE 6: ENERGY ANATOMY

LESSON 1: BREATH, ENERGY AND KUNDALINI

“When formless divinity moves into form, it does so through the building block of all matter - energy” - Kamini Desai

Breath carries the essence of that which sustains all life. It is the life force or universal life energy that is the building block of material existence. It is an inexplicable force of energy that permeates all of existence and that flows through us through the breath.

All the ancient and traditional wisdom systems of the world have recognised and named this life force or, “Intelligent Pulse of Life”.

The Chinese call it Chi or Qi. The Japanese call it Seiki. In Vedic or Yogic philosophy, it is called Prana. The Kahunas of Hawaii name it Mana. In Tibetan Buddhism it’s called Lüng. The Kabbalistic tradition call it Koach. The ancient San people of Southern Africa have named this awakened form of this powerful force N|OM.

This force pulsates through us through the breath. Through the breath we open up to it, become a channel for it and an expression of it. It is a generous easily accessible force that can be harnessed, utilised and channeled.

Our tangible physical anatomy is designed and organised to support the flow of this energy to every cell of the body, right down to the quantum level through the cardiovascular, respiratory, neurological and musculoskeletal system all working in harmony. But there is also a subtler system of energy anatomy that has been identified by ancient wisdom traditions that for the purposes of the breathwork practitioner is of vital importance.

Our beliefs, habits of thinking, feeling patterns of tension in the physical body that interfere with the free flowing of this energy, and when there is an accumulation of



this 'stuck' energy it interferes with the body's self-healing ability, and this eventually manifests as pain and illness both physically and psychologically.

Working with the breath is a way to clear these pathways in a way that is non-invasive, safe, and accessible to anyone.

This module focuses on the understanding of how these subtle energy pathways and layers are organised. The exploration of these pathways is particularly useful and relevant to the breathworker who is essentially working with the creative art of life force itself for the purposes of healing, growth and transformation.

In Chinese Medicine, Chi energy moves through the body through 12 main pathways or Meridians organised vertically down the body and that carries this life force to all the organs and endocrine systems. Optimum health and vitality is based on the free flow of this energy. When the flow of this energy gets blocked, it can be opened through various healing methods such as acupuncture, massage, herbal medicine and movement therapies. Chi Gong is a very beautiful and powerful practice that involves coordinated breathing and movement to balance chi.

The Japanese and Kalahari Bushmen and ancient yogis had a deep understanding of this energy and were masters of awakening this force and harnessing it. The Kundalini energy or N|OM is the fully awakened form of this energy that causes spontaneous rocking, moving or shaking. The full awakening of this energy was thought to be the secret to a vibrant life.

"N|OM wakes up the sitting meditator, ignites the passive contemplator and supercharges the quiet pilgrim. It kicks open the spiritual lotus flower and accentuates the movement in it's opening" - The Bushmen's Way of Tracking God.

In conscious breathwork we work with both the subtle flow and fully awakened form of this energy and get comfortable with holding and playing with all the expressions of this life force.



According to tantric philosophy, Kundalini energy is symbolised by a sleeping serpent. When this energy is awakened, the symbolic snake or 'Shakti' energy which is the feminine creative force uncoils and moves upward through the energy pathway in the centre of the spine, piercing through all the chakras where it meets and unites with the male divine energy which resides at the crown chakra at the top of the head.

This is the divine union of the feminine and masculine energy which resides within everyone. It is said that enlightenment is experienced when this union occurs.

For some, this awakening happens spontaneously, while performing ordinary activities.

For others it occurs with certain spiritual practices as described above.

One can also feel this energy rising in a breathwork session and is often experienced as a sexual energy that stirs up from the pelvis.

In Kundalini, energy and sexual energy is one and the same - being the energy of the creative force - and when it is harnessed and channeled it can move up to the higher chakras - opening the heart centre and compassion. Many people however, get stuck in the lower chakras and focus upon expressing this energy in a purely sexual way, losing the opportunity to transform sexuality into spirituality.

For most others on the spiritual path, this upward ascent of Kundalini energy occurs gradually, as we raise our consciousness from survival through to self-actualisation. We will talk more about this in the next lesson on the Chakras.

"When Kundalini is uncoiled, she will force her way upward, bursting through barriers to stir up feelings, emotion, creativity and to give life. She shatters the established order with her thrust towards evolution" - Rudolph Ballentine, Radical Healing.

For a long time in the West, Kundalini energy, chakras and energy pathways were vague, esoteric concepts.



Now there are very exciting and ground-breaking studies being done to validate the existence of the Kundalini experience and to measure its effects through certain parameters such as Cellular energy levels, immune responses, psychological and emotional health, neurological changes in the brain, genetic transformation and expression of extraordinary abilities.

One such study was done in 2011 in Bangalore India at the Sri Nityanananda Mission

Read more about it here - www.nithyananda.org

How is the Kundalini energy relevant to breathwork?

As a breathworker, it is important to be comfortable with and to relax into all the feelings and sensations that occur as this ultra-potent living electricity moves through you, activating, healing and transforming every level of being on a consciousness level and down to each physical cell. The natural and free movement of this energy through you creates the opportunity for you to experience your divine nature.

It is also important to recognise and work with Kundalini energy in your clients. When clients fear the energy that gets activated with the breath and tighten up in an attempt to contain it, it builds up and can be experienced as pain.

During the session you can support your client to relax and feel safe - remind them it is just a feeling, that all feelings are welcome. Encourage them to surrender and breathe - into the feeling, the place.

EXERCISE

At the base of your torso is what is called the "PC Muscle." That's the muscle you use when you want to hold back your urine...when you need to control the urge to pee.



Locating this muscle, isolating it, and consciously tensing and relaxing this muscle while you breathe is an ancient tantra technique. It is a way to raise your sexual energy and to awaken "kundalini".

A basic tantric exercise is to tense the pc muscle and draw sexual energy up to your heart while you inhale; then relax the pc muscle and send that energy as love and light out through your heart while you exhale.

Practice this technique and notice the feelings and sensations that arise.

Are you able to really fall into the experience?

Where do you feel resistance?

Write down your experience while doing this technique

Are you becoming aware of any belief systems within yourself as you were reading through this lesson and practising this technique?

Write them down.

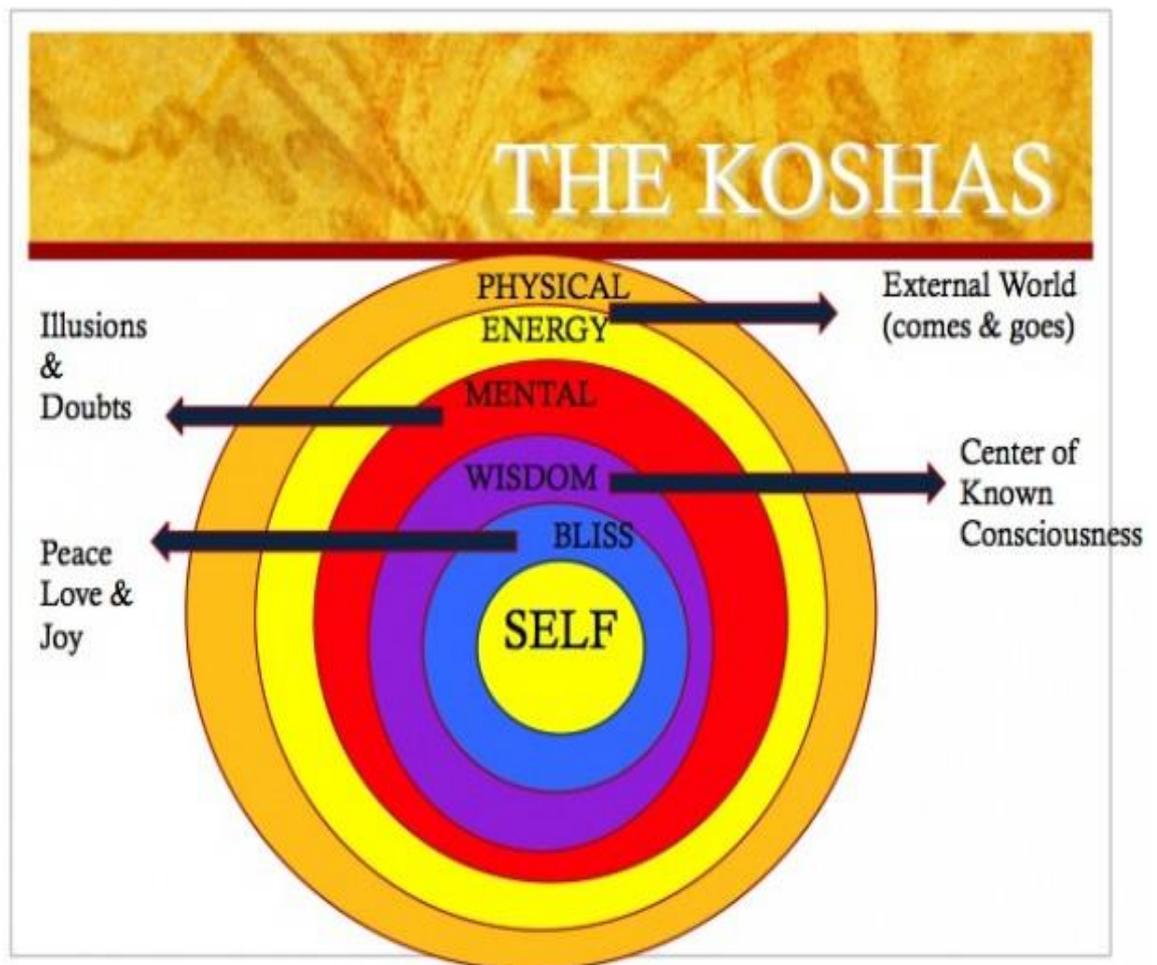
A breath technique that also activates the kundalini energy and the pc muscle and the 2nd chakra is to do reverse respiration, contracting the abdomen on the inhale, and consciously raising the breath to the heart chakra and then exhale, sending the breath down and out and expanding the abdomen and the pelvis.

Which technique works better for you?

LESSON 2: THE 5 SHEATHS OF ENERGY

“Energy is Consciousness Made Visible”

Now we explore how Universal energy gets embodied in five interconnected sheaths of energy that make us who we are. In the ancient Vedic traditions these sheaths are also known as “Koshas”. In understanding these sheaths, we have a greater sense of how breathwork effects change and what aspect of ourselves we are experiencing in various stages of a session.





1. The Physical Body

The physical body is the densest of these 5 layers of energy.

2. The Energy Body

This is the sheath that is closest to the physical body and that weaves through it through the chakras. This layer is not visible but can be experienced as sensations. It is through this sheath that Universal Life force interfaces with the physical body.

So much of our communication with the world happens on an energetic level. Consider the way we feel when you're in a room with an angry person or the peace you feel when you are walking in nature.

When the prana body is strengthened, it can be visible to the naked eyes as a glow or aura. It's often what is depicted as a halo or aura around saints and mystics.

In breathwork, when we begin to feel tingling, waves of energy, heat or cold, we are having a tangible experience of the energy body. Breathing allows easy access to the other sheaths through this layer.

3. The Mental Body

This is the sheath of energy that is made of thought processes. It is the part of us that creates meaning out of the world we inhabit. But just as the physical body has layers of skin, fat, blood, and bones, so the mental body has its own layers. The most superficial layer comprises passing thoughts, images, perceptions and emotions. Some of these thoughts are like bubbles in the ocean, that rise and disappear, while others are like tides and have a stronger hold and more influence.

The deeper levels of this sheath contain the powerful mental structures formed by the beliefs and conditioning that you've absorbed from your family and culture as well as from your accumulated mental patterns. These deep thoughts make grooves



in the mental body that cause your perceptions of yourself and your life to run in certain fixed patterns (see Module 5).

4. The Wisdom or Awareness Body

This is the energy of the higher mind operating as discriminating intelligence, insight and intuition and creativity. Artists often describe this state as “being in the flow”. We are accessing this sheath when we become completely immersed in a project like writing or painting or even problem solving. We often have moments of being in this state in a breathwork session when we have deep insight, vision or sense of knowingness.

5. The Bliss/Causal body

This body is the interface between universal and individual consciousness. It is a space of stillness and contentment. Here, there is no fear. It is the energy of pure unconditional love, gratitude and open heartedness.

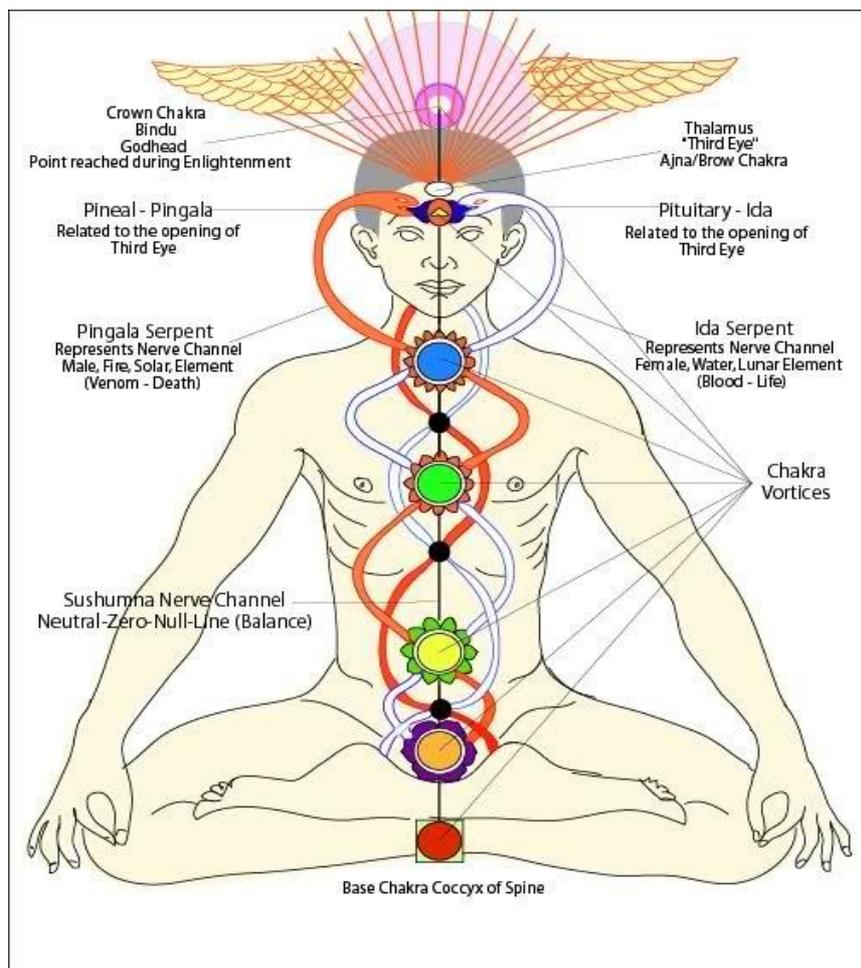
Contact with the bliss body develops through practice, especially practices that teach the mind to let go of the thoughts that hide the bliss body. When you are in touch with your bliss body, you know that your nature is joyful and free. You are in the bliss body in those moments during which you recognise - viscerally rather than intellectually - that love is the deepest reality, beyond mental constructs or ideas. In fact, the greatest gift of breathwork is its power to awaken us to our body of bliss.

It is possible to be conscious of yourself in all these layers and levels. To be aware and present in all these sheaths is to awaken to your own life and to integrate all the parts of yourself. It then becomes natural to sense the universal Self that expresses itself as our individual Self.

LESSON 3: THE CHAKRA SYSTEM AND THE BODY-MIND CONNECTION

“The Energy of the universe is yours - Just claim it” - Yogi BhaJan

“Chakra” is the Sanskrit word for “wheel”. This wheel of energy acts as the bridge and communication channel between the physical body, emotions, thoughts and higher consciousness. This bridge of subtle energies is organised in the form of 7 main centres which are aligned up the spine, from the base of the spine to the top of the head, each of them represented by a colour and associated with certain psychological aspects and parts of the physical body.





As we develop from a fetus into childhood, these energy centres are activated and integrated by our life experience. However, when we experience certain traumas, abuses or “miss a certain life experience”, the healthy integration of these centres do not occur. Compensation for the traumas occur either through the over activation of certain energy centres at the expense of others. We are not usually aware of these imbalances until it manifests in the form of illness or as a psycho emotional state. Our body acts as an information system, manifesting imbalance in the areas that are associated with a certain aspect of our consciousness.

It is important as breath workers to be aware of these patterns and to work with certain breathing practices and affirmations, colour and sounds associated with the chakras to restore balance. This doesn't always have to be communicated, and may not always be appropriate, but simply by holding the awareness, it will support the healing for the person you are working with.

The following is a table which is a summary of the all the attributes of the 7 chakras as it relates to our physical and emotional health and is a guide for some of the healing practices that could be integrated into the sessions.



LESSON 4: SCIENCE OF SHIVAGAMA – MASCULINE AND FEMININE ENERGY

In Module 6 we explore a way to describe and frame the nature of "the life force" that moves within us from the inside out, the currents through which it moves through our bodies and how to access this "life force" with the breath.

In Lesson One, we explored this concept of prana in-depth and the primary current of Kundalini energy or primal life force that moves through the spine.

Now we extend our understanding as we look further into the two additional currents of energy that also originate at the base of the spine. These two currents move up to the brain, balancing the left and right sides of the brain and thus the feminine and masculine aspects of self.

The right channel is called Pingala. It originates from the base of the spine and moves up to the right nostril. Pingala is connected to the sun and masculine energy and activates the left side of the brain which is the more logical side. Thus, when there is more flow of energy through this channel, we feel more energised, active, and warm; and would be more prone to anger outbursts.

The left channel known as Ida, and connected to the feminine and lunar energy. It has the same origin as Pingala at the base of the spine and moves up through the body to meet the left nostril, activating the right brain and the feminine, creative, reflective and cooling aspects of our nature.

Nature has its own flowing rhythms and cycles, day and night, the lunar cycle and the seasonal cycles. As natural beings our physiological processes are also ruled by many rhythms and cycles.

Think of all the rhythms that make up our physiology - our heartbeat for one is driven by our autonomic nervous system. It quickens in times of excitement, stress and activity. It naturally slows down when we're relaxed and at ease.



The natural rhythm of the breath also flows with the inhalation and exhalation. The flow of cerebrospinal fluid through the spine is also connected to the flow of the breath.

Think of the sleep-wake cycle or the circadian rhythm tied to the rising and setting of the sun and the menstrual cycle which is connected to the 28-day lunar cycle. Our physiology also adapts with the changing of the seasons.

What is even more fascinating is the shorter 2-hour biorhythm which creates a shift between the left and right hemispheres of the brain, so we are constantly moving between being more creative and more linear every two hours!

Like the breath, this 2-hour shifting bio rhythm is both automatic and conscious. It seems that this automatic shifting is triggered by the change in nostril dominance. A dominance that can be affected by bringing conscious awareness and focus to this pattern.

You will notice that at any given time, one nostril will feel more open than the other, which means that one side of the brain is more dominant.

In general, when the left nostril is more open, the right brain would probably be more active, and you may be more open to creative ideas and feel more emotionally vulnerable. The whole system seems cooler and quieter.

When the right nostril is more open, the left hemisphere is dominant – which means thinking is more logical and strategic and the metabolic rate is higher. There is predominance of fire or solar energy in the body. It would be a good time for strenuous work, writing, debating etc.

At certain times the breath flows through both nostrils equally. This is when the pendulum is in the middle and your consciousness is most integrated. It's when we tend to retreat deep within even if it's for a few seconds. It would be a good time to check in on your inner state, to take a few long conscious breaths or to practice breath suspension. Many people unconsciously reach for a cigarette, coffee, sweet



or other stimulant drug at this time. There are hypnotists who have been known to step in and choose this moment to induce a trance.

The practice of Shivagama (or Swara yoga) explores the nasal breath pattern in amazing depth and detail and gives very explicit information on how the flow of the breath reconfigures energy patterns within it so that certain activities can be coordinated with it; vice versa left and right nostril breathing is activated to match and support certain activities.

It is advised to change nostril dominance at the first sign of physical, emotional or psychological imbalance.

For example, to fight a fever, the dominant nostril would be blocked with a cotton ball until the body temperature returns to normal. To recover from hard work, it is advised to lie on your right side and breath through your left nostril. To clear an uncomfortable emotional state, it is suggested that one blocks the dominant nostril and breathes through the congested nostril for 10 - 15 minutes.

If you are a feeling hungry, check which nostril feels closed. If the right nostril is closed, you are probably not really hungry, you are probably thirsty! When you are truly hungry, the right nostril should be fully open, the digestive fire should be strong, and you are able to digest your meal far better.

Techniques

These are various techniques that can be used to open the opposite nostril:

- Lie on your side with the closed nostril up: after some time, it should open.
- Sit with the arm of the open side over the back of a chair, or with the arm and chest pressed against it. The pressure around the armpit of the open side will tend to open the opposite nostril.
- Stimulate the inside of the closed nostril with a tissue or neti pot.
- Concentrate on the sensation of air against the inside of the closed nostril. Accentuating awareness will bring that side more into play.



- Create thought characteristics of the opposite side. Eg think of the hot sun, and masculine energy to bring the right breath into dominance and cool water and the moon for the left.

Practical applications:

These are Kriya Yoga techniques taught by Yogi Bhajan

- When you feel tired, sit up with a straight spine, and block your left nostril with the thumb of your left hand, keeping your other fingers pointing straight up like antennae. Take 26 long deep and complete breaths through the right nostril. Then inhale and relax.
- When you are feeling anxious or nervous, sit with a straight spine and block the right nostril with the thumb of the right hand. Take 26 long deep and complete breaths through the left nostril. Then inhale and relax.
- To deal with an “out of control” mind or runaway thinking, sit straight, close off your right nostril with your right thumb and inhale deeply through your left nostril. Exhale completely through your mouth. Do this for 6 minutes to quiet your mind.
- To overcome compulsive eating or for assistance during fasting, sit with spine straight, block the right nostril with the right thumb. Breathe in a long deep slow inhale through the left nostril. Hold the breath for as long as feels comfortable. Then exhale through the left nostril and hold the breath out for as long as you held it in. Do this for 31 minutes.

EXERCISE

Alternate Nostril Breathing

This basic Pranayama exercise involves using the thumb and ring finger of your right hand to alternatively block your right and left nostril. Most people like to rest their index finger and middle finger in forehead between the eyebrows (over the ‘third eye’).

Notice that you put the exhale first, which means you first empty your lungs and all the channels before drawing in a new breath.

Block your right nostril with your right thumb finger, then exhale and inhale one breath through the left nostril.



Switch

Block the left nostril with your right ring finger, exhale and inhale through your right nostril.

Switch

Block the right nostril with the thumb; exhale and inhale through the left nostril.

Switch

Practice alternate nostril breathing in this way for 10 minutes.

You can breathe according to any regular rhythm or pace that you find comfortable. Make your exhalations and inhalations as long or short, or as fast or slow as you like.

Two traditional pranayama rhythms or counts are:

Exhale 4, hold 2, inhale 4, hold 2, exhale 4, hold 2, inhale 4, hold 2 etc.

Exhale 4, hold 4, inhale 4, hold 4, exhale 4, hold 4, inhale 4, hold 4, etc.