The Basics of Better Breathing & Better Health

1. The first step is learning the fact that most of us suffer some degree of CHHV or chronic hidden hyperventilation, over-breathing in simple terms.
2. Secondly CHHV makes us ill! Anything from low energy, poor sleep to serious health problems such as asthma, hypertension, sleep apnoea or panic attacks.
3. Most of us arrived at this state because of the many stressful events in our lives, emotional, physical, illnesses, chemical or whatever. Any stress triggers a primitive response called the "Fight or Flight Syndrome" that once protected us from sabre toothed tigers but today is not so useful and more often has an adverse effect on our health.
4. The Fight or Flight response produces over a thousand physiological changes in our bodies preparing us for emergency action, all but three of these responses we have little or no control over, histamine, adrenaline, corticosteroid production etc.
5. We can however take conscious control over three of them; our muscle tension, our breathing and our mental tension.
6. The neat thing is that once we start to take control over muscle tension, mental tension and our breathing all the others are reduced.
7. There is a very detailed physiological explanation for the benefits of better breathing that you can learn about later. Right now all you need to know is that CHHV causes us to lose carbon dioxide (carbon dioxide far from being the deadly gas many of us have been led to believe, it is the essential stuff of all living things, we would be dead without it! We need around 6% in our bodies to function well)
8. Carbon dioxide is so important to our life our breathing is governed by the level of carbon dioxide in our blood, and not oxygen. Receptors in the brain measure the level of carbon dioxide and adjust our breathing accordingly, if too much we are made to breathe more to "wash out" the excess, if too low we are made to breathe less to conserve it.
9. With CHHV our receptors have been set at too low a level of carbon dioxide and much of the breath training will be to correct this, returning them to normal.
10. Low carbon dioxide levels cause: a) Spasm of smooth muscle wrapped around all hollow organs in our body, blood vessels, airways, bladder, gut, etc. b) The blood's ability to deliver oxygen to all our tissues is impaired and c) the pH, or acid/alkalinity of the body is changed affecting every chemical reaction in our bodies adversely.
11. There are many other effects associated with poor breathing but you can learn about them later.
12. So, to correcting your breathing, if you need to! First you need a measure of your breathing. This is based on two very simple checks you do yourself, namely, the control pause and pulse measurements.
13. The control pause (CP) is a measure of your maximum COMFORTABLE breath hold in seconds after a normal exhalation while at rest. Effectively it measures how well your body is oxygenated, if you're well oxygenated you don't need another breath for a some time, if very poorly oxygenated you will want to take the next breath almost immediately.
14. The Pulse is measured on your wrist or neck by counting the number of beats in 15 seconds and multiplying by 4 to give number of beats per minute.
15. The table below gives a rough guide as to how good or bad your breathing is related to your CP, your pulse may add more information about this.

Control Pause	CO_2	Your Breathing State
45-60 seconds	5 - 6 %	Excellent normal breathing.
35-45 seconds	4.5 – 5%	Good but slight over-breathing
25-35 seconds	4 - 4.5%	Moderate hyperventilation
20-25 seconds	3.5 – 4%	High hyperventilation affecting your health
15-20 seconds	3 - 3.5%	Serious hyperventilation
10-15 seconds	2.5 – 3%	Severe hyperventilation
< 10 seconds	< 2.5%	Critically poor breathing

As you improve your breathing you will find your CP increases and your pulse decreases for a while until your normal base level pulse rate is reached.

Start Training:

Disclaimer: Please note, breathing has a powerful effect on our entire body and therefore any exercises should be done with caution. If you have a history of any serious condition including, diabetes, heart disease, hypertension, psychotic conditions, severe asthma, etc. you are advised to only do breath training with the support and supervision of your doctor health professional or Buteyko Educator. This also applies to *anyone* with a CP of under 15 seconds.

1. Make an effort to always breathe through your nose, breathing in *and out* through your nose not your mouth.

2. If you have a stuffy or blocked nose: Take a breath in then out and gently hold your nose while nodding ten times keeping your mouth closed. Release your nose and breathe in through your nose. Repeat as necessary.

3. Check how you are breathing; hold one hand on your chest and the other on your belly, which hand is being moved the most? Try to get all the movement low down where your diaphragm is.

4. Now practice RB. RB stands for Relaxed or Reduced breathing.
Start by simply relaxing do not try to reduce breathing at this stage.
a) Relax every muscle in your body, be “soft like a cloth!”
b) Only breathe through the nose, keep your mouth shut.
c) Try to keep the daily mental stresses out of your thinking by occupying your mind with something calming like imagining a garden, seashore or desert island.
d) Sit upright with a straight back and both legs placed on the floor.
e) Close your eyes.
f) Sit like this, just learning to relax thoroughly for two to five minutes then open your eyes and wait for another minute while resting, to let your breathing return to a its new normal.
g) Now measure your CP and Pulse again.
h) If you have succeeded in doing this exercise well your CP will be higher and your Pulse may be lower or the same. This will mean you are breathing less.
i) That was your first exercise in resetting your carbon dioxide receptors.

5. Repeat this exercise three or four times a day and keep a record of your results to measure your progress.

6). If you have any questions contact: Michael Lingard by phone or email

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