

This is from a letter that a member of COPD-International and others, Filcab, developed for publication and sharing with everyone. He would like everyone either who has COPD or works with COPDers to have this knowledge in order to better help people with breathing problems breathe better. He has given his permission to have this "borrowed", re-printed and passed along.

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The following is my own thoughts on the importance of addressing the breathing techniques of those of us who have COPD. This aspect of our treatment is, unfortunately and sadly, most highly neglected by our medical community. A recent paper put out by the Canadian Thoracic Society virtually neglected breathing techniques, but, in their defense, a great deal of our breathing problems is psychological as opposed to physical. Be that as it may, I would hope that this letter would be read by as many of the medical community as possible, so they can get an insight into our every day lives.

For "normal people", breathing is as easy as inhaling and exhaling, without giving their breathing any thought at all. For the vast majority of us with COPD, breathing can sometimes be an adventure and for some of us, most of the time it is an adventure. It is my belief, that anyone who deals in the care of COPD'ers in their later stages should try a little experiment as suggested by Dr. Rick Hodder, a noted Canadian respirologist, in his book, "Every Breath I Take – A guide to living with COPD". Quote: "Take in a deep breath but don't exhale. Take in another and another. You're hyper inflated. Hold it! Now run upstairs. You'll soon appreciate what it feels like to have COPD or asthma."

We as COPD'ers have to deal with our breathing on so many levels:

(1). The psychology of breathing - How anxiety affects our breathing.

- (2). Dealing with Shortness of Breath (SOB)
- (3). Learning to pursed-lip breathe (PLB).
- (4). How we breathe. Are we shallow breathers or diaphragm breathers?
- (5). Learning to exhale properly.
- (6). Learning to relax our auxiliary breathing muscles
- (7). Learning to pace ourselves so we don't become (SOB).

When we become anxious, our body releases adrenaline, which causes our heart to beat faster. The brain then tells the lungs that the heart is working harder and needs more oxygen. So we start to breathe faster and harder. The brain then tells the heart that the lungs need more blood to process, and so the heart starts to beat faster again. And so on, and so on, until we are completely breathless and in our anxiety and breathlessness, the muscles in our chest tend to tighten as we make every effort to stop it from happening.

The main purpose of PLB is to keep the airways open. When we huff and puff, we tend to breathe out too hard and this collapses the airways and makes it harder to breathe in. Also when we huff and puff we don't expel enough air and build up CO<sub>2</sub> in our lungs as well as trapping air. This CO<sub>2</sub> build-up triggers our body to breathe harder to expel it. Anxiety can lead to panic. That happened to me once only. I couldn't breathe properly and eventually had a full blown panic attack, where my airways closed over completely! I could not breathe at all! The only fortunate thing was that I was already on an examining table at E/R, so they gave me the ole Ativan, and I was able to relax almost immediately and breathe again.

What is Pursed Lip Breathing (PLB)? PLB is the first line of defense used by most COPD'ers when trying to recover from shortness of breath. It involves breathing in through the nose and exhaling with the lips pursed as if you were going to whistle. How hard do you blow out? I find that blowing out with the same force that you would use to cool

hot soup on a spoon to be the perfect force. Blow hard enough to cool it, but not hard enough to blow it off the spoon. Many sites advocate blow like you were blowing out a candle, but with the shape my lungs are in, if I blow hard enough for me to blow out a candle my airways would collapse into next week and defeat the purpose of why I'm PLBing in the first place! How does PLB help?

When we PLB properly we create a back pressure in the mouth and throat and this back pressure actually holds the airways open. Now that we can breathe in easier we have to concentrate and breathe out for at least 4 seconds or longer if possible. This helps expel CO<sub>2</sub> and trapped air and we begin to breathe easier yet. I have been doing something for the last month or so, which I have not seen written up, but it helps me. It may not help everybody. After I exhale for four seconds, I pause and let the body inhale naturally. I find that if I consciously try to inhale I will invariably gasp. When I inhale naturally, I make sure I do not try to "top off" the air already in my lungs. This will cause you to use your auxiliary breathing muscles in your shoulders and neck. This will in turn cause you to use up more oxygen. Also with the pausing after exhaling, I would suspect that it gives the lungs a little more time to exchange gases, (CO & CO<sub>2</sub>). Now that we are breathing rather easily, the anxiety subsides and all is well in our wonderful little worlds. Practicing these techniques is very important so as to be completely trained on how to recover from being Short Of Breath.

As for diaphragm breathing, I can't begin to tell you the difference in my life since I learned to diaphragm breathe about a year ago. I don't know when it started but I became a shallow breather (chest breather), not using my diaphragm. If your neck and shoulder muscles are constantly sore after a bout of SOB, then you are a chest breather and you have to learn to diaphragm breathe.

About eleven months ago I was having a very hard time, being

continually SOB. If I went upstairs to the washroom, even using PLB, it would sometimes take me an hour to get my breath back. To make a long story short, I searched the web and learned how to diaphragm breathe and my life turned around 180 degrees! When I go upstairs now I am winded when I reach the top as opposed to severely SOB.

I now know that my last hospital stay for respiratory failure was due mostly from being a shallow breather. I was cleaning out my shed, and because of my low FEV1 (10%) and low DLCO (19%), I would work for 30-40 seconds and then I would have to sit and catch my breath. I would PLB and huff and puff for 3-5 minutes in order to catch my breath. After doing this for a couple of days, 2 or 3 hours a day, I eventually exhausted my breathing muscles to the point that they were not function properly and not able to rid my body of CO<sub>2</sub>. Eventually this caused respiratory acidosis (lowering of blood pH), which led to a very severe exacerbation and respiratory failure.

Now that I know how to diaphragm breathe, hopefully, this will never happen again! My next exacerbation will be infection induced! Probably the most aggravating thing to me through all of this, is that I suffered undue breathing hardship for a long, long time because nowhere down the line was my method of breathing ever checked and corrected! I did a lot more panting and sucking for air than I ever had to! Every COPD'er should be individually checked for proper breathing techniques.

Exhaling – A tremendously neglected part of therapy by our medical community! Our problem as COPD'ers is not getting good air (O<sub>2</sub>) in, it's getting bad air (CO<sub>2</sub>) out. Extending our exhale time helps us on two fronts. First of all, it gives our lungs a much better chance of ridding our bodies of CO<sub>2</sub>. Secondly, I believe extended exhaling is the main reason that I have been exacerbation free for the last year. I realize the immune system helps, but I was getting pneumonia, probably every three months before I learned to breathe and exhale

properly. The more stale air you exhale, the more fresh air you can inhale, which gets deeper into the lungs and does not give all the little creepy crawlies a moist, damp environment in which to multiply. One of the signatures I now use is SOB? PLB - Exhale For 4 - Relax!, which is my shorthand to remind us to "Purse Lip Breathe - Exhale For a minimum of Four seconds - Relax".

Relaxing – If you exhibit any muscle soreness after a bout of SOB, it is probably because you are either over-breathing or not breathing correctly. With a combination of PLB and exhaling 4-4, you should be able to talk yourself into relaxing all those muscles used to breathe. Something I have used for the last year or so is to start humming a tune. Myself, I hum to "Amazing Grace". Humming it right it forces me to extend my exhalation, take small inhales and gets my mind off of my SOB and allows me to relax. Relaxation is very important.

As a final note, most of us know how important it is for us to address our breathing problems properly. Unfortunately, the medical community has not seen that need, as yet. We have medicinal therapy, physical therapy, nutritional therapy, but no breathing therapy as such.

Somehow we have to reach out to the medical community to see how this can be changed. I presently go to three different COPD forums on a regular basis, and the vast majority of the questions pertain to shortness of breath and how to obtain relief. If the medical community were to visit these forums, they would get a much greater understanding of what we go through on a daily basis and would address our breathing problems in a different light. All doctor's, nurses, Respirology Technologists and Pulmonary Rehabs would be doing their patients a great service by recommending the following forums. It is my belief that ER visits can be reduced by a significant number if all COPD'ers are taught proper breathing techniques. About a thousand of us have benefited greatly from them, but there are

hundreds and hundreds of thousands of people who suffer needlessly and could use some help from their peers. Through this letter I am asking all forum members to copy this letter and take a copy to your PCP, Respirologist, Rehab or whoever else you feel may benefit from it.

<http://www.copd-international.com/COPD/forum.htm> -

<http://copd.proboards31.com/index.cgi> -

<http://members.boardhost.com/COPD/>

Also added, <http://www.breathingbetterlivingwell.com>