Top 10 Tips for Living Your Best Life With COPD

PULMONARY EDUCATION AND RESEARCH FOUNDATION

Dedicated to providing help to those with chronic obstructive respiratory disease

Who we are

The Pulmonary Education and Research Foundation is a small but vigorous non-profit foundation located in Southern California. We are dedicated to providing help to those with chronic respiratory disease through education, research, and information.

Part of what we do is publish weekly articles and monthly newsletters on our blog that share information to help people suffering from COPD, and their loved ones, live their best lives while dealing with COPD.

Our articles cover:

- COPD research
- Treatments
- Methods of exercise
- Lifestyle tips
- Breathing Techniques
- And more…

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Table of Contents

Preventing Panic When Short Of Breath

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THE IMPORTANCE OF PROPER BREATHING TECHNIQUES FOR THOSE WITH COPD

Do you ever get so short of breath that you panic? It is instinctive for everyone to breathe faster and harder to relieve shortness of breath. Did you know this is the worst thing you can do if you have COPD (chronic obstructive pulmonary disease)? What you really should do is the exact opposite! To breathe easier you need to slow your respiratory rate, forget about breathing in and just concentrate on breathing out! Yes, this is counterintuitive. After you have read the information in this article you will understand why this will help you and why certain breathing techniques can relieve shortness of breath, increase the oxygen saturation in your blood and prevent panic. If you are interested in this explanation, or in learning other techniques that will help you enjoy a life free of the fear of shortness of breath or panic, keep reading.

Breathing Retraining Is the Most Important Thing

Over and over patients graduating from pulmonary rehabilitation classes have said breathing retraining is the most important thing learned in class. Once they had control over their breathing they were able to start exercising and learning all those other things offered. Who can think of exercise when they get short of breath walking across the room?

Of course, you have already discussed your shortness of breath with your physician. He (or she) probably has tested you for the various problems that can cause shortness of breath including heart disease, anemia, extreme obesity, asthma, and various types of respiratory conditions as well as pregnancy, but we won't go into that at this time. Maybe you are using prescriptions for medications or inhalers for COPD, and you've been tested for the need for supplemental oxygen.

If you have a respiratory problem, your doctor may suggest a pulmonary rehabilitation class if there is one in the area. Such a class helps you learn efficient breathing techniques such as proper PLB (pursed lips breathing). What if you don't have a pulmonary rehabilitation program nearby to help you? It probably is a little harder to learn those techniques without a therapist to help, but it still can be done.

Why Are You Still Having Sudden Attacks of Extreme Shortness of Breath?

If you have been diagnosed with COPD and are taking all the medications, or even oxygen, as prescribed by your doctor, why are you still having sudden attacks of extreme shortness of breath or even panic? How do you handle that, and what causes it? Let's start with a few basics.

Many of you may feel that you "suddenly" developed a problem with your breathing after getting that last episode of flu or pneumonia. Actually, emphysema is a disease that slowly progresses over a 20- or 30-year period. The first thing that happens, maybe while you are still a teenage smoker, is that the elastic fibers in your lungs start to deteriorate and lungs start losing their elastic recoil, that is, their ability to get air out of the lungs efficiently. Over the years this gets worse so you start to develop air trapping in your lungs.

Air Trapping In Your Lungs

Everybody has some air in their lungs, even after they breathe out as much as they can. This is normal and prevents the alveoli, the little air sacks, from collapsing flat as an old balloon. Patients with COPD may have a 200% or even larger increase in air trapping, known as residual volume, in their lungs. Why does that matter? That amount of extra air can compress some of the undamaged alveoli, so that they can't work efficiently, much the way an expanded air bag would

compress your body in your car seat. The other thing that happens is that those larger lungs push out your chest wall. Have you noticed that your chest size is larger, or that your bra size has increased?

Another effect of air trapping is that the upward curve of the diaphragm becomes flattened, which can be seen on your chest x-ray. When your lungs weren't damaged, the diaphragm did about 80% of the work of breathing. Now its ability to suck in air as it tightens and flattens is limited because it is already flattened out to make room for that extra lung volume. The mechanics of breathing are all thrown off. You start to use accessory muscles of respiration such as your shoulder and neck muscles. These muscles are only meant for use in emergencies. They are inefficient. If you think that you work harder on your breathing than other people do, you are absolutely right. Even at rest, you are probably working many times harder to breathe than a person without lung disease.

You Can Learn a More Efficient Way of Breathing

What can you do about that? You can learn a more efficient way of breathing! You have been breathing ever since you entered this world so why are you suddenly supposed to learn a new way to breathe? Because there have been changes in your body. If you remember what is wrong, it will be easier to make sense of the new breathing techniques you will learn. That loss of elasticity in your lungs is the first thing for you to remember. In practical terms, it means you now have to work to get air out of your lungs. Think of a balloon. You work to get air into a balloon but when you let go of the neck of the balloon, the elastic recoil shoots the air out of the balloon without any effort on your part. Your lungs do the same thing when they are not damaged. However, if they lose their elastic recoil you have to now work to get the air out. It's like breathing air into a paper bag. You have to squeeze the air out of the bag since it won't flatten out by itself. Now you also have to work to get air out of your lungs so you can make room for the oxygen in the fresh air you need.

Forget about breathing in which is automatic and not your problem. Your problem now is getting air out of your lungs to make room for the air you need to breathe in. When you have COPD you may need to breathe out 2 or 3 times longer than you breathe in to accomplish that. If you panic and

breathe too fast, or even if you breathe in and out at the same rate, you will cause more air trapping, leave less room for fresh air, and quickly get more short of breath. The other very important thing you need to do is slow down. Pace yourself! Walk across the room slowly instead of running to get across it before you get short of breath!

Does Pursed Lips Breathing Really Help?

What about this PLB, pursed lips breathing, we keep talking about. Does it really help? Yes, it does! Correctly done, PLB can raise the oxygen level of your blood as much, and faster, than being put on 2 liters per minute of oxygen. We have demonstrated that in test after test. Then why do some of you not feel much better when you use PLB? Why do you sometimes feel worse? Because you may not be doing it correctly! Done correctly, you breathe in deeply and slowly through your nose. You slowly breathe out about 3 times longer through slightly pursed lips with just a small opening in the center of your lips. Think in terms of gently blowing out hard enough to make a flame flicker, but not hard enough to blow out a birthday candle! Remember, it is very important to slow down your breathing and concentrate on breathing out. Pursing your lips is one of the techniques that helps.

Always remember, one of the biggest mistakes made is blowing out too forcefully. If you use too much force you can actually LOWER the oxygen level of your blood and make yourself become more short of breath! If you can be heard breathing out, you are working at this too hard! If you feel light-headed, or uncomfortable doing PLB, you are also working too hard. Stop and rest a bit. Good PLB feels comfortable and natural. Another common mistake is gulping a little air in through the mouth before breathing out, or while trying to breathe out.

Use An Oximeter

Using an oximeter is one of the easiest ways of telling if you are doing effective PLB. Borrow one to try if you can. If your oxygen level is low, say 88%, with good PLB you can usually "blow the number up" to 93%. Practiced breathers can sometimes get their saturation all the way up to 98% but 93% or 94% are good numbers to aim for. What happens if you breathe incorrectly? Maybe nothing, except that you don't feel less short of breath and may even feel worse. With the oximeter, you will see for yourself that

your oxygen saturation levels will drop, and continue to drop until you stop blowing out so hard.

What about those who suffer from a restrictive pulmonary disease such as IPF, idiopathic pulmonary fibrosis? Do these breathing techniques work for them also? Yes, a variation of PLB can help. There are many kinds of restrictive disease. Each patient is different and needs to experiment more with breathing techniques than someone with COPD. Doing so with the aid of an oximeter makes it much easier to learn the best way of breathing.

Patients with COPD will slow their breathing rate down to 10 or 12 breaths a minute to control panic. Patients with IPF who breathe very rapidly when they panic can rarely slow their breathing down to less than 16 breathes a minute. Since they do not have air trapping this is adequate. Again, PLB helps accomplish this. Always pacing themselves is even more important for those with IPF than for those with COPD. Just getting out of a chair too quickly can precipitate a drop in oxygen saturation levels and cause a marked increase in shortness of breath. Again, while pacing is important for all respiratory patients, it is essential for those with restrictive disease! This cannot be stressed often enough.

We hope you have been helped with some of these basic techniques needed to help control shortness of breath and prevent panic. There are many other factors, such altitude and exercise, that also affect breathing but space is limited and we'll cover them another time. Let us know if these or other topics are of interest by entering them in the comment area at the bottom of this blog post. Helping you is our goal! We do care.

Best wishes and better breathing to all,

Mary

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What Happens When You Drink Alcohol with COPD?

MUST YOU EXTEND THIS WHOLE "LIVE A CLEAN AND HEALTHY LIFE" REGIMEN TO ALCOHOL CONSUMPTION?

If you've been diagnosed with COPD, of course you're told that you should eat healthy, exercise, get adequate sleep, and avoid triggers such as pollen if you have allergies. Must you extend this whole "live a clean and healthy life" regimen to alcohol consumption as well? Or can you go ahead and have a drink when you want to, without affecting your COPD symptoms?

The first advice is to consult with your doctor. He or she knows your symptoms, your level of fitness and general health, and can give you the best advice on the subject. However, it's good to educate yourself as well. Here are some things to know about drinking when you have COPD:

Alcohol Lowers Glutathione Levels

Glutathione is an antioxidant that's found within the lungs, and when you drink alcoholic beverages, the alcohol in them will lower your glutathione levels. This can lead to COPD flare-ups. The probability and possibly the severity of such flare-ups can be worsened if you drink and you also smoke cigarettes. One of the things that glutathione does is help protect your lungs from tobacco smoke.

Alcohol Decreases Lung Function

Chronic ingestion of alcohol actually damages the surface of your lungs; and it's on the surface that the mucociliary transport system operates, attracting mucus and eradicating it from your lungs. This system is damaged by ongoing alcohol use and does not operate as well as it should. The result is that it becomes increasingly difficult

for you to expel mucus from your lungs. This can worsen your shortness of breath.

Alcohol Acts As A Respiratory Depressant

Drinking alcohol can make you feel less bothered by breathlessness for a little while, but this can be dangerous, because while you may not *feel* as much discomfort, still you are experiencing the same lowering of oxygen saturation in the blood that may bother you when completely sober. This lowering of oxygen can lead to an excess buildup of carbon dioxide in the lungs.

Carbon dioxide buildup is bad for anyone, but it's especially harmful for COPD patients, because their lungs, damaged by the disease, cannot respond properly to the buildup by increasing their breathing rate to expel the excess carbon dioxide. The result? You become even more sedated than would a non-COPD patient who consumed the same amount of alcohol.

Alcohol Can Interfere With Your Medications

Alcohol is known to interfere with many COPD medications such as glucocorticoids and antibiotics. Even small amounts of alcohol can have this effect. Similarly, the effects of anxiety and pain medications could be increased, causing your heart and breathing rates to slow down dangerously, even to the point of death.

Alcohol Can Damage Sleep

Many people feel that a drink at night helps them fall asleep, and this may be true, but it's also true that alcohol can cause you to wake up often during the night. This reduces both the quantity and the quality of sleep that you get in a night. Alcohol further acts as a diuretic, causing you to urinate more frequently. This can result in a headache and dry mouth and throat.

As a COPD patient, it's very important that you get an adequate night's sleep each and every day.

Alcohol Can Lead to Poor Nutrition

If you're a moderate to heavy drinker, you could be substituting alcohol for other more nutritious sources of calories, causing a general degradation in the quality of nutrition you take in.

On the other hand, you might find that you eat more when you drink than when you're sober, resulting in overeating, which can cause shortness

of breath, and which can lead to overweight in the long run; another contributor to shortness of breath.

Alcohol Can Increase Your Risk of Respiratory Infection

According to a study done by ATSJournals, heavy alcohol consumption may cause an increased risk of respiratory infections. This may be due to the adverse effect of alcohol on your immune system mediators. Interestingly, though, some of the data from the study suggested that light to moderate drinkers might actually have lower rates of exacerbations and longer periods of time before a first exacerbation than minimal drinkers.

Should You Avoid Alcohol Entirely?

That's not a question that can be answered with a blanket declamation. For example, there are many studies that show that the antioxidants in a glass of red wine may help prevent coronary artery disease, and therefore a glass of red wine every day may be beneficial.

Our advice? Don't discount the potential harm that alcohol can cause you as a COPD patient. Understand the potential risks. Do talk with your doctor about your alcohol consumption, and follow the advice that he or she gives you.

How COPD Patients Can Reduce the Symptoms of Dry Mouth

DRY MOUTH IS A LESS DRAMATIC SYMPTOM OF COPD, BUT IT'S UNCOMFORTABLE AND DISRUPTIVE NEVERTHELESS.

Dry mouth is one of the less dramatic symptoms that COPD patients sometimes experience, but it is uncomfortable and disruptive nevertheless, especially when it's severe enough to interrupt your sleep.

The technical word for dry mouth is xerostomia. It can wake you up with the feeling that your tongue, mouth, and throat are completely dried out, making it difficult to swallow. During the day, it might be less severe, but the effect can still cause discomfort and make chewing and swallowing food uncomfortable.

Luckily, in many cases, contributing factors can be identified and controlled, tamping down the dry mouth phenomenon. In other cases, such as when an essential medication causes dry mouth, a change in some daily habits or the use of mouth-moisturizing products can help to significantly reduce your dry mouth symptoms.

Contributing Factors to Dry Mouth

Consider these factors that might be contributing to your dry mouth symptoms:

- You may be taking antibiotics for an infection, and if so, it is necessary to complete your prescribed medication. However, some antibiotics can contribute to or cause dry mouth.
- Many antidepressants contribute to dry mouth.
- If you have a cold or allergies and are taking antihistamines to

manage your runny nose or watery eyes, the medication can also inhibit your body's ability to produce mucus, which can contribute to dry mouth.

- Inhaled bronchodilators. Both short-acting and long-acting inhaled bronchodilators, particularly anticholinergic bronchodilators, inhibit the production of saliva by your salivary glands, which can create or worsen dry mouth.

- If you're taking diuretics, most likely you know that they expel excess water from your body through urination. But you may not know that they also can reduce the activity of your salivary glands and cause or worsen dry mouth.

- Sometimes oral or inhaled corticosteroids can be prescribed to relieve breathlessness and they, too, can cause or contribute to dry mouth.

- Oxygen therapy. Medical oxygen is moisture-free, so using it can dry out your nasal passages, mouth, and

- CPAP Leakage. If you sleep with a CPAP, you could be experiencing dry mouth or worsened dry mouth symptoms due to air leaking out of your nasal mask or nasal pillow.

- Since ingestion of alcohol can reduce your intake of water, it can contribute to dehydration, which can cause dry mouth. Even if you drink as much water as usual in addition to your alcohol consumption, the alcohol can still cause your mouth to dry out.

- Spicy or Salty Foods. Both spicy and salty foods are known to initiate drying of the oral membranes.

Tips and Treatments for Alleviating Dry Mouth

- Medication Changes. If you're taking medications to help control your COPD symptoms, it's important to tell your doctor if you're experiencing dry mouth. It could be that an adjustment in dosage or a switch to another brand or form of your medication will reduce or eliminate the symptoms that you're experiencing.

- Dry Mouth Products. You might want to try one or more of the following over-the-counter products to help alleviate your dry mouth symptoms:
    - Biotene Dry Mouth Oral Rinse
    - Oasis Mouthwash
    - Biotene Dry Mouth Gel
    - ACT Total Care Dry Mouth Lozenges
    - Biotene Xylimelts
    - Biotene Moisturizing Mouth Spray
- Daily Habits. Keep a water bottle with you at all times so that you can hydrate at the first sign of dry mouth. This can be especially helpful at night when dry mouth can progress to very uncomfortable levels before it wakens you from sleep.
- Humidifier Bottle Attachment for Medical Oxygen. If you're using a continuous flow oxygen concentrator and you have dry mouth symptoms, you might want to try a humidifier bottle attachment, which adds moisture to the oxygen that you're receiving.
- Stand-Alone Humidifier. A humidifier for your bedroom can go a long way toward reducing your dry mouth symptoms.
- CPAP Humidifier or Mask Adjustment. If you sleep with a CPAP machine and you experience dry mouth during the night, consider adding a heated humidifier attachment to your CPAP machine. If you currently use a nasal pillow, you might want to try switching to a face mask so that whether you sleep with your mouth open or not, you'll still receive humidified air from your machine.

Just What Is A COPD Exacerbation?

"IT IS TIME WE STOP DEFINING A COPD EXACERBATION ONLY BY ITS SYMPTOMS. THE TOOLS ARE AVAILABLE TO BE MORE PRECISE."

Recently, a novel pilot study was conducted using what is called a "system network analysis" to determine whether the variables measured during COPD exacerbations, could help generate a new way of defining COPD exacerbations. A total of 69 variables were studied, including clinical, laboratory, microbiology, cytokines, and imaging. These were analyzed during 72 hours of hospitalizations and 3 months following discharge from the hospital.

The results of the study helped to describe the relationship between COPD and comorbidities (or the simultaneous presence of other chronic diseases or conditions besides COPD in a patient), and the potential role of a B-cell immune response.

One finding was that, during an exacerbation, the connection between lung function and cytokine expression of inflammation was disrupted, and each process or function became independent from the other.

A second set of findings was that, in addition to the presence of cough and sputum, there was a measurable increase in the perception of dyspnea (breathlessness). Additionally, the respiratory rate was higher during the acute phase of the event, there was a large increase in the blood levels of C-reactive protein (CRP), and the levels were directly related to the severity of the exacerbation. A high white blood cell count also was often present in exacerbations.

Though the study was conducted on a relatively small group of patients (a total of 14 individuals) and did not provide for baseline measurements of these individuals prior to their

exacerbations, and also did not compare their data to a control group of patients without COPD, the study is thought to be significant because it may provide the impetus for further research using integrative analytical techniques to provide a better definition of COPD exacerbations and to gain deeper insights into the effect of interventions on the pattern of response.

In the words of Bartolome R. Celli, the author of an article on this study published in the European Respiratory Journal, “It is time we stop defining a COPD exacerbation only by its symptoms. The tools are available to be more precise and following the guidance provided by Galileo >300 years ago, to measure what is measurable and make measurable what is not.”

An Overview of Pulmonary Rehabilitation

THE FIRST STEP IS TO ENROLL IN A PULMONARY REHABILITATION PROGRAM, WHERE YOU WILL RECEIVE GUIDANCE, COACHING, AND ASSISTANCE.

When you have shortness of breath caused by COPD, it's hard to imagine embarking on a regimen of pulmonary rehabilitation. After all, if you're frequently out of breath, particularly when exerting yourself, how can you exercise? Even if you've been told that exercise will improve the symptoms caused by COPD, pulmonary hypertension, or interstitial lung disease, how can you perform the actual exercise you should be doing, without running out of breath before you accomplish anything?

The first step is to enroll in a pulmonary rehabilitation program, where you will receive guidance, coaching, and assistance as you embark on your exercise regimen. The beauty of such a program is that it helps you manage your breathing problem as you increase your stamina and decrease your breathlessness. The program will teach you to be "in charge" of your breathing, instead of your breathing being in charge of you. Techniques you'll learn will include pacing your breathing with your activities, proper use of your medications, and making the most of your communications with your health care provider.

Best of all, when you exercise, you'll be performing activities designed specifically for you, and the pulmonary rehabilitation staff will supervise you as you work. You'll start at a level that you can handle, whether that means initially exercising while sitting, or getting right on a treadmill from the beginning. It all depends upon your condition and the amount of work that

you can perform without becoming out of breath. The goal will be to strengthen your muscles so that over time, you'll be able to exercise with more intensity or for longer periods of time without becoming breathless or overtired.

How Long Does A Pulmonary Rehabilitation Program Last?

The length of your pulmonary rehabilitation program depends upon your needs. Remember that it's important to attend every session because you will be increasing your exercises as you are able while the program staff monitor your performance. The more consistent your exercise sessions, the more rapid your improvement.

In general, most pulmonary rehabilitation programs meet two or three times a week and last between six and twelve weeks; sometimes more.

How Do I Begin A Pulmonary Rehabilitation Program?

The first step is to consult with your health care provider, who will evaluate your current state of health, your lung function test results, your current activity level, and your ability to participate in the activities you'd like to do – and, perhaps most importantly, your willingness to participate and to stick with the program.

What Happens When I Begin Pulmonary Rehabilitation?

You will find that you have an entire team behind you, often including nurses, respiratory therapists, physical therapists, occupational therapists, psychologists, dieticians, social workers, exercise physiologists and even spiritual advisors such as a chaplain. They will all be after the same goal: putting you in charge of your breathing.

The exercise you will do will be customized to match what you can do now and revised as you get stronger. Typically you will begin with stretching exercises or warm-ups, followed by arm- and leg-strengthening exercises using weights and lifting devices. Then you'll work on improving your endurance by walking on a treadmill or in a hallway or other unimpeded space or cycling on a stationary bike.

Pulmonary Rehabilitation Includes Education Too

You won't just be told what to do and when to do it; you'll be taught why and how your rehabilitation is working to help you breathe better and get

stronger. You might attend classroom sessions, and/or one-on-one consultations with members of your health team, and you also will receive education during your exercise sessions. You'll learn new ways to breathe during exercise and even during stressful times, and you'll practice these new techniques during your rehabilitation exercise sessions. You'll also learn about the best times and methods for using your inhalers and other medications. Patients are often amazed at how much exercise they can do, without becoming short of breath, after they've participated in a pulmonary rehabilitation program.

Are There Other Benefits of Pulmonary Rehabilitation?

Most definitely! When you participate in a rehabilitation program, chances are you'll have the chance to meet others who also have breathing problems, giving you the opportunity to share your concerns and successes with others who are living with lung disease just as you are. The beneficial effects of group support and camaraderie cannot be underestimated. Participants often have decreased levels of depression and anxiety as a result of rehabilitation.

How To Find A Pulmonary Rehabilitation Program

Ask your health care provider for a referral to a qualified program. The American Lung Association also can help you to locate a program in your area. If you live in or near Torrance, California, we here at LA BioMed can help you with a referral.

Singing With Shortness of Breath

EVEN IF YOU SHOULD HAVE SOME SORT OF RESPIRATORY DISEASE CAUSING YOUR SHORTNESS OF BREATH, SINGING WOULD BE ONE OF THE THINGS RECOMMENDED TO HELP YOU!

The following is a question we received from a patient. PERF board member Mary Burns, RN, BS, answers.

Hi,

I read your article on pursed lips breathing. What is the ratio of the intake of air and the release of it? Do I have to keep the air in for a while, by holding my breath? Should pursed lips be like whistling? I have shortness of breath when singing. Every time I have a performance and sing I lack air.

Thank you,

Vintage

Dear Vintage,

This is a good question. It sounds simple, but it is really very complex. The answer must be, "it depends." To begin with, it depends upon your general physical condition. There are many things that can contribute to shortness of breath that your doctor will consider. This includes heart disease, anemia, obesity, general poor physical condition, exercise deconditioning, high level of anxiety, altitude or even pregnancy! Do you have respiratory disease? If so, what kind and how severe? Other factors include your smoking history, the results of your last physical, and your lung function, which can be measured by spirometry.

Perhaps now you can understand why you need to discuss this with your doctor at your next visit. He or she can

help you evaluate many possible causes of your problem and hopefully get down to some simple causes and solutions.

While we can't give you any definitive answers, we do have a few general suggestions to consider until you see your physician when you'll know more about what is causing your problem.

Most important of all, your ratio between inspiratory and expiratory time should be whatever is comfortable for you. People doing effective pursed lips breathing don't work hard at it!

If you have COPD, you should try to slow your breathing and breathe out 2 or 3 times longer than you breathe in.

With some other pulmonary conditions, just slowing your respiratory rate down to 16 or less can help shortness of breath. Pursed lips breathing makes it easier to slow down the rate of your breathing.

Don't worry about pursing your lips like a whistle, which you certainly can't do while singing. Gently pursed lips may make it easier to raise your oxygen level if that is a problem and thereby decrease shortness of breath, but your breathing pattern is also important. So, slow your breathing down and try to relax!

Last but not least, remember that even people without any serious problems can have shortness of breath at times, especially when nervous or with a new activity. Don't worry about this too much, but do discuss it with your physician.

I'd also like to add that even if you should have some sort of respiratory disease causing your shortness of breath, singing would be one of the things recommended to help you! I've had patients with very severe respiratory disease who, after pulmonary rehab and breathing retraining, were able to return to singing in public. Whatever else you do, keep singing!

Best wishes,

Mary Burns, RN, BS

Life Hacks For The COPD Patient: 8 Ways to Simplify Your Daily Life

YOU CAN PLAN A FEW ALTERATIONS IN THE WAY THAT YOU DO THINGS IN ORDER TO AVOID TAXING YOUR BREATHING.

You know that when you have COPD, daily tasks that seem almost effortless for others can cause you to become short of breath. Perhaps you've decided that that's just the way it is, and you have to live with it.

Not really. With your COPD in mind, you can plan a few alterations in the way that you do things in order to avoid taxing your breathing. Here are 8 ideas to think about incorporating into your daily habits:

Use a shower chair

Standing in the shower for several minutes and balancing to wash your hair etc. can cause you to feel short of breath, or just tired. A shower chair can make a difference, allowing you to sit while you perform these daily tasks. Some chairs come with built-in containers to hold your shampoo and other supplies so you don't have to bend and straighten to pick them up and use them.

If you combine a shower chair with a removable shower head, you can easily control the direction and flow of water and make your shower easy and rejuvenating instead of tiring.

Wear easy-to-remove-shoes

Let's face it; as we get older, putting on shoes and taking them off takes more effort than it used to, and bending over can make many of us feel as though we're squeezing all the air out of our lungs.

Buy shoes that are quick and easy to slip on and off. You'll minimize the

time you must spend bent over compressing your midsection, and you'll ease the work of putting on and pulling off your footwear, saving you a bit of energy.

Consolidate cooking tasks

Instead of gathering supplies, then cooking, and then cleaning up every time you have a meal, try to cook two or three different meals or dishes at a time. Then stretch those meals out for several days. On your "off" days, all you have to do is reheat and serve, saving you all the repeated work of setting up and cleaning up several individual cooking operations.

You can also prep snacks in one work session and grab those snacks with little effort throughout the next several days. Wash and cut vegetables and fruit and store them in the refrigerator. Slice up a whole wedge of cheese so you can grab what you want over the course of several days without having to pull out the cutting board and knife and wash and put them away multiple times. And in one session, wash and cut all the vegetables that you intend to use in salads or dishes over the next several days.

Do away with fancy

Serving dishes are nice but they're not necessary, especially when getting them down from the kitchen cabinets, spooning the food into them, and then washing them after the meal takes extra energy that you don't really need to expend. Serve food from the original cooking dishes. Once it's on the plate, it won't know the difference!

Substitute "cart" for "carry"

If you don't have one already, buy yourself a compact wheeled cart that can maneuver easily through rooms and doorways. Use that cart to transport things like dishes from the table to the kitchen, laundry to and from the washing machine, and books and papers from room to room. You'll save energy and reduce the stress on your breathing.

Use a grabber

Handled sticks with padded pincers on the end can be a real energy saver. Keep one handy and use it to lift items from higher shelves and pick up things from the floor.

Break down big tasks into smaller pieces

If you're in the habit of doing certain tasks once a week, like "laundry day," and you find that you're exhausted afterward, consider breaking these

tasks into two different days. For example, instead of washing all clothes and linens during one long day, set aside one morning for clothing and one morning for sheets and towels. You'll reduce the number of trips back and forth and the time spent folding linens and clothing per session, and you won't drain your energy beyond your limits of comfort.

Use online services for groceries and household goods

Several grocery stores offer online ordering via their websites. Some will even deliver those groceries to you, and generally, their fees for the extra service are fairly low. Another option is Amazon Prime Pantry, a relatively new service that offers a large inventory of household goods at very reasonable prices. When you order online you'll receive your items within a few days.

Does COPD Discriminate Against Women? Differences in COPD Between the Sexes

YOU'D THINK THAT A DISEASE WOULD NOT DISCRIMINATE BETWEEN MEN AND WOMEN, BUT COPD DOES.

You'd think that a disease would not discriminate between men and women, but COPD does. The manifestations of COPD, both biological and cultural, differ between the two sexes. This difference has importance in both properly diagnosing and treating the disease.

Not only does the disease affect men and women differently, but doctors (statistically speaking) treat male and female COPD patients differently as well. Most significant are the data regarding diagnosis of the disease itself. More women than men are underdiagnosed or misdiagnosed every year, often being diagnosed with asthma when COPD is the correct diagnosis.

It also appears that genetic factors play into the difference in the effects of COPD on men and women.

Recent sex- and gender-specific studies on COPD indicate that the disease is now almost as prevalent among women as among men, and the number of female cases is continuing to rise. At the same time, mortality rates are decreasing more significantly among men with COPD than among women.

COPD Differences Between Men and Women

Here are some of the sex-based differences, called sexual dimorphisms, that have been revealed by epidemiological data from around the world:

Women may be more vulnerable to developing COPD due to exposure to risk factors such as cigarette smoking.

Women may, on average, experience more rapid and severe progression of the disease, and this difference may be due in part to lung and airway size differences.

Women with COPD may experience more difficulty with smoking cessation. When they do successfully quit smoking, however, they may benefit more greatly from the cessation than do men.

Men are more apt to develop emphysema, while women are more likely to develop small airways disease.

Women COPD patients tend to be younger and of a lower socioeconomic class, have lower body mass index, and smoke less than men with COPD.

Women with COPD have more severe dyspnea (shortness of breath) and more frequent COPD exacerbations than male COPD patients.

Women have a higher rate of airway hyperresponsiveness ("twitchiness in response to irritants), which is a marker for decline in lung function.

Additional health problems such as asthma, osteoporosis, inflammatory bowel disease, chronic heart failure, and diabetes are more prevalent among female than male COPD patients.

In general, women with COPD have a poorer quality of life than men.

Anxiety and depression affect more female COPD patients than men and tend to be more severe.

Finally, notes James F. Donohue, MD, Department of Medicine, University of North Carolina School of Medicine, Chapel Hill, NC, "anxiety can be associated with worsening dyspnea as can social isolation, which affects more women."

Genetic Components in Differences in COPD Between Men and Women

There is little data on why COPD affects women differently than men, but in a study reported in March 2017, it was suggested that women may possess genetic variants in the lung development gene CELSR1. These variants may affect the formation and structure of the actin-myosin lung cytoskeleton and lung branching. The resulting changes in the lung may increase susceptibility to COPD related to smoking.

The Importance of Spirometry in Correctly Diagnosing COPD

A study on the diagnosis of COPD among men versus women found that the doctors involved in the study underdiagnosed COPD in general, and more markedly among women. However, when spirometry information was used to aid diagnosis, there were fewer underdiagnoses of COPD and less evidence of gender bias.

It was suggested by Dr. Donahue that clinicians should perform objective tests like spirometry when adults of either sex who smoke have symptoms such as wheezing, dyspnea, and cough. Experts also suggest that environmental exposures should be considered when taking a patient's history.

Considering Stem Cell Treatment for Your COPD? Be Careful!

STEM CELL THERAPY FOR COPD IS NOT A PROVEN TREATMENT—AND BEWARE; THERE ARE BAD ACTORS IN THE FIELD.

You've probably seen the ads or the comments on Facebook or blogs: "You should try stem cell therapy for your COPD. It worked for me."

There are two reasons to be careful about seeking stem cell treatment for your COPD.

Stem Cell Therapy for COPD Is Not A Proven Treatment

First, stem cell therapy has not been proven an effective treatment for COPD. While we're not saying that it will never be effective, like many therapies under development, it deserves study. But for now, it is unproven.

There Are Bad Actors In the Stem Cell Clinic Field

Second, there are a number of bad actors in the field; unscrupulous outfits that are administering stem cell treatments to patients either without FDA approval or without adhering to standards of procedure that ensure sterility of the product being administered. At best, patients at these clinics are subjecting themselves to procedures that will not work for them; they are spending money on false hope. At worst, patients are being exposed to bacterial infections and other side-effects that could cause them serious risk; they could be made more sick than they already are.

Here are two examples in point:

US Stem Cell Clinic

The US Food and Drug Administration (FDA) Commissioner Scott Gottlieb,

MD, announced in August that the FDA sent a warning letter to US Stem Cell Clinic of Sunrise, Florida for marketing stem cell products without FDA approval, and for failing to adhere to good manufacturing practice requirements, which could affect the sterility of their products. Needless to say, both of these factors put patients at risk.

US Stem Cell Clinic was manufacturing its own stem cell product from adipose tissue and administering it either intravenously or directly into the spinal cord of patients to treat a range of conditions, including COPD. The FDA has not reviewed or approved any biological products manufactured by US Stem Cell Clinic for any use. In addition, the clinic was found to have failed to establish and follow appropriate written procedures to prevent microbiological contamination in at least 256 lots of stem cell products.

StemImmune Inc

The FDA announced also that it took action to prevent the use of a "potentially dangerous and unproven treatment" at centers in Rancho Mirage and Beverly Hills belonging to StemImmune Inc of San Diego, California. The US Marshals Service seized five vials of live virus vaccine at their centers, a vaccine that is reserved for people at high risk for smallpox and is not commercially available. The FDA is now investigating how the clinic obtained those vials.

New FDA Oversight of Stem Cell Centers

Dr. Gottlieb noted that these two centers are examples of a larger pool of centers that claim that their unproven and unsafe products will treat a serious disease, but that instead put patients at significant risk. "We will seek to take additional actions in the coming months as we address this field, and target those who are clearly stepping over the line," he said. At the same time, he noted, the FDA is developing a comprehensive and efficient science-based policy to accelerate the proper development of stem cell therapies.

(Bonus: Article #11!)

Breathing Techniques With COPD

By Mary Burns, RN, BS
Asst. Clinical Professor, School of Nursing, UCLA (ret)
Executive Vice President, PERF

IF YOU ARE DOING GOOD PURSED LIP BREATHING, YOU SHOULD BE ABLE TO INCREASE YOUR OXYGEN SATURATION NUMBERS

Those of you with restrictive disease will find that your oxygen saturations may plummet with activity if you don't carefully pace yourself and practice good breathing techniques. If you have COPD, when you breathe slowly, breathe out longer than you breathe in. Using good pursed-lip breathing (PLB) can make the difference between a normal and an abnormal oximetry reading. If you have a form of restrictive disease, you may need to try different breathing techniques to see what works best for you. Slowing your breathing helps, and using PLB slowly usually helps also.

If you are doing good pursed lip breathing you should be able to increase your oxygen saturation numbers while you are doing the PLB. The lower your saturation, the easier it is to "blow those numbers up." The closer your saturation is to normal, the better your technique needs to be in order to increase your saturation numbers. There are lots of patients with low oxygen saturations who are quickly able to increase their saturations up to 93% with good PLB technique. We've seen some superstars get all the way up to 98%, higher than the saturations they have on 2 liters per minute of oxygen!

WARNING! If you work too hard at your breathing techniques, you will see that you may actually lower your

saturations! So, relax and don't be an overachiever!

Why would you want to use PLB to increase your oxygen levels when you have oxygen prescribed for this very reason? For peace of mind! If you have confidence in your ability to keep your oxygen saturations at a safe level with your own breathing techniques, you never have to panic if you temporarily run out of oxygen! Also, proper breathing techniques, including a slower breathing pattern, enable you to better utilize your prescribed oxygen, and you may find you need a lower liter flow. Investing in an oximeter, if only to practice breathing techniques, may be of great value for those of you who have compromised oxygen levels with activity or at high altitude.

Remember that each person is different! Please be sure to discuss these breathing techniques and the use of an oximeter with your doctor, who will be able to give you advice regarding their use.