

# BREATHING FOR LIFE: OUR STORIES

AS WE BREATHE, WE HOPE

## Living with IPF A Patient's Story

It all started with the stairs. I noticed that I was out-of-breath each time I went from the bottom to the top of a flight of stairs. Up until then, I thought I was in good shape. I visited the health club regularly, pumped some iron, and did a fair amount of walking/running on the treadmill. In spite of this exercise regimen, by the time I reached the top of the stairs at home, I was gasping for breath. Something wasn't right.

It was a sign that my life was about to change significantly. I went to see my internist, who in turn referred me to a pulmonologist. My lung doctor started talking about something I had never heard of—Idiopathic Pulmonary Fibrosis (IPF). Researching IPF on the Internet produced some very unsettling results. It's progressive, debilitating, and terminal. There is no known cure, although a lung transplant can sometimes delay death. The overwhelming task now facing me was learning how to live with this disease.

I've heard that the first reaction to really bad news is denial. I tried it and this strategy simply didn't work. Every time I went up some stairs, I got an unpleasant reminder of my "condition." I had many well-meaning friends who'd ask, "Are you alright?" when they found me gasping for air. Another reminder of something I couldn't deny.

Because I felt pretty well, except for going up stairs, I didn't want to give in to accepting I had this terrible disease. But after much reflection, more research on the Internet, and a good bit of trial and error, I worked out a personal plan based on the new reality in my life. Facing an uncertain future, I decided it was time to stop working and retire. Moving to a warmer climate where it was a bit easier to breath, I began to "live a little" and, most importantly, I got into a pulmonary rehabilitation program.

I'd read about such rehab programs on the Internet and I'd be happy to attest to their benefits. Pulmonary rehab teaches you the correct way to breath and improves your

# Newsletter

physical condition so you make more efficient use of the oxygen you take in. It's also often a mandatory prerequisite for getting a lung transplant. Transplanting a lung is major surgery with significant trauma to the body. Being in good shape improves your ability to tolerate the procedure and can improve your out-come.

Now my days are filled with trips to the gym, taking adult courses at Duke University, and volunteering with a couple of local organizations such as my homeowner's association and Duke's Life Long Learning Institute. And, I do enjoy my afternoon naps. When I have to stop and catch my breath after walking up a hill or some other incline, I occasionally get asked if I'm okay. My standard answer is "Yes, I just have some lung issues." I now use oxygen when working out and once in a while when I feel that I'm not getting enough air. I no longer do "heavy" physical labor. For example, I gave up mowing the lawn even though the mower was self-propelled. I take it slow going up and down stairs and I occasionally have to stop and rest while walking, but that's okay. I will get there eventually.

Also, I have become more careful during the flu/cold season. This includes the regular use of hand sanitizer and sometimes using a surgical mask when I'm around people who are coughing up a storm. One lung disease is enough. Compounding it with the effects of a cold, flu, bronchitis, or some other nasty, is not advised.

Apart from these adjustments, I try not to let IPF take over my life. I will admit, though, to occasionally taking an elevator as opposed to the stairs, and parking close to the Mall's entrance so I don't have to walk too far. Some days, I find myself huffing and puffing after mild exertion, while other days I breathe a little easier. The same is true when I inhale. Some days, I notice that my intake is not what I'd like and wish I could take in more. Other days, I don't seem to notice at all.

I'm of the opinion that there are two parts to living with IPF: the physical side and the mental side. Both are with

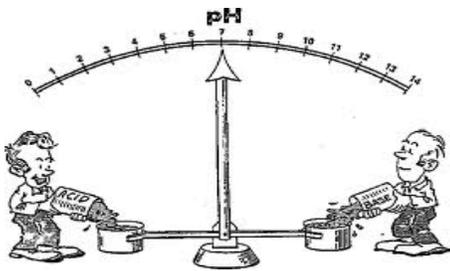
me always, but to varying degrees. And each can influence the other.

After six years, I've come to realize that there is no escaping the physical problems that accompany IPF and, if you let them, they can affect your mental outlook. I try not to let that happen. I can't change the situation and constantly thinking about it just leads to depression.

In fact, whenever I can I like to poke fun at my disease like suggesting that my oxygen supplier mix in nitrous oxide so I'd laugh a bit more. Laughing, in fact, may be the best medicine. And, there are too many other, more pleasant things to focus on like: grandchildren, beautiful flowers, intriguing books, gorgeous sunrises and sparkling sunsets.

Len Goodman  
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## The ABC's of ABG's



Pulmonary patients often wonder why their doctors order arterial blood gas tests (ABG's) so frequently. They wonder exactly what information is obtained by this oh so tiny sample of blood. Hopefully this article will inform, explain, and put into understandable terms the ABC's of arterial blood gases.

### What does an ABG test measure?

Our blood contains many different components including various gasses. Yes, gasses. Oxygen and carbon dioxide are two of the gasses involved in breathing that are important to homeostasis, which is when the body tries to maintain a constant condition internally at all times. Your doctor can see how well the lungs are able to move oxygen into the blood and remove carbon dioxide from the blood, tell how much oxygen is in your blood, indicate the severity of a disease, and base a plan of care on the results s/he obtains from an ABG test. He or she can also determine if the renal system is reabsorbing

bicarbonate and excreting acids at appropriate levels.

**Normal blood gas ranges are: pH 7.35-7.45, pCO<sub>2</sub> 35-45 mmHg, pO<sub>2</sub> 80-100 mmHg, O<sub>2</sub> Saturation 95-100%, HCO<sub>3</sub> 22-26 mEq/L, Base Excess +or -2. Today I am going to discuss pH, CO<sub>2</sub>, and HCO<sub>3</sub> also called bicarbonate. Please see definitions for initials below.**

### What is the significance of a pH that is out of range?

An ABG provides a way for your physician to look at how efficiently your respiratory system (lungs), and your renal system (kidneys) are working together to maintain the perfect acid-base balance (pH) in your body. Keeping the ideal pH is one of the most delicate and important functions of our bodies. It is the ultimate goal of the relationship between the lungs and the kidneys. Tissues, organs and body systems die if our bodies are kept out of the ideal pH range for too long!

### How do our bodies keep the blood from being too acidic or too basic?

The pH is regulated by filtering of the blood in the kidneys and by altering the rate of respiration. If a respiratory problem causes the pH to become out of order, the renal system will attempt to balance the pH, and if the renal system has caused the pH to become off balance, the respiratory system will attempt to compensate. Balance must always be achieved by the opposing system like a seesaw.

In the hospital, clinicians can control the blood pH by controlling a patient's rate of breathing (using a BiPaP, a mechanical ventilator, or using sedation to slow breathing,) or by giving sodium bicarbonate to regulate the pH.

### Why use blood from an artery not a vein?

Blood in the vein - venous blood - has already passed through the body's tissues where the oxygen is used up and carbon dioxide is produced. Blood in the artery - Arterial blood - is needed in an ABG test because it uses blood where the oxygen and carbon dioxide levels can be measured before they enter body tissues.

### How are ABG's done?

By piercing an artery with a thin needle and syringe and drawing a small blood sample. The most common site is the [radial artery](#) at the [wrist](#), but sometimes the brachial artery, [femoral artery](#) in the [groin](#) or other sites are

used. Obtaining blood from an artery is more painful than giving a venous sample because arteries are deeper than veins and they are surrounded by nerves.

**Some of the conditions in which a Doctor might order ABG's are:**

- Acute (sudden onset) conditions
- Chronic (on-going) conditions
- All respiratory illnesses and respiratory failure
- Renal, kidney or liver failure
- Sepsis
- Victims of burns, poisons, or toxins, drug overdose
- Diabetic crisis
- Cardiac illnesses and cardiac failure

**ABG Terms Defined**

**Partial pressure of oxygen (PaO2)**-measures the pressure of oxygen dissolved in the blood and tells how well oxygen is able to move from the airspace of the lungs into the blood.

**Partial pressure of carbon dioxide (PaCO2)**-measures how much carbon dioxide is dissolved in the blood and tells how well carbon dioxide is able to move out of the body.

**PH**-measures hydrogen ions (H+) in blood normal pH is 7.35 and 7.45. A pH of less than 7.0 is called acid and a pH greater than 7.0 is called basic.

**Bicarbonate (HCO3)** - Bicarbonate is a chemical (buffer) that keeps the pH of blood from becoming too acidic or too basic.

**Oxygen saturation values (SaO2)**-O2 content measures the amount of oxygen in the blood. Oxygen saturation measures how much of the [hemoglobin](#) in the red blood cells is carrying oxygen (O2).

**Base excess and base deficit (BE)**-refers to an excess or deficit, respectively, in the amount of [base](#) present in the blood.

S. Porter RRT, RCP of Respiratory Skills, Inc.

**Delightful Fruit Salad**

- 1/4 cup orange juice
- 1/4 tsp
- 1 tbs Sugar
- 1/4 cup white wine
- 1 pear,



- 1 apple
- 1 cup grapes
- 1 orange
- 1 banana

Cut up fruit in a bowl. Combine juice and spices. Boil 7-10 minutes. Remove from heat. Stir in wine. Pour syrup over mixture. Stir gently. Refrigerate 2 hours. Just before serving add banana. Toss and serve (cooking white wine also works or you can eliminate the wine).

Mary McCain



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**HOW TO GET A DATE ON OXYGEN!**

- 1: Appearance :**  
Make sure you look your best, even when sometimes you know that it's very hard to do.
- 2: Smell:**  
Always smell fresh, not too much perfume or cologne. Too much turns a person off or causes him or her to cough.
- 3: Smile:**  
Smile, smile! Although it can be hard at times, that smile shows off those pearly whites and beautiful smile, which in turn can go a long ways when trying to get a date on oxygen.
- 4: Greet:**  
Please don't greet with a "hello how are you doing," which could open up a whole new chapter. Instead, say "hello you're looking good or nice today."
- 5: Ask:**  
Now, go ahead ask that man or woman out for a date - just make sure there is no ring on the wedding finger.

Catherine Lee

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