



- Dr. Drew Sinatra: Welcome, everyone, to another episode of **Be Healthistic**. Today on our “Ask the Doctors” segment, we’ll answer questions that you have asked us on Facebook. And our segment today is going to be all about COPD, or chronic obstructive pulmonary disease.
- Dr. Drew Sinatra: Now if you've ever heard the terms chronic bronchitis or emphysema, those are really the conditions that we're going to be talking about today. And you may not know this, and this is something that I actually learned while I was preparing for this “Ask the Doctors” segment today is that COPD is, in fact, the fourth leading cause of death in the United States. Fourth leading cause of death, and it affects over 15 million Americans, which is pretty significant. And what COPD is, is it's really a chronic progressive lung disease that basically results in the reduction of air flow over time. So on a cellular level, the ability of your lungs to exchange oxygen and CO2 becomes compromised. And this can be a condition that really affects the quality of life for people. Now, Dad, as a cardiologist, what was your experience with COPD?
- Dr. Steve Sinatra: Well, actually one goes with the other. Remember that the heart and the lungs share the same circulation, so if you're compromised on the lung side, then you're certainly compromised on the heart side, as well. And as a heart specialist, I used to dread the fact that if I was seeing somebody with a heart attack, or a malignant cardiac arrhythmia, if they had COPD at the same time, chronic obstructive pulmonary disease — then my job was a lot harder, in trying to get them in better shape. So, if a heart attack occurs in a smoking individual, or let's say a coal miner, or somebody that's worked with asbestos, or somebody that has a lot of environmental toxicity...my job was certainly incredibly hard. Because once both circulations are involved, both vital organs are involved...you know, one can impact the other, and that's when I saw the most complications.
- Dr. Drew Sinatra: Yeah, I'm happy you mentioned the smoking piece, because that's really the underlying cause, or probably the major cause for COPD. And, in fact, 80 percent of COPD patients right now in the United States have either smoked or are currently smoking. So in terms of prevention, we need to tell people to please stop smoking, because that is ultimately the number one cause of COPD. And like you mentioned, too, Dad, all of the other environmental exposures, too.
- Dr. Steve Sinatra: You know, Drew, I think I want to mention one environmental exposure because...it's sort of being eradicated now, which is sort of music to my ears. I don't know what it's like, you know, in Canada or California, but in the Northeast, we used to have toll roads everywhere, you know. Massachusetts Turnpike, Connecticut Turnpike, I mean the bridges going over into Manhattan.



Everything was toll roads, so what happened was when cars are slowing down and you were paying the toll, the auto emissions was like increasing, you know, because the cars were slowing down and then speeding up. And then when I had a health food store like 20, 30 years ago, I was reading about the impact of auto emissions and the impact, the positive impact of vitamin E in reversing some of the environmental toxicity of the auto emissions.

Dr. Steve Sinatra: And even as a heart specialist, you know, I was looking at this and it just made a lot of sense to me — even though it was decades before. Now with all the toll roads being, you know, you have all this monitoring going on and like, you know...but in Florida, we still have it. We have to slow down, you know, go through a toll road. But again, those auto emissions are really problematic, even with the cleaner gasoline today. So, for the environmentalists listening to this program, vitamin E is one of the great substances we can take to help eradicate some of these environmental toxicities.

Dr. Drew Sinatra: Yeah, we'll definitely get to some potential treatments towards the end. Let's talk to our viewers and listeners about what really COPD is, and we talked about it being a chronic progressive lung disease, meaning it gets worse over time. And really, the cardinal symptoms of COPD are shortness of breath or dyspnea, chronic cough, and sputum production.

Dr. Steve Sinatra: Correct.

Dr. Drew Sinatra: And some who are listening right now may be saying, "Well, I've got asthma, where does asthma fall into this category, because I've got those symptoms." And technically speaking, mild to moderate asthma doesn't really fall under the COPD umbrella — it's really severe, chronic asthma that can actually lead to COPD. But really, if you have someone that's having shortness of breath, they've got a chronic cough, they've got lots of sputum production — that's when you really need to start thinking around, "Well, hey, could this person have COPD."

Dr. Steve Sinatra: Yeah, and one of the things that I saw frequently was a combination of bronchitis with COPD, where the sputum production was even worse. Now with pure emphysema, I've seen many patients who did not have sputum production, but when they developed superimposed bronchitis on the emphysema or the COPD, then they would have sputum production. But usually sputum production was sort of an end sign, because it would take decades...and I saw patients who were smoking as kids into their 30s, 40s and 50s who developed early COPD — and then secondary bronchitis superimposed on it.

Dr. Drew Sinatra: Exactly, and just what you said there, too, Dad, with the history of smoking. That's always an important question to ask, because if you are currently



smoking or have smoked in the past, we need to bring that up, of course. Now, what about other symptoms, Dad? Like I know wheezing can be a part of the picture, also, tightness in the chest, exercise intolerance — is there anything else you can think of for COPD that people should be aware of?

Dr. Steve Sinatra: Well, the most important thing is when they got infections. In other words, whether they caught bacterial or viral infections. One of the things that I learned very early was if you do have COPD, and you did develop an infection, some of these people responded immediately to antibiotics — and then some people, if you withheld antibiotics for any reason, they would progress and get worse and worse. And unfortunately, I've seen people go on to full blown pneumonia, as well. So even in this, you know, COVID-19 epidemic, or pandemic we're in right now, I mean certainly COPD is a comorbidity, where people have to be very careful. And smoking is a major comorbidity with COPD, as well.

Dr. Drew Sinatra: Exactly.

Dr. Steve Sinatra: And COVID-19.

Dr. Drew Sinatra: Now, if someone has these signs and symptoms that we just talked about, what are really some of the diagnostic tests that can be run to confirm a COPD diagnosis?

Dr. Steve Sinatra: Well, a classic test is what we call an FEV1. I mean, that was, you know in my day, and it's still a big test today where, you know, you breathe in and you force out your air within a second. And in other words, if you have chronic obstructive pulmonary disease, where you have narrowing of the bronchials or you have air sacs in the alveoli, you can't get the air out. It's almost like an asthmatic situation. So, the FEV1 is prolonged, and when we see a prolonged forced expiratory volume, you know, FEV1 — well then that's, sort of, almost the sine qua non of chronic obstructive pulmonary disease. So, you know, that's easy to do, and these pulmonary tests can be done by pulmonary technicians, and the doctors get reports and they make decisions on it.

Dr. Drew Sinatra: Yeah, so that's the spirometry test that people may have. And, you know, people have always asked in some of these Facebook questions, "Well, what about a chest X-ray, can that diagnose it?" And really, if you want a chest X-ray or get a chest CT, that may help you understand if you've got emphysema, because we can see the damage that's being done to the lungs. But really...and you can also exclude other conditions like lung cancer, for example. But really, it's all about the signs and symptoms, and the spirometry test that you just talked about, with FEV1 and all that.



Dr. Steve Sinatra: Right, right, and you can check total lung capacity and all those things. But, you know, a chest x-ray for emphysema or COPD, it's usually...those findings are usually seen on the latter stages of the illness. And I got to tell you, I was blessed — I studied with one of the best pulmonologists in the United States when I was really a resident in medicine at St. Francis Hospital and Medical Center. And he used to show x-rays all the time when we had our resident's meeting, you know, every day, he would put up these x-rays. And he was even a specialist in what we call a diffuse lung lesion — which is what we're seeing today with COVID-19, it's actually a diffuse lung lesion. It's the total opposite of COPD, asthma and, you know, I mean it's unbelievable. But you basically get like a glass-like picture of the lung, which is really a hemorrhagic-type situation in the alveoli. But, you know, that's one of the worst things that I saw in my training and unfortunately, that's one of the things we're seeing today with COVID.

Dr. Drew Sinatra: Right...well, Dad you mentioned the toll booths, and the air pollution aspect with cars. I also wanted to bring up, too, on the West Coast, those of us that have been living here for the last two months, it has been an awful time with these forest fires. And the amount of particulate matter that we're being exposed to and breathing in is unprecedented. I mean, I can't tell you, Dad, how difficult it was to be inside for many weeks at a time.

Dr. Drew Sinatra: So let's talk about some ways to kind of reduce a lot of this environmental toxicity piece that may be here in the lungs. Obviously it's stopping smoking, that's number one. Reducing your exposure to car emissions, if that's even possible — so roll your windows up, for example, right? Same things happens with the forest fires, you want to make sure if you're traveling in your car to roll your windows up. Get an air purifier in your home, to make sure the air that you're breathing in your home is clean. What else can we do in terms of the environmental piece, to kind of help reduce the risk.

Dr. Steve Sinatra: I just want to just give a tag along on that last statement you made. When we're in traffic jams, you know, put your recirc on in your car.

Dr. Drew Sinatra: Yes, thank you.

Dr. Steve Sinatra: That is so important, because if you're in a traffic jam, and you're not moving, and you got your windows down, and you're breathing in those auto emissions — that's not good for the body or the lung or anything, at this point.



- Dr. Drew Sinatra: Yeah, Dad, even my kids are trained now, where if they smell a little exhaust in the car, they say "Dad is that recirculation button on?" I say, "No, son, you're right, it's not!"
- Dr. Steve Sinatra: That's good, that's good. The kids, they're like canaries in a coal mine, you know what I mean? That's really important...
- Dr. Drew Sinatra: Exactly. So, removing all the causes — the smoking, you know, helping filter the air out in your home. What else can people do in terms of lifestyle stuff, like diet, supplements, all that? Let's dig into that.
- Dr. Steve Sinatra: Well, you know, I'm a big believer in a diet, and I did a little short video with Healthy Directions on this, about quercetin and onions. I read this Zutphen Elderly Study when I was a fellow in cardiology. Actually, I was an attending in cardiology, as well, because the study went on for decades. But these elderly Dutchmen...they were only interested, the researchers, in how long they lived. They didn't care whether they died of cancer, heart disease, or whatever. And I've said this before and I'll say it again — the biggest thing was the amount of quercetin in the blood stream. In other words, they could measure this, you know, and the Dutchman...the longest living Dutchman had the highest levels of quercetin in the blood stream.
- Dr. Steve Sinatra: So what does that mean? Well, if you were eating a lot of, let's say, green apples or eating a lot of onions — onions contain a lot of quercetin, or drinking black tea, these are the three top quercetin containing foods. And what the researchers showed that quercetin protected the body from inflammation. Now, let's fast forward three or four more decades. Now with COVID-19 and everything else, and respiratory illnesses, and SARS virus, and Ebola virus, and this virus, and influenza — what they're finding is that quercetin, this really magical bioflavonoid, protects...has a special affinity for the lung by protecting the lung in inflammatory situations. So I'm all in when it comes to quercetin, I love it.
- Dr. Drew Sinatra: That's a great addition, Dad, I like that, I do like that. I like to recommend that in regards to diet, people reduce mucus forming foods — so that can be dairy products for a lot of people.
- Dr. Steve Sinatra: Exactly, yes.
- Dr. Drew Sinatra: Yep. And I don't know if you're familiar with this, Dad, but what we've done before for a lot of patients with chronic bronchitis is nebulized glutathione. And I can't remember if you gave that to me as a kid when I had asthma, but it can certainly help people reduce some of their symptoms, if they have a nebulizer at



home, and get some glutathione to take, and they do a session once or twice a day.

Dr. Steve Sinatra: No, it works, Drew. And I'll never forget this, I was only in my mid-50s, and I was using IV glutathione in my office. And I'll never forget I had a guy come in with Parkinson's disease. He was shuffling in, and he had his Parkinson gait, and his cogwheel rigidity, and all that stuff. And I put him in IV glutathione, and he literally walked out of my office like a normal man. I mean, it was amazing. I mean, it was like totally amazing. And then one of the attorneys that my wife was, you know, Jan was actually working with, she says, "You can't do that, they're going to take away your license!" I go, "What do you mean I can't do this, I'm helping these people." "You cannot do this in the state of Connecticut." So it was amazing, you know, it's like, you know — she put the blocks on me and she says, "You know, as your attorney I got to tell you, you can't do this," and I said, "Oh, my gosh." But Drew, it was like night and day. I mean, and now we use glutathione for everything.

Dr. Drew Sinatra: Exactly.

Dr. Steve Sinatra: In fact, look at the vitamin Es that we can take are fortified with glutathione, and vitamin C, for example. I take a vitamin C every day, it's in the packet, fortified, it's in the liposomal delivery system, which really works. And I'll tell you, I think glutathione is one of the best things you can do. And you're a big proponent of NAC, n-acetyl cysteine.

Dr. Drew Sinatra: Well, it's a great segue way, Dad. Because yeah, if we don't have access to glutathione, if people can't get an IV, they can't do nebulized glutathione — well, taking oral NAC is a great substitute.

Dr. Steve Sinatra: Of course, because n-acetyl cysteine is broken down to glutathione in the body. And if you take selenium, as a mineral with the glutathione, and the selenium with the vitamin C, now you're forming the antioxidant, protective system, glutathione peroxidase. In other words, which is the most beneficial, endogenous antioxidant we form in our bodies for immune system support. So selenium, vitamin C, and n-acetyl cysteine is a winner when it comes to immune support in the body.

Dr. Drew Sinatra: Yeah, and really these products that we're talking about here are going to help reduce oxidative stress, which is happening because of the auto emissions, air pollution, the fire, the smoke that we're exposed to. So it's not only helping with detoxification, supporting lung function, but it's also helping reduce oxidative stress, which is great.



Dr. Drew Sinatra: Now, other herbs, Dad, I mean, I like to recommend things like licorice root. But of course, you got to make sure you don't have hypertension, and if you are taking it to monitor your blood pressure regularly. I also like herbs like elecampane, or yerba santa. But, of course, work with someone who's qualified to actually know how to use these herbs. But they can be really good as expectorants and mucolytics, to break up that mucus and to help you get the mucus out of your lungs more efficiently.

Dr. Steve Sinatra: Yeah, I had great success with licorice root tincture. You know, a few drops with water, and drinking it. And you're absolutely right, the worst contraindication is hypertension. However, if you are following patients who are hypertensive, mildly to moderately hypertensive, you have up to about three weeks where you could use licorice root safely. But you certainly cannot use it on a daily, chronic basis over several weeks, especially in people with high blood pressure. But it's magical, I could tell you that, for supporting the immune system, especially when it comes to a compromised lung.

Dr. Drew Sinatra: Yeah, exactly. Well, Dad, I think we've mentioned some amazing things today. We talked about COPD, what it is, and some treatments to help support it. Do you want to leave our listeners with anything else with regards to COPD?

Dr. Steve Sinatra: Well, I like astragalus and ashwagandha. I mean, I've always liked those herbal preparations. I mean, I've been taking ashwagandha for over 20 years as an adaptogen, I think it's really important. Astragalus, as well. I mean, I just feel that these are lung supporting herbs that work, especially when you take them chronically. So, I'm in favor of those. And like I said, I take them daily myself.

Dr. Drew Sinatra: Yeah, okay, that's great. Well, thanks everyone for watching today, I'm Dr. Drew Sinatra.

Dr. Steve Sinatra: And I'm Dr. Steve Sinatra, and I hope you got some information on preserving your lung health, because it's really important in this day and age, I could tell you that.

Dr. Drew Sinatra: And thanks for listening to **Be Healthistic**.