

Speaker 1:

I think that your mics are all muted. We're good there. If you want to stop your video so nobody's looking up your nose, that's probably a good idea. There you go, Brenda. All right. Questions go in the chat box. We have 16 slides. Then, I'd like to see if we can get into a discussion along the way. What we're going to cover is who is at risk, what are the symptoms, testing, prevention, actions you can take, and how does it look? Where are we heading? What's the future? As I see it, of course.

What do we know? At this point, the people who are at highest risk are the people who have hypertension, cardiovascular disease, diabetes, obesity, and, of course, the elderly. Now, interestingly, people with asthma or other pulmonary conditions do not seem to be over-represented in the population of people who are at risk. The question is, what do these things have in common? Simply put, these things affect circulation, vascular function. They, also, are associated with high levels of inflammation.

Oftentimes, actually, we think of these things as being related to what we call metabolic syndrome. They're associated with high cholesterol, vascular disease, increased risk of dementia, increased risk of arthritic diseases, just many, many problems that are related to this. This cluster is not so surprising. I think, the way to look at it is that the underlying issues that they have in common from a physiological perspective, are vascular and inflammation.

Take home message number one, this probably going to be with us for a while. Now, I know we want to think that two, three months, the summer is coming, this is going to die out. From what I'm gathering, listening to the experts, reading a lot of articles, there's not a lot of evidence that this is going to go away very soon. What's more likely is, right now, while we're boiling and the pot is boiling over New York, etc. What we're likely to do is go into a state where we are kind of simmering. What does that mean? That means we've got to kind of get our mindset around getting in shape for this thing, so that, if we are infected, we are in a good place when we're infected, because that's going to make a difference. If we get rid of those factors of inflammation, vascular problems, we're going to be in better shape. This is your call to action. It's time to get healthy. That's message number one. There's no way around it now. It's time to get healthy.

How does this present? At first, we thought it was mainly a lung problem, but now, it appears at this point and, of course, our understanding is developing over time. It looks like, at this point, we have four clusters. We have a lung cluster, a gut cluster, a vascular blood vessel cluster, and a neurological cluster. The lung cluster typically presents with a sore throat, fatigue, dry cough, shortness of breath, and fever, more or less in that order. I'd say the sore throat might be the first thing, the fatigue might be the first thing. Then, the dry cough comes on with some shortness of breath. Then, a little bit later, the fever comes on.

Other people present with diarrhea, bout of serious diarrhea that can go on for several days. Then, some people, this is now being reported, are developing redness in their toes, their fingers, and something that I call ToeVID, because it shows up in the toes very often. It lasts for, maybe, a week or so. Then, it seems to clear up. Sometimes, there's ulceration.

Then, finally, neurological. There are now reports of neurological problems. Maybe, the loss of the sense of smell and taste could be a sign of that. It could also be a sign of decreased zinc levels. We don't know yet, but these are the clusters we're seeing.

Now, how does this happen? It seems, at this point, that there are four primary processes that this virus creates. First of all, when the lung is affected, the transfer of oxygen and carbon dioxide in the lung is impaired. Second thing is what you may have heard about, this cytokine storm. That's the immune system fighting this virus. It really is very aggressive in doing that. That creates a lot of collateral

damage. Another possibility it looks probable is that the virus actually breaks hemoglobin. It cleaves hemoglobin into what are called porphyrin rings. Then, it uses those porphyrin rings to gain entry into the cells. The result of that, however, is your hemoglobin, which carries oxygen, no longer can carry oxygen. Even in those cases, you can be breathing in oxygen but your blood can't carry the oxygen very well. Finally, there's the changes in blood clotting, which can be quite devastating.

This is one of the most important things. The virus gets in by binding to a receptor that's called the angiotensin-converting enzyme 2 receptor. This receptor is present in the lungs. It's present in blood vessels. It's present in the gut. Now, because it's present in blood vessels, that means it's present in every part of your body, but the areas where it's very highly concentrated is the lungs, the gut, and the blood vessels.

Once it's gained entry to the cell, then, it goes in and it goes through a replication process. You may be replicating the virus. You may be replicating, of course, and you may not have symptoms anywhere from a few days to as long as two or even three weeks.

What blocks entry into these receptors, these are a few of the things. These are some herbal types of things that, actually, have been shown to block entry or attachment to the ACE-2 receptor. We don't know whether it will be effective in this disease, but we know, based on other coronaviruses, that these things can be helpful. These are things that you can get online although it's a little more difficult these days to do that.

Licorice, I'll just mention, can raise blood pressure. That's not Twizzler licorice. That's real licorice. Twizzler licorice would send you in the other direction with all the sugar, etc. Licorice also comes as deglycyrrhizinated licorice. That is not what you want. You do not want DGL licorice. You want glycyrrhiza, but that can raise blood pressure. You have to really watch that. It can also cause retention in fluid.

Sambucus is elder berry, which you can get at Whole Foods or online. Luteolin, readily available. Resveratrol or Japanese knotweed, also readily available. Chinese skullcap root is a little tougher to find, but you probably can find it. These would be good preventative measures.

Other preventative measures. No sugar. Sugar is your enemy. Nancy's huffing and puffing. Sugar is your enemy. When I say sugar, I don't just mean a teaspoon of sugar. I mean things that have a high glycemic index. If you're my patient, you've heard me talk about this. These are things that you eat that turn into sugar quickly. That includes things like white rice, bread, cakes, cookies, juices, sugars, fruits. Most fruits are very high in sugar. When I say, "Have fruits and vegetables," that really should be vegetables and, maybe, a fruit. Look online if you're not sure. The glycemic index of a food is very, very important.

Now, if you have a teaspoon of sugar, your blood sugar will rise very quickly. It's pro-inflammatory. It suppresses the immune system. It causes all kinds of problems. If you were to eat that sugar with a plate of broccoli and, say, a piece of fish or a steak, the effect of the sugar is diminished somewhat, but it's still bad. The glycemic load, as what we call it, is reduced.

If you cut back your sugars, most importantly, what will happen is you will actually start to trim down, because you want your body mass index to come down. If you are overweight, you are vulnerable. Cutting out sugars and breads, and cakes, and starches, etc., is critical.

Another thing that's very important is zinc. 60% of the American population is deficient in zinc. Zinc actually fights this virus. If there's a lot of zinc in the cell, there are three places in the cell where the zinc can actually stop the virus or slow the virus from reproducing. Zinc is a big, big deal. You probably do need a zinc supplement because you couldn't get enough zinc in foods. There are foods that have

zinc, but you're not going to eat a ton of oysters or pumpkin seeds, so you need to get a zinc supplement.

Then, we have these vitamin A, D, and C. Making sure your vitamin D level is good. Vitamin A 20,000, units or so per day. Vitamin C, just as prevention, it could be something 1,000 to 2,000, depending on your tolerance.

Gratitude is very important. Gratitude is critical. We are all locked in our homes, pretty much. We're cut off from the people, many of the people that we love. Yet, we are in our homes. Yet, we have food. We are breathing. We can move. We have a long list of things to be grateful for. You have to shift your thinking, so that you start to pay attention to the good things. Very, very, very important. If you watch too much TV, you will be in trouble.

Sleep, very important, obviously. Excuse me. Sleep is very important. Hang on. Where, where, where, where are we? There we go. Sleep. Sleep is very important. Getting restful sleep. You can read about good sleep hygiene. The phone, getting away from the phone, away from the computer, etc. You read about that. Try to work on that. Do, maybe, a little meditative exercise before going to bed. Then, moderate exercise. This is not the time to become an Olympic athlete. You don't want to push yourself further than you usually go.

Take home message number two, the best medicine is prevention. That's what I want you to start thinking about. Probably, unless we have a breakthrough, and I pray we do, this is going to be a while. Get wrap your head around that. You got to prevent this. Those are the things we're talking about now.

Social distancing, that's going to be part of our life for a while. Outdoors, 12 feet, not six feet. If you go online, you'll see pictures of how these viruses are aerosolized and they spread quite readily. Indoors, 24 feet. Got to have your mask on. Very, very important. The numbers that they're saying six feet are really not very good. Wind conditions and amount of heat and light, etc. have a big impact.

Talk a little bit about testing, PCR testing. The testing for the virus, there are different types of tests. There's the PCR, which tests the actual RNA of the virus to see if it's actually in your body and if you're shedding it. The antibody tests, that will show whether you've been exposed and have developed a good response to it. Immediate antibodies, IgM or IgG. Now, the issue is that this field of testing is in chaos. I was actually asked to help bring tests to market and I refused, because in going over the data on these tests, which most of them come from China, they're very sloppy and they're not really worthy of being trusted. What I'm looking for is good quality testing that's developed in the United States.

There are lots of issues involved, because, for example, the antibody tests, there are different types. Is the antibody produced against the part of the virus that can cross-react with other viruses? Is it produced against the nuclear shell of the virus that is less likely to cross-react with other viruses? What if you get a false positive antibody test? Then, you say, "I've had the virus. I can go outside." No, we don't know that. What if they say, "Yes, you have antibodies. You can go outside." You'll get a false positive that says you have antibodies, and now, you go outside, but you didn't really have antibodies.

I did the math on that. If we have a false positive rate of about 1% and we do a million people with a case fatality rate of .5%, that means, for every million tests that are done, you'll have 50 people who die. These tests have their place, but do not be fooled into thinking that this is the be all and end all. This will be sorted out. Eventually, over the coming months, it's going to be sorted out. We're going to figure out what are the best tests, which ones can be done, and what are they going to tell you. Be aware, be very aware that the testing is going to be important, it's going to have its place, but it's not quite ready for primetime.

What if you get symptoms? This is my advice. I strongly recommend early intervention with hydroxychloroquine and azithromycin and zinc. Then, gargling with salt water, warm salt water every two, three hours, or so. Now, there's debate about hydroxychloroquine. It's kind of strange that it's become politicized. Matter of fact, yesterday or the day before, a study came out from the VA, which is a fairly good-sized study, that showed that, not only was hydroxychloroquine not effective, but, in fact, people who took hydroxychloroquine did worse.

Well, I read the study, and the problem with that study is that the hydroxychloroquine was given to people when they got in the hospital. By the time you get into the hospital, it's too late for hydroxychloroquine. This is something that works early in the course of this to prevent viral replication, viral multiplication. It keeps the viral load low, so that the virus can't decimate your system. You can still be sick. You can still be quite sick, but it keeps it under some control. It does that through several mechanisms, which, if anyone wants to know, put a question in the chat box. I'd be glad to tell you, but I don't want to put you to sleep.

The zinc is important to take with the hydroxychloroquine because the zinc, as I mentioned, actually slows down viral replication. It helps support the immune system. The hydroxychloroquine, actually, carries the zinc through the pores in the cell to get the zinc into the cell. It actually works very well together.

Additional tools if someone is ill. At home, warm baths are good because viruses do not like fevers. They do not like high temperatures. Vitamin C 1,500 milligrams four times a day. There are some hospitals giving vitamin C infusions, and they claim that it's helpful. Certainly not harmful, unless it causes diarrhea. N-Acetylcysteine, 1,200 milligrams three times per day. Melatonin, if you're ill, 10 to 20 milligrams in the evening reduces the activity of what's called the inflammasome. It reduces inflammation. That's a huge dose, but, in this setting, there's some evidence that could be helpful. Then, there are variety of herbs that can be helpful if you're ill.

Having an oxygen concentrator at home could be very good. You need a doctor's prescription for that. I have one patient. I got him. He's 63 year old. I got him on the hydroxychloroquine very early with azithromycin, the zinc, and melatonin. He ended up going into the hospital for a couple of days. Then, came out, which was wonderful. He's at home with the oxygen concentrator. If he had the concentrator beforehand, he probably wouldn't have gotten into the hospital. He wouldn't have gone to hospital.

Pulse oximeter, you can buy. They're available on Amazon now. They're worth having around. You could buy a couple. Sometimes, they don't work that well, so you can buy a couple. That's good. If your oxygen saturation on the pulse ox starts to go below 92%, it's time to consider the hospitalization. Particularly, if the respiratory rate goes up over 22 or so, and your pulse starts to go out of its normal range, which should be, usually, 60 to 70 for most people. What you would be monitoring is your oxygen saturation and health fast your breathing. As your breathing rate goes up, it's likely that you're having to breathe fast, because you're not getting enough oxygen. It's important to know that you can be doing well with this disease and suddenly fall off a cliff. That's kind of what happened to my son. It's a common pattern.

Psychologically, what do you do? I think one thing is you have to control the input into your brain, TV, news, etc. People are having nightmares. I, myself, have a few nightmares, because we're all faced radical change in our lives and an existential threat. You really need to control and try to remain in as normal a mind state as possible and enjoy your time at home, and learn how to use it to your advantage.

Stay away from and limit your TV and your news as much as possible. If you want to read the science, that's one thing. I, myself, have been helping to manage a case in the intensive care unit in Cornell, my niece. I've been very, very involved in her case for, sometimes, hours a day. I can tell you that when you're involved in the dark part of it, it really can pull you down. TV, they seem to know how to pull you down pretty quickly. You don't have to spend hours. Stay away from the TV as much as possible.

Put on nice music, Mozart, whatever you like. Not hard rock. Hard rock, actually, there are a lot of studies that show that it's actually disruptive to your stress response and your immune system, etc. Music that's pleasant and calming and soothing and enjoyable. Dance, enjoy it, etc. Control your input. Control what you read. Only talk to people who are upbeat. Be around people who are upbeat.

Gratitude, we talked about. Connecting with people. Zoom, Skype, whatever it is, telephone. Really stay connected, very important. Reach out to people who are alone. Reach out and connect to them. Help them out. Then, maintain your normal activities. If you had a routine before, try to do as much as what you were doing before as possible.

God and spirituality. I know not everyone believes in God, so forgive me. I don't mean to offend anybody here, but I happen to believe that there's a very, very creative and benevolent being, and that we all have a purpose in this world. Each of us has a purpose in this world, and we need to develop that purpose. In my view, you may not believe it, and that's fine. What I think we're seeing here is that we, on the planet, for the very, very first time, the entire planet is together as one experiencing one mental state, a state in which we are aware of our existential limitations of death, potential death, and we are sharing the same thing all as one humanity. That's pretty remarkable.

I think our responsibility here is to take what we're experiencing and actually elevate ourselves to a higher level of function and a higher level of kindness, etc. I think I can speak for myself, and certainly, most of us, that we were all running around, driving here driving there, doing this, buying that. In our mindless modes, doing our thing, trying to be good, but relatively mindless. Now, we've been shaken up. Now, we need to focus on the things that are most important. The people that we care about, the things that we care about have to become front and center for us. That's very important. For me, the good that comes out of this is that we are going to be stronger and we are going to be more mature.

I was kind of telling my brother, actually, the other day, I had lunch. Then, I grabbed the napkin, wiped my face a little bit. Then, I fold it, and then, put it back in the napkin holder. I said, "Why waste a perfectly good napkin?" You have to appreciate. You got to appreciate what we have and not be so wasteful. This is good, and the environment is getting a rest from our pollution, etc. Not that we want to pay the price that we're paying. I'm not saying that. Our interconnectedness is clear now. I do think that this is going to be a game-changing experience for humanity. We will slip back but we will not forget. This will not be the last global experience we have since we are so interconnected.

Make meaning of what's going on. That's what I suggest, because people are dying. If we can elevate how we behave towards each other, then we kind of take their lives and their deaths and make meaning out of it. We give it some value. I would say that's very, very important.

What do I see going forward? I think we're going to be simmering with this for barring a breakthrough. I hope I'm wrong. We'll be simmering with this for two to four years, is what my guess is. It could be less, but that's the way it's looking here. Social distancing and protection, that's going to be part of our lives for the next few years. Mask, part of our lives the next few years. Testing will become standardized. We will learn how to manage this. We will learn how to manage this. The most important thing is to optimize your health now, because prevention is key.

This too shall pass. Remember that. Very, very important. This is not forever. Get Healthy. Be kind. Do good. All right. Let me get to the questions here. Do you still think silver hydrosol is effective? I'm still using it. If I go out, I'd put a spray in the nostrils and spray a couple of sprays in the throat. I don't know if it's effective. I know it's a great antibacterial. It does have some antiviral activity, but there's no data on the coronavirus at this point, this particular type.

How much zinc per day and what type? Basically, you want two options. One option is zinc lozenges. Zinc lozenges are good because they kind of coat the throat. That's where usually this virus will gain entry. Remember, this virus can gain entry through food. If you order food from takeout, or let's say you order some food from Whole Foods, you get some cut of watermelon, or something like that, somebody sneezed on it, or inhale it, or whatever it is, you don't know that you eat it. You're going to get the gastrointestinal symptoms.

It gains entry, usually, through the nose and the throat. If you're having a zinc lozenge every two, three. That's a little too much if you're not sick, but let's say two times a day, that would be good. Alternatively, this is what I do, is I'm taking zinc, 50 milligrams of elemental zinc. That comes in different forms, picolinate, etc. I think what's most important is to make sure you get 50 milligrams of zinc. Zinc is very helpful for the immune system, helpful for the brain. You don't want to overdo the zinc. Zinc, if you take way too much, can lower your copper. It can be complex, but if you can take, say, 50 to 100 milligrams a day, at least, for a few months to see what's going on, and then, cut it back. Don't stay at 100 milligrams a day. That'd probably be too much.

Let's see. We have had patients on respirators who had success with chloroquine and Z-Pak before it was mentioned. Well, I hope that's true. I hope that's true. I don't know how many patients you've had. I'd like to know. That would be good. Being told to ask you to put your questions into the chat box. I wonder how many patients you've had. I'd like to know more about that, Lynn. I've read in a couple of places that most of the infected that have bad outcomes have low levels of lymphocytes. I was over 25 seems to be protective. It definitely causes lymphopenia, low lymphocytes. There's no question about that. That is just a marker. There are variety of markers of poor outcomes. That's one of the markers. It's not clear to me that level over 25 is protective, because the virus can actually wipe out the lymphocytes. I'm not so sure. Certainly, I'd rather have higher levels than lower levels.

Can you get a copy of my slides? Yes, you can. If you believe now that you had COVID, would you recommend getting an antibody test with the thought that your antibodies could help someone who is suffering? Or, would it be better to wait? Well, I'm not exactly sure. There's convalescent plasma exchange, where people are actually now giving their blood if they've had COVID. Yes, if you can give that, it might save a life. I think that's, probably, a good idea. The most important thing is, we don't know, if you have antibodies, if you are protected against reinfection. Remember that. You can have antibodies against Epstein-Barr, against herpes virus, and you can be reactivated.

In fact, my son, who seemed to have been in the clear, is now going through a period of feeling worse, nowhere where he was before. His oxygen saturation is very good, but he's having chest pain, fatigue that comes and goes in the same pattern. This is a virus that can reassert itself. Do not re-expose yourself. If you can get tested in a safe way, which you should be able to, for antibodies and donate, then, I think that would be a good thing. Again, it's an individual's circumstance, because it depends on how old you are, how vulnerable you are, how high risk you are.

Recording will go out tomorrow for everybody of this. My son tested negative. It was a false negative. He had all the symptoms, etc. I don't know if I mentioned. If you don't know, he's a very fit 39-year-old surfer. Very fit. He had just barely kept them out of the hospital.

Here's one from Melanie. "I am 54, genetic type two." I don't know what that means. Maybe, that means diabetic type two. "Asthmatic from exercise and virally. When I get to come in col, I always get bronchitis. I'm very concerned if I were to get this, especially, say, in two to four years. My daily regimen is oregano oil, zinc tablet, vitamin C, and a wellness shot. What else should I be doing?"

Well, you could look at those herbs. If I'm reading it right, if you're saying diabetic type two, then, you probably really should have a consultation with, say, some kind of integrative or open-minded doc to really nail down exactly what you should do. That would probably be very beneficial to you. I think that would be an excellent thing for you to do. It's not something I could really answer, because I have 25 or 30 questions. I'd have to ask it before I could answer your question.

At what point do I think the small business people will be able to open shop again? What I'm thinking is that we're going to need a protective gear. We're going to need gloves, good quality masks. We're going to need to have adequate testing, and really be good. I'm, myself, thinking about what can I do to see certain patients in the office. I'm thinking the patient has to come in showing a negative test, PCR test, and an antibody test, no temperature, no symptoms, etc. Then, we have to be gowned, and we're going to have to have a mask and gloves, and they're going to have to have a mask, and we're going to have air filters in the office, that antiviral. We'll have a setup.

The ones that I'm most worried about are the dentists. I'm not so sure how they're going to do it. At what point? Remember, I'm lacking a lot of information that the people in the government have. You could take what I say with a big grain of salt. I would say, depending where you live, it could be next month, but in other places, like New York, it might be three months or four months, five months. It's mostly going to be about protection for yourself and screening the people who come into your small business. If you're running a restaurant, you're going to need other systems to get that going again.

Men more are likely to die if infected? The answer is yes. There's a higher fatality rate. Question is why? The answer is, we don't know. I just read a paper earlier today about it being related to higher levels of cholesterol, and that statins could be helpful. I thought, it's not such a strong argument. That would tie in with the whole metabolic syndrome, the diabetic obesity, and hypertensive vulnerability. We don't really know exactly why. I've heard about people talked about the ACE-2 genes and that the ACE-2 gene is somehow segregated according to sex. I'm not sure if that made much sense. The answer is we don't know.

When do you stop taking hydroxychloroquine? Well, I'm not sure if this is somebody who is ill, or somebody who's taking it for prevention. The hydroxychloroquine has a half-life in the body of, roughly, 40 days. What that means is, if you took one dose of hydroxychloroquine, it would not be out of your body for about 200 days. When you repeat the dose, over time, you will raise your levels. It still takes about five half-lives to get rid of the hydroxychloroquine.

When you say, "When do you stop?" I guess, maybe, you're thinking about acute illness. That has to be judged on a case-by-case basis. What I did with my son is we kind of shaved it back every two, three days, saw how he tolerated it, waited. Sometimes, had to go back up on it. Then, eventually, got him off over a period of, maybe, 10 days, two weeks. That's a case-by-case basis. Obviously, you monitor your oxygen saturation, respiratory rate, your symptoms, etc., and make the best judgment. We don't have great data on this right at this point.

Is this more of a risk for type one diabetics? The literature that I'm reading is not segregating type one and type two diabetics. As long as you're controlling your sugars at reasonable way, it should be okay, I would say. If your cardiovascular system is in good shape and you're eating a healthy diet and you're getting a reasonable amount of exercise, I would say that you're doing very well. You might have some increased risk, but I think, if you can do that and control your diabetes type one well with your

lifestyle and your diet, etc., you would be ahead of someone with a type two diabetes that is not controlled.

What about the side effects of hydroxychloroquine and Z-Pak, like heart arrhythmia? There's a risk for something that's called QT prolongation with both of these medicines. The risk when you put them together is even greater. I've read different papers that quantify the risks. Some say that the risk is quite high, and some say it's quite low, and, compared with the fatality rate of the disease, the risk of this is much lower. Some of this depends on the individual and their vulnerability. Do they have pre-existing heart disease.

There are apps. There's one called Kardia with a K, K-A-R-D-I-A, where you can actually get a device that hooks into your phone and you can do an EKG at home. Then, send it to your doctor who can look at it to see if you have any QT prolongation. I think that's a good thing to do. That should give you an idea of what kind of risk you're incurring.

What's the safe amount of vitamin A? Probably, a safe amount of this is 10 to 20,000 units. Some people, I just was talking with a patient last week whose vitamin A level is too high. For that patient, there is not a safe amount of vitamin A. If you don't know what your level is, then, probably, 10 to 20,000 units. Some people are recommending 25,000 units a day. I'd say that would be the range.

Could you elaborate about the protocol for colloidal silver? That's what I was talking about before. What I do is, if I go out or have any potential exposure, before I go out, I'll put a couple of sprays in my nose and my throat. When I come back, I'll put a couple of sprays in my nose and my throat.

Have you heard anything about Type A blood people have more risks? Yes, there's some data that says Type A, and to some degree, Type B are more at risk, and Type O is at less risk. I've seen that now in two papers. I'm not sure what you would do about it to accept, maybe, you're at higher risk if you have those blood types. You still have to do the same thing, because it's not like a slam dunk, that if you have a Type O, you're safe. It shouldn't change your behavior that much. Maybe, you'll sleep better at night.

When do I recommend that schools reopen? We're going to have to see how this goes. I'm just concerned that it's going to depend on the areas. There are people out who are not wearing masks, and who are walking, they're not wearing masks. If they're shedding virus, they're spreading virus. If that happens, we're going to have recurrences. We're probably going to have recurrences, anyway, because many people are not immune. When we open up, people are going to be exposed.

This is why I'm trying to tell you, now is the time to get healthy. You want to go out. We all want to go out. Now is the time to prepare yourself. Now is the time to get healthy, because when you go out in a month or two or three months, whatever it is, depending where you are, you want to be in good shape. You really want to be in good shape.

It's going to be depending on the location. It's hard for me to say, but I certainly don't see schools opening this year. That's for sure. Again, I don't have a lot of information. I'm inclined to think that homeschooling could be a very appealing option, because kids spread this virus very readily.

Let me see was. What is this? I don't know how this popped up. I was taking colloidal silver by mouth, every day. I experienced vertigo. I never heard of that before. No. Diabetic A1C is eight, three weeks of frequent diarrhea, I guess. Do I get tested proactively for COVID? I think, if that's out of character for you, I would certainly get tested, yes.

How protective is the mask and gloves when you go to the store? It depends on what kind of mask, of course. They're not perfect. What I would try to do is go to the store when people are least likely to be around, and try to stay away from people and go to the store as little as possible. You can

order most things online these days. I think they're very helpful. They also help prevent the spread of the virus to other people. They're not perfect, but they're very helpful. Gloves, obviously, you need to think carefully about taking the gloves off before you touch your car, before you get into your car. You can reuse the gloves. Either wash them with soap and water well, or just set them aside for a week. Then, you could reuse them.

It is a funny joke from Dana. What percentage of cases have the minor symptoms? About 80% is what it's looking like?

Why not take hydroxychloroquine before any symptoms as a prophylactic? I think that's a great question. I've been kind of advocating for that for about a month now. I've been trying to get word to the people in power, because we don't have data. We don't know whether it really works, but the logic is that it should reduce the severity of the disease. I don't think it would prevent the disease, but it should reduce the severity of the disease. In fact, I am planning to start that myself prophylactically this week.

I heard zinc should be taken with quercetin, which is a transporter. Yeah, I've heard that too. There's only one study on quercetin has zinc ionophore that carries zinc into the cell. It could be true. I don't think it can hurt. Quercetin is good. It's a mass cell stabilizer. That can be helpful. There's some talk about people with this disease having mass cell destabilization.

I am a licensed psychotherapist in Rockville, who's seeing clients on video or phone call therapy. All right. Have they found those infected have certain blood types we talked about that already? I read COVID can go through air conditioning units, heat pumps. True. I'm concerned about the ventilation in these buildings. The virus can live in an aerosol for three hours, according to what I've read. If you're in a sealed building where the air is kind of being mixed, that's a bit concerning. I think if we go back into our office or when we go back into our office, every room will have to have a unit that cleans the air from virus particles.

Thank you for your review. My 78-year-old mother and 85-year-old father with hypertension left Chicago to go to their second home in Mexico in late February. They opted not to return in March due to the risk. Now, they are there indefinitely. We have the challenge of figuring out how to get my parents back to Chicago. Do you think it will be safe to fly with precautions anytime soon? Or do you think we need to pick them up and drive them back with the risk of making stops along the way?

Well, I guess I don't know what's the downside, although, there may be alone there. What's the downside of there staying there? Two of my kids, they're on the other side of the country. I want them to come back here, but how do you travel? Where are you going to sleep? It's not so safe to sleep in the car. That's a challenge. I would lean on having them stay there for some time until, maybe, we know more. I personally would not fly because, there, you're recirculating air. I have not heard anything about the airline's doing anything at this point. Maybe, they're working on it. I definitely would not fly. If I had to choose flying or driving, I think I would drive because you can control your exposure.

In Israel, people will go shopping and have their temperature taken before they enter the store. Does that make sense? I guess it makes some sense. It's a low level screen, but if you have a temperature, it's good to know that that person could be carrying it. I think that makes sense.

Let's see. Maybe, because men are more toxic, eating much more junk food than women. I'm not sure about that.

I have heard that eyes are an excellent root of infection. Do you agree that face shields and goggles would be additional useful protective agents? Yes, I do think so.

For someone already taking 100 milligrams of zinc a day to treat copper overload, that's with middle normal blood zinc level, when appropriate level of zinc supplementation strengthen? Yes. What would be an appropriate level of zinc supplementation? Some of it depends on your blood level of the zinc. You, probably, would tolerate a higher dose of zinc than other people because of your copper overload. The vitamin A would help you as well. Probably, vitamin A, too.

Do I know variants in the TP53 gene put you at higher risk? I haven't heard anything about that.

Preventative measure with taking tonic water with quinine. I don't know. One of the ways hydroxychloroquine works is by alkalinizing the endosomes, the lysosomes and endosomes, these little organelles inside the cell. Anything that alkalinizes you would probably be helpful. Quinine is alkalinizing or an alkaline diet, that could be helpful. The body is very good at keeping the pH in its proper range. They're exceptionally good at keeping the pH in its proper range. I'm not sure if you could drink enough quinine to be useful.

Do I take new patients? Yes, I do. Can hydroxychloroquine effect Viagra doses? I would go to druginteractionchecker.com to see if there's an interaction between hydroxychloroquine and Viagra. I'm not aware of that. Interestingly, there's some papers floating around about phosphodiesterase-5 inhibitors being helpful, potentially, in theory. Viagra, who knows, could be turned out to be helpful?

Are you available to accept patients for management of COVID? I can do that. You better contact me through the website. We can always talk about that.

Do you suspect the recurrence in the fall? As I said, I think it's going to be percolating through our lives for a little while. I would think of this as an opportunity to grow, to get work on your self-awareness, and to work on your gratitude and your health, and get out of some of those old habits that you had, and try and deepen your spirituality, if you are so inclined. A friend of mine is taking online a master's degree. That's how he's using the time. He's getting a master's degree in finance.

Be creative in how you approach this time, and grow from it. At least, this is my experience. Everything that happens in life that is tough, actually, can turn out to make you, not just stronger, but happier. We don't like this medicine. I don't like this medicine that we're being given. But this is the way it is now, so let's do what we need to do and let's get through it together. Let's hang in there together, as they say, because if we don't hang in there together, we will hang separately.

All right. Everybody, good night and thank you for being on the call.