UNMC Chancellor Jeffrey P. Gold, MD: Hello, this is Dr. Jeff Gold, and I'm the chancellor of the University of Nebraska Medical Center. And I want to welcome you to "Health Care Heart to Heart," providing insights into the medical and the scientific issues of the day. And as you may know, I'm a recovering cardiothoracic surgeon, a longtime medical educator and a firm believer in the ability of science to change lives for the better. Today, my guest is Dr. Dan Anderson, chief of the University of Nebraska Medical Center Division of Cardiovascular Medicine Dan Good morning. Great to have you with us.

Dan Anderson, MD: Good morning. It's an absolute pleasure to be here.

Dr. Gold: So, as both of us spent our careers dealing with heart disease, if there are one or two things that you wish more people knew about heart health, what would that be?

Dr. Anderson: I think that's a great question, because I think what -- even yesterday in clinic, I saw a patient who said, "Oh, my goodness, I've just been diagnosed." And I think what's really important for people to understand with heart health, is this is a lifetime opportunity to prevent progression of heart disease. I always tell people, it starts often when you're a young person, even in your single digits of age, and it progresses to the heart attack at the age of 50. So it'd be nice if people actually understood preemptively, we can take a lot of steps to prevent the catastrophic thing that happens at the age of 50, 60 or 70. And just go to your physician and talk to him and say, "What is it I can do to manage my heart so that I don't have problems, and I get to see my grandchildren graduate from high school," which some people are not fortunate enough to be able to do that.

Dr. Gold: And maybe even college.

Dr. Anderson: And/or college or etc. That's exactly right. It's something that people miss the opportunity to take care of, is take care of themselves. And, you know, when you're busy in life, you're distracted, you're raising your kids, but it's important to step back and really take care of yourself so that you can continue to take care of your kids and be an advisor to your grandkids.

Dr. Gold: You know, that's a great segue, Dan because you know, when you and I both started our careers, heart disease was still the number one cause of death in the United States. And regrettably, as you know, and I'm sure most of our audience knows, it still is today. And so prevention is really the name of the game, and you know, we've for a long time talked about diet and exercise and screening, but what are the things that you think our audience might not know about some of the important things that they can do, particularly at a young age -- because you know, when you're in your teenage years and in your 20s and 30s, you know, most people think they're invincible and that heart disease is something that only happens in the latter decades of life. But as you just said, that's when the prevention is the most important.

Dr. Anderson: Right, I absolutely agree. I think, you know, it's an interesting thing; as you just said, it's the number one killer. I do think the good thing about some of the research and the advances is that people don't die as much at the age of 45, 50 and 60, because we're actually surviving heart attacks. But we still have other types of heart disease that people die of. So we've shifted the mortality to a different kind of disease. I think it still goes back to your key point is, is that these are things that we can manage earlier in our lives. And we really should be doing that. And I think also bringing our children up, you know, so that they understand they can manage aspects in their lives. And there's lots of opportunities,

whether it's just simply understanding diet, the benefit of diet, the benefits of exercise, and enough exercise, the right exercise, you know. It's about behavior patterns, and what do you do and not do that are healthy or unhealthy -- you know, or approaches to it. So, I think it's just taking a much more global view of your health, your family's health and ownership of all that, in concert with your providers.

Dr. Gold: And, you know, I recall that I used to talk with patients all the time about lifestyle balance, that it's not all or nothing. I mean, people won't live on water and cardboard, right? And if you tell them they have to do that, there's no chance that they'll do that. But understanding what a balanced diet means, when understanding what a reasonable amount of cardiovascular exercise is, and maybe it'd be worthwhile just taking a minute during this recording, to talk about what is cardiovascular exercise, because there are many different types of physical exercise.

Dr. Anderson: I think that's a great add to the previous discussion is, what do we do for exercise? I think I always counsed patients, "Do something you love to do," because that's going to become something you're passionate about. Whether it's swimming, it's biking, or running -- and there are different physical limitations individual patients may have that will guide them to do one versus the other -- and then find a partner in crime. You know, find somebody who's your advocate, your support, who's your encourager. You know, we always have days where it's like, "Oh my goodness, I don't want to do that." You know, the best time is when you just finish it, and you think "I'm glad I did that." Somebody to help remind you of that. And I think that those are the things that I think we take care of and we control. And I think that having a plan to do it and building in those patterns and those habits – we always talk about it takes three to four weeks to develop a new habit, and that means persistence ...

Dr. Gold: Good, bad and indifferent.

Dr. Anderson: Good, bad and indifferent. You know, so think about it -- it's not just going to be an overnight switch to stop a bad habit. I think most important in what you were describing is, life and it's decisions are best approached, I think, in moderation. Do I have a piece of birthday cake on a special birthday? Absolutely. Do I have three pieces? I think I want to, but at that point I try not to, you know. So I think those are the moderate decisions to have dessert every day. No Do I have dessert when I go to restaurants? No, because those are calories that I know are not the best calories to eat. And plus, it contributes to the weight problem we all have, including myself. And then I think it's also acknowledging that it's a challenging venture to make sure you take care of yourself in a healthy way in our current marketed society in delivery of products, be it a vending machine at a high school, be it food that you select from a buffet of meals, you know. Walk through the buffet first, make your decision, you know, be acknowledging that it's a challenge.

Dr. Gold: Those buffets can be dangerous.

Dr. Anderson: Absolutely. And you can pick the wrong thing repeatedly. Or you can pick the right thing and go back and, in moderation, celebrate some of the smaller things that are tasteful, but maybe not very healthy. So...

Dr. Gold: Well, you know, I think we should just take a few minutes and just shift gears with our audience and talk a little bit about the impact of COVID. You know, in the early days of COVID, you know, now several years ago, people were seeing the inpatients who were diagnosed with COVID developing really severe heart failure and a lot of damage to their heart muscle. And now, in the long COVID reports that we're seeing, people who are not just three months or six months, but years out,

lingering effects of loss of heart function, or what we would call congestive heart failure, which can be extremely debilitating. So, what's the state of the art of that? And how much of that are we seeing? And is there any thinking about what might be done to try to help some of these patients because they're not few and far between?

Dr. Anderson: No. And I think that with that we clearly saw those first different variants had much more of an impact on, you know, what we see as far as direct myocardial injury and heart failure. I think the opportunities of light-in is that we've had a known viral entity that's caused a disease pattern. And what we're learning is that that's probably a paradigm across other viral particles and infections. You know that there are mechanisms that we're now looking at to say, "How do we manage and treat the acute phase so that it lessens the chronic phase?" But that results in the lingering symptoms of heart failure, or symptoms of heart failure that we need to manage? We manage them very much in the way that we manage all heart failure. You know, it's really about medical management and allowing the heart that's remaining -- that hasn't been irreversibly damaged by an infection -- to do the job it needs to do without progression and deterioration so you end up with severe heart failure or end stage heart failure. So I think knowing that that's there, and if you're having these symptoms, is to find a provider that works with this, can manage those problems, because there are very good medications to help protect you and add years of life. And so I think it's just getting into the system to say, "I've had COVI, I have these symptoms, I have this known problem. How do I treat it? How do I prevent it from progression?" In the same way, there's other aspects of cardiovascular medicine that people have presented with. You can have irregular rhythms, you can have tachycardias, you could have a number of things that present normally in the population, but it's an increased rate after COVID infection. And so I think that understanding that those things are there, not living with them but actually saying, "Hey, who could I see who can help me manage this in a way that's constructive and allow me to live my life as I expect or I wish.

Dr. Gold: And I think another message for individuals that may be in the post COVID cohort of patients, that if they're having symptoms, don't wait till they get severe.

Dr. Anderson: Yes.

Dr. Gold: Because there's really some very effective medication treatments that can prevent progression and also treat their symptoms. You know, it's almost like any other disease, whether it's heart disease or or any of the neurologic syndromes, or certain cancers, if not all cancers, that the earlier you can make a diagnosis, the more successful you are in preventing progression and in treating the disease.

Dr. Anderson: Yes, and I think on the other side, it's even a much more significant tragedy of COVID infection, is people who think, "I have post COVID, and I have long COVID, and I don't seek treatment, because it's just COVID, I'll get over it." I think you need to seek treatment for those symptoms, because if it is COVID, we help you to find a way to manage it. We also have found out that, you know, "Hey, you actually have lung cancer, and it's not shortness of breath from COVID." We've had people who have gone into late stages of lung cancer because they thought it was COVID, and "I watched it for two years," and now we have metastatic cancer.

Dr. Gold: And you know, regrettably, we are seeing a significant reduction nationwide in cancer screenings, as you may know. And it's not just the lung cancer, but it's for cervical cancer, skin cancers, breast cancer, etc. And, you know, hopefully that will kick up and make it back to normal levels. But there's a tremendous backlog of individuals that just have decided that they're going to hit the pause

button on their screenings. So, before we close, do you remember the day or the hour that you decided that a career in cardiology and treating heart disease was going to be in your future?

Dr. Anderson: Yes. An interesting and very, I'm going to say, circuitous pathway to cardiology. I think the context of...

Dr. Gold: You really wanted to be a surgeon, right?

Dr. Anderson: Surgery was in my in my bag of possibilities. I think when I did my PhD in cardiovascular pathology, I knew that there was something that I wanted to do, but I really was focused on inflammation of disease. So, when I went through my internal medicine residency, I liked inflammation, I liked hepatitis, I liked oncology, I was interested in rheumatoid arthritis. And as I did every rotation, I'm like, "Oh, this is a disease of inflammation." I mean, the short answer is, is that inflammation is a foundational aspect of most disease mechanisms. So, I found everything interesting. So, I actually had my fellowship application to gastroenterology, because I wanted to be a hepatologist, because part of my studies was viral impact on hepatitis and the inflammatory responses that occur in the liver, because there's an immune response -- the liver's responsible for our body. You know, and I'm like, "Okay, do I really want to do this?" I was actually set up and doing my interview. And I'm cleaning up my lab coat, and I'm pulling out EKG after EKG and rhythm strip, and I thought, "You know, I'm not pulling out pictures of colon polyps. I'm not pulling out pictures of biopsies." And then I thought, "What I love is the telemetry, the EKGs, the rhythms. That was my "Aha!" moment, when I thought, "Why am I doing this?" So I went to the program director, and I said, "I'm going withdraw my application." And I walked over to the department of cardiology, and I said, "I'd like to be a fellow next year." That was it.

Dr. Gold: And obviously, they said "Yes."

Dr. Anderson: Yes.

Dr. Gold: Well, congratulations, it's great to have you as a guest. And thank all of you for joining us on this episode of "Health Care Heart to Heart" with Dr. Jeff Gold. And please say healthy until we meet again.