



Dr. Drew Sinatra: Welcome, everyone, to **Be HEALTHistic**. Our audience is always asking about CoQ10. So for this “Ask the Doctors” segment, I’ll be interviewing the expert on CoQ10 — my father, Dr. Stephen Sinatra. Welcome, Dad.

Dr. Steve Sinatra: Drew, it's good to be here. I have a little humility about being called an expert on CoQ10, because I actually met all the experts on CoQ10, but they're mostly deceased right now. I mean, Karl Folkers, Fred Crane, Emile Bliznakov. I mean, these are the guys that really launched CoQ10, and I am blessed, Drew...I am blessed that I was in their inner circle, so to speak. I went on cruises with them, I attended medical meetings with them, I had dinners with them. So I felt like I was introduced to CoQ10 at an early age. In fact, my first introduction was in my early thirties, now I'm in my early seventies, and it's been about 40 years that I've worked with CoQ10. And I have to tell you, back then, I used to call it the miracle nutrient. Right now, it's for sure the miracle nutrient, because there has been an explosion in the literature over the last few years on CoQ10.

Dr. Drew Sinatra: Well, let's dig in about that, because I think our listeners probably know about the cardiac protective benefits, obviously, that CoQ10 can have. But apparently there was this research paper that you've sent out and I've read, that is showing all these, essentially, non-cardiac potential benefits that CoQ10 can have. So can you speak to some of these non-cardiac benefits?

Dr. Steve Sinatra: Sure. And this actually blew me away Drew, because...we're writing this textbook, which is going to come out in 2022, and one of the chapters is on metabolic cardiology. So when I came across this recent paper only a month ago, I mean, it was amazing, it was just incredible.

Dr. Steve Sinatra: And you got to remember when I was attending the anti-aging conferences, and when I became certified as an anti-aging specialist...everybody, I mean, I was the only one, everybody was talking about the neural hormonal theories of aging. They were talking about growth hormone, melatonin, certainly testosterone, progesterone, pregnenolone, all those hormones. Nobody was talking about the mitochondrial theory of aging. I was the only one...and now I'm going back 25 years. Drew, in the last few years alone, there's been thousands and thousands of articles in the literature about the mitochondrial theory of aging.

Dr. Drew Sinatra: Yeah.

Dr. Steve Sinatra: So you've got to remember, CoQ10 turns the clock back. In other words, it rescues mitochondria, it takes these mitochondria who are being decimated by insecticides, pesticides, heavy metals, UV light, all that stuff. But CoQ10, because of its magical, and I say magical, membrane stabilizing activity driving ATP in a preferential direction, and having this bioenergetic support, this is



where CoQ10's magic is. It's in the mitochondrial membrane, and when you're supporting the mitochondrial membrane, you're supporting the aging process. So I'm just all in on CoQ10. And again, I am blessed that these pioneers have intersected my path. I mean, and now you have it, now. And look, you did research on CoQ10 in the mouse model, you saw what CoQ10 did. They reared more, they had more energy, they had better coats. I mean, you did that original research.

Dr. Drew Sinatra: That was almost 20 years ago, too.

Dr. Steve Sinatra: And that was 20 years ago! And so, I have to tell you that I think CoQ10 has a lot of legs, and we're blessed at Healthy Directions because we use the cyclodextrin complex. And I was amazed, it was...this is a varietal of CoQ10, and Tishcon Laboratories uses this. And I'm so indebted to Raj Chopra, because when the Japanese reported that the cyclodextrin complex now improves the bioavailability of CoQ10 even more, and they were showing that CoQ10 had an impact on aging around the eye. In other words, the smoothing out the skin. I mean, can you imagine, all these aspects of CoQ10. Then there were aspects of being supportive to the kidney and calming inflammation down...not only in the brain and the heart, but the kidney, as well. So I'll tell you the truth, I just feel that by accident, and by fate, I'm so blessed that CoQ10 and myself have become buddies. And I have to tell you, I continue to be amazed and awed by this recent research on CoQ10.

Dr. Drew Sinatra: Yeah, I know, it is phenomenal. It is phenomenal. And they also mentioned relieving pain in fibromyalgia patients, as well, which is likely due to the whole mitochondrial supportive aspect.

Dr. Steve Sinatra: Mitochondrial thing. And again, this whole aspect about immune system support, I mean, supporting the immune system. And right now, we need immune system support. And basically, if CoQ10 can intercept these inflammatory cytokines, or lower NF-kappaB, interleukin 6, C-reactive protein — if we can lower these inflammatory cytokines and lessen what we call this cytokine storm, CoQ10, because it supports endothelial cell function, may have some utility in even infectious diseases going forward. So I am looking forward to even more literature to be released on CoQ10. And again, I just feel that we're blessed as a family to have been involved with CoQ10 for decades. And I'm so glad that you've been dealing with it for more than 20 years, as well. And remember, I had you taking CoQ10 when you were six, and seven, and eight years old.

Dr. Drew Sinatra: Thankfully, yes. It's a wonderful thing you brought on board at a young age there.



Dr. Steve Sinatra: You had an illness, you had those little asthmatic episodes, and I was treating you with CoQ10. So, I think you and CoQ10, going forward, is going to be a great combination over the next 10 or 20 years.

Dr. Drew Sinatra: Well, I've learned everything from you, Dad, so thank you.

Dr. Drew Sinatra: What about dose? I'm sure a lot of our listeners are wondering, "Well, I've got some of these conditions here that you just mentioned, is a standard dose of 50 milligrams or 100 milligrams sufficient, or do I need more?"

Dr. Steve Sinatra: In this toxic day and age that we're living in...I used to believe that 50 milligrams for a 40-year-old person was adequate, not anymore. I think 100 milligrams is really the way to go. Anybody my age group, 100 to 200 milligrams of a good quality CoQ10, a bioavailable form, is really the way to go with. A hydro soluble form is the one that we use. And I just think it's really important that the older you get, that the more CoQ10 you get. Especially post-menopausal women. I think women — and Karl Folkers taught me this — that women in their seventies, for some reason, they can't make enough CoQ10 in their body as a male in their seventies. So, any 70-year-old woman, I would say, a minimum, a minimum of 100, and preferably perhaps 200 milligrams of CoQ10 going forward, even if she's healthy.

Dr. Steve Sinatra: Now, if you have hypertension, hypercholesterolemia, high Lp(a), prone to infections, have immune system dysfunction, then go higher. Certainly any cardiovascular situation, like heart failure, even higher. Recently I've been using even 300 to 400 milligrams of CoQ10, especially in my adult patients who are pediatric patients waiting for heart transplants, now they're adults. And when I see them in the office, even now, I'll increase the CoQ10. But they're all thriving, they're all doing well. So I'm blessed that CoQ10 has helped a lot of these younger pediatric kids, who are now actually approaching your age right now.

Dr. Drew Sinatra: Wow. No, that's great, that's great. And lastly, Dad, what about those that are on a statin? Is this recommendation for dose still around 100 milligrams, or would you go higher?

Dr. Steve Sinatra: I would go probably go up to 200 milligrams now. Again, it's not just a statin...it's really the day and age of the statin. The electromagnetics, the Wi-Fi, the insecticides, pesticides, heavy metals, that whole toxic soup environment that we live in. And remember, and you said it so clearly, in a toxic environment, what suffers? Mitochondria. Mitochondria are so vulnerable, especially in the inner membrane of the mitochondria. So it just makes sense to take more CoQ10 to rescue the inner mitochondrial membrane. We've gone 360 with this,



and I just feel so blessed that CoQ10 is in our tool bag, or basically our handbag of instruments that we use on a day-to-day basis to treat our patients.

Dr. Drew Sinatra: Well, Dad, keep us posted on all the new research coming out, especially on the immune system. I think that's a fascinating piece that you mentioned, so we look forward to hearing more in the future.

Dr. Steve Sinatra: Yeah, maybe in the next six months to a year, there'll be more literature. And we could talk about more aspects of CoQ10, because I'm still really surprised right now, it's really wonderful. So thanks for bringing it up, Drew, this was a great conversation, I enjoyed it a lot.

Dr. Drew Sinatra: Yeah. Thanks for updating us, Dad.