

# Primary Care Cures

## Episode 158: Dr. Malcom Kendrick

Ron Barshop:

Are statins a no-brainer or are they a trillion dollar long con? The Bernie Madoff of meds? My eldest son did his residency and soon he'll finish his fellowship at two world famous Boston hospitals and he loves me, of course, and recently insisted that I start taking statins as a no-brainer way to ensure cardiovascular health. "Dad, you have a giant investment in me. Might as well enjoy it." Well, he was shell-shocked when I said, "I took lovastatin back when I weighed 45 pounds more a few years ago but I've stopped and I'll never again take another statin. You see, I read this really comprehensive book. You want to see it, son?" "No, dad. It's well beyond debate. I'm going to start soon, myself."

Ron Barshop:

Now, Kenneth is pushing his mid-30s, he's got a flat belly, he eats and drinks and moves and sleeps, in my estimation, all pretty rightly by any measure. And if not for his daft father, he even stresses out correctly. Little heart disease in the family that we know of, but we Barshops mostly seem to die from Jewish guilt. And it's kind of caused a rift. That was the end of that.

Ron Barshop:

I've learned in the last few years to purge my life of all but low glycemic foods. I eat lots more proteins and my peas and my beans and my powders and I take increasingly and I'm all about intermittent fasting so I only eat in a six-hour window and I now optimize my daily hydration with a hydration coach, believe it or not. There are those people out there. And I get lots of sun-soaks with good habit stacking.

Ron Barshop:

After reading a second book by the same author ... You may guess that's today's guest ... I'll start intensity training around the track 10 minutes, four times a week. Maybe I'll do burpees 10 minutes, four times a week. I'll start even more lower carbs and I'll not decrease my salt; thank you Lord. Maybe, even, I'll meditate to lower stress even though that's a real stretch for my monkey brain. And I'll add a few other ideas that we're going to talk about today.

Ron Barshop:

Maybe today's episode repairs that rift with my son. I'll send it on and I'll let y'all know. Okay, so maybe we have got statins completely wrong in the west. In fact, be prepared to rethink the whole cholesterol hypothesis and meet its new replacement, only if you trust the facts in biochemistry, cardiology, hematology, molecular biology ... And I can think of seven or eight more ologys that are all careful outlined and nicely explained for us laypersons in this, my favorite book of 2022.

Ron Barshop:

My new statin equivalent is the authentic gold standard, having lost over 15% of my body weight and kept it off several years with a solid plan. And I have further plans to drop further down to my fighting weight back when I used to train for marathons about 20 years ago and I should get there by the end of summer.

Ron Barshop:

What's wrong with western medicine cardiology, our number one killer, besides the standard high-carb American diet that is so God awful for us? Well, today's guest has written this solid alternative hypothesis that shatters the cholesterol hypothesis like NBA ballers shatter the backboards in a million pieces. Our guest won me over with his important new book called *The Clot Thickens*. What a great title. He gives all the credit to his son. But it's a geek-out fest on the deep-dive bioscience behind statins and cholesterol and it's funny, funny, funny. I told him I was mad at him because I had to read this book slowly rather than fly through it like most books. I really wanted this intro to be my best Scottish accent but it would be a really bad impression of Scottie on *Star Trek*, who did a bad impression of a Scot. So, let's not insult the dialect and get off to a rough start today.

Ron Barshop:

Dr. Malcolm Kendrick is a primary care physician practicing near Manchester, England. He completed his schooling in Aberdeen, Scotland in the dim and distant past. Can you hear the bagpipes a'calling? He's had a long-standing and deep interest in cardiovascular disease, we'll from now call CVD, what causes it, triggered by the fact that when he was a wee baby white coat, Scotland was the world champion in heart attacks. The reason given why just didn't seem to add up to him and after 30 years and several deep-dive books, he's likely solved what he calls this enduring mystery. And if you're one of the many listeners wedded to the gold standard, that CVD narrative that we all believe, this is your spoiler alert. The rest of this episode now ... Move on to your Joe Rogan and your Tim Ferris. I warned you.

Ron Barshop:

Okay. Well, now we're stuck together for a half hour and if we're lucky you'll get two half hours with today's guest. Today we're going to strip away the myths, bury the legends and tell you and me what to do instead based on evidence and science. Bill Bryson is my favorite author and he basically invented a new category of book called humor travel and lately he's been veering over towards history humor. And Dr. Malcolm Kendrick is of that same genre. He's invented what I call healthcare humor but it's on a very serious topic; the number one killer in the world besides Russian tanks and missiles. CVD. I've long been reading his blog, [DrMalcomKendrick.org](http://DrMalcomKendrick.org), which will be in the show notes. And to boot, he has written *The Great Cholesterol Con*, *Doctoring Data*, *A Statin Nation*, and his most recent page-turner, *The Clot Thickens*, as I said. It's, again, LOL funny, it's jaw dropping and it's like reading a mystery and it's extremely well cited, like all of his books.

Ron Barshop:

This, he promises, is his last book on heart disease. He swears up and down and crosses his heart, hopes to die. Wait a minute, got to skip that last part. 30 years of research later, he hopes that the cholesterol hypothesis, which has beautifully served the bigs but not us, will be toppled this

lifetime. Maybe this show will make a tiny difference. Welcome to the show, Dr. Malcolm Kendrick.

Dr. Malcom Kendrick:

Thank you very much. Yeah. Yeah. I'm afraid I don't have a very Scottish accent. I can put one on if you want.

Ron Barshop:

No, no. You sound fine to me. I can't tell the difference. I'm in south Texas.

Dr. Malcom Kendrick:

Oh, is that right? Well, that's fine. My father was English, I hate to say.

Ron Barshop:

Okay. You hate to say. Well, any comments before we go to this?

Dr. Malcom Kendrick:

I think that's a fantastic introduction. It sort of sets the scene. I suppose I now have to live up to this fantastic prologue and say, "Well, okay. Here it is. I've worked it out. I know what causes heart disease. Look upon my works, ye mighty, and despair."

Ron Barshop:

Well, you've been turning the tables in the cardiovascular temple for almost three decades. You have been name called, you've been attacked for so many years. How do you deal with all that?

Dr. Malcom Kendrick:

Well, I suppose you're not going to ... Don't enter ... Don't go in the kitchen if you can't stand the heat. And if you're going to attack a hypothesis that's supported by virtually the entire medical community and a huge industry and, and, and, then you're going to have to expect that some people might be a slightly critical of you. I think it was Margaret Thatcher who said years ago. I said, "I'm delighted when people attack me personally because it means they've run out of anything else to say." Whilst I would welcome attacks of fact and logic and science and stuff, this just doesn't really happen. It tends to be, "This man is a cholesterol denier, he's a statin denier, he's a ... Whatever. He's a zealot. He's an idiot. He's a whatever."

Dr. Malcom Kendrick:

These are not attacks that bother me. I'm sort of prepared for them. If somebody came up to me that I respected and said, "You have got this completely wrong and here are the reasons and here is the evidence," I'd say, "Blimey. Oh, blimey. That's something I got to look at." But this just doesn't happen. All that ever happens is ad hominem attacks. I was asked this morning ... There's a paper I co-authored which looked at the level of LDL that was measured in 16 different studies; the only studies that there are that exist. And there was no association between the level of LDL and the rate of cardiovascular disease in all of these studies.

Dr. Malcom Kendrick:

And it was published in the British Medical Journal Open and the criticism was that the ... The criticism ... There were three criticisms. Criticism one, we had only looked for studies in English, which is actually just complete nonsense because any large studies are all translated into English. There may be some out there that aren't in English but when you're talking about this area, it's just not true. The second was we'd only use one database, which was the NIH PubMed database which contains 99% of all published journals in the world. And a third criticism was, "Well, we give people statins and that reduces the risk of heart disease, so we know that LDL causes heart disease." And that was it.

Dr. Malcom Kendrick:

So, okay. Give me something to get hold on. I can't get all the nonsense and yet all you hear, all that happened around the world was, "Well, this article's being criticized by the experts and it therefore must be wrong because it's been criticized? This is the sort of nonsense attacks that you have to put up with, which is frustrating but not personally wounding.

Ron Barshop:

I'm going to take an amateur shot at explaining the thrombogenesis hypothesis because if a layperson can understand it, that's going to be 90% of this audience. But we do have plenty of PCPs, primary care providers, listening in, too.

Dr. Malcom Kendrick:

Yeah.

Ron Barshop:

Before I do that, I want to know, when did you know you were right on this alt hypothesis? Was there a moment when you went, "Ah, of course."?

Dr. Malcom Kendrick:

Maybe about two years ago. I was sitting thinking ... Because I thought about this and thought about this and turned it inside out and upside down. And I thought if you use this hypothesis ... In fact, there is a very brilliant man, Paul Roche, who was a professor of psychiatry in New York. He set up the American Institute for Stress. And I was at a meeting, we were talking about heart disease. He's a big stress man. I was a big stress man or strain man. And I was banging my head against the wall a bit and he said, "What you have to do is you have to move away from looking for causes and look at the process. What's the process that's going on?" This was probably six years ago. And I looked at him and thought, "What are you talking about? And then I went away and thought about it and I said, "You know what? He's absolutely right. What is actually happening to your arteries? What's going on? What are the processes? Which one of them makes sense."

Dr. Malcom Kendrick:

Then I spent about years ... Several years thinking, "Okay, how would everything fit? What are we looking at? And suddenly I was sitting one day and I thought ... Someone came to me and

said, "Did you know that sickle cell disease increases the rate of heart disease by 50,000%? And I looked at him and went, "Really? I never heard of that." There's an awful lot of research out there, which is always my fear that eventually someone will say, "Help yourself to 2,000 papers."

Dr. Malcom Kendrick:

Anyway, I thought, "Well, okay. Fine. How does that fit into ..." Because it's just a hypothesis. Basically, the lining of your arteries is damaged in some way by something and there are many somethings that can do this damage. Once the damage has happened, then the blood forms on the artery wall. This, by the way, never happens in veins; just in arteries. And once that blood clot's formed it's then repaired. But if the repair is incomplete, a bit of clot is left remaining. This is transformed in what we call a plaque and this because an area of vulnerability so that more clots can form at that point and the plaque can grow and grow until eventually you have what they call a vulnerable atherosclerotic plaque, which is a big, lumpy thing with a thin top. And the final event will be that that thin top ruptures and that causes the final fully elusive blood clot because the artery at that point is narrowed and that's when you have a heart attack.

Dr. Malcom Kendrick:

And strokes are slightly different because what happens is that the arteries in your neck become thickened with atherosclerotic plaque and when the blood clot forms on top of that it has a tendency to break off and travel into your brain, causing a stroke. So, it's a slightly different process but it's essentially the same process. It's just a different end point event.

Dr. Malcom Kendrick:

You have three things. You have damaged in the artery wall, you have blood clot formation and you have repair and those are normal, natural processes. But if you have more damage going on or you have bigger, more difficult where blood clots formed, all your repair systems aren't working properly then plaques can grow and develop more regularly.

Dr. Malcom Kendrick:

Another way of looking at it is we have a system of damage and repair. So the damage occurs and the repair systems come and sort it all out. I said damage goes too fast. Their systems can't sort it out and gradually you end up with this vulnerable point of attack. When you're looking at factors that might increase the risk of heart disease you don't say your other 10 factors. What you say is, "Here we find something like sickle cell disease cause cardiovascular disease. That's restorative plaque. It's got nothing to do with LDO. Blood pressure, smoking, any of these things. It's a completely out of the blue slingshot came in.

Dr. Malcom Kendrick:

And I thought, "Right. How does that fit?" Well, sickle cell disease means that your red blood cells, which are normally like donuts ... Although they don't have a hole in the middle but sort of donut-shaped without a hole in the middle ... They normally squishy and move through your blood vessels without problem and they're designed if you like to be around and squishy. But a sickle cell has got sharp ends to it. It's sickled in its shape, which is like the sickle moon or whatever sickle.

Dr. Malcom Kendrick:

And, of course, if you've got sharp, pointy red blood cells hammering through your arteries, they're going to be causing mechanical damage to the artery wall. They just have to do this. And once they're causing this damage ... And I looked at ... This came to me and I looked at a case study from a 14 year-old boy who was admitted to hospital with gangrene of his right leg because of his blood supply to his leg was virtually blocked off and he had calcification, which is a late stage of atherosclerosis. This normally happens to 70-80-year olds. All of his major arteries were calcified as atherosclerosis. And the people that wrote the paper, themselves, said that this is due to the mechanical injury caused by the sickled red blood cells.

Dr. Malcom Kendrick:

I thought, "Well, this is obviously going to be a cause, isn't it?" We have a thing. It's almost like sandblasting your arteries and they respond and you get clots and you get plaques and you get calcification and you get ... His brother, by the way ... The five-year old brother of this 14 year-old had died of a stroke. The thing with sickle cell disease is severe sickle cell disease, children used to die age two and three and four. They just did not live for very long. But when they started to do blood transfusions and change the blood over, then people lived an awful lot longer. They're living to their 30s, 40s. The average age of death in the 1960s was five, I think. The average of death with severe sickle cell is now 45. Well, that's out of order. But one of the things they're finding is these people have atherosclerosis; they're riddled with it.

Dr. Malcom Kendrick:

So you say, "Well, okay. Well, that fits with the arterial damage hypothesis, the thrombogenic hypothesis, but what does not fit this is the LDL hypothesis. Not in any way shape or form." It was at this point I started thinking ... It's almost like a game. It's like, "Find me a risk factor for heart disease and I will show you that it does one of three things; damages the artery wall, it causes bigger and more difficult clear up blood clots or it interferes with the repair process. I looked for contradictions. I looked and looked and looked and looked and then I couldn't find any. And a good scientific hypothesis is a good hypothesis when you try to contradict it and you can't.

Dr. Malcom Kendrick:

That's what science is about. You come up with an idea, you do the experiment to try and prove it. Disprove it is what you're trying to do. And if you can't disprove it, your hypothesis is probably quite good. It was when I couldn't find a factor that ... I mean the only factor that is broadly promoted, which I couldn't find that causes any of these things is, of course, LDL, low-density hyper protein, what we call bad cholesterol because it doesn't fit with the thrombogenic hypothesis at all. And it doesn't. And so, therefore ... If you say they thrombogenic hypothesis is correct, you have to, in a way, discard the low-density lipoprotein hypothesis because it hasn't got anything to do with it.

Ron Barshop:

Let's dive in to the chemical makeup of a blood clot because you do a lot of that in the book and it looks like the blood clot is made out of red and white blood cells, LPA, which is a lipoprotein, and platelets. And then there's this thing called fibrin, which is a leftover skeletal remain, but the

fibrin is sending out distress symbols to attract more of the other four and the platelets are the symphony conductor putting it all together. This is the formation of a clot, right? So far, we don't have LDL anywhere in that chemistry.

Dr. Malcom Kendrick:

Yes. Well, there is one place that ... What do you call? LEL is a lipoprotein lipid and protein sphere. There's many of them as HDL, high-density lipoprotein, low-density lipoprotein, very low-density lipoprotein, intermediate-density lipoprotein, lipoprotein A, counter microns, blah, blah, blah. But one interesting thing is that the fiber ... Blood clots are like ... There's little cells that float around called platelets. They're, as I said, the conductors. They are the little things that conduct the whole process of blood clotting. They activate, they stick together, they bring red blood cells together, they trigger most of the blood clots and cascade that you've heard of seven, eight, nine; all those things.

Dr. Malcom Kendrick:

The purpose of all those factors when they're brought together is to get small strands of fibrologyn, which is a short protein strand, and they stick them together end-to-end to create this big, long, sticky strand of fiber, which wraps the whole clot together and at which point almost everything in the blood is dragged into this process. There's very few things in the blood that have no part to play in blood clotting. And when you look at red blood cells ... It's just astonishing, the complexity. Red blood cells link onto the fiber and then they contract down to tighten the fiber strands down, thus making it clot really tight and strong. And if you look at it, it's just amazingly complicated.

Ron Barshop:

It's exactly like a scab. We've all had a cut and seen a scab develop after blood clotting. That's an internal scab on the endothelial layer on the inside of the artery.

Dr. Malcom Kendrick:

Yes. It is not exactly the same because the scab on your skin just falls off because the skin grows up from underneath and pushes it away.

Ron Barshop:

Yes. And I thought of these thromboses that are formed, these scabs that are formed, wash away and are cleaned out but a lot of them build up kind of like our archeological layers so they ... It's like thin pancakes stacking on top of each other. That's what's really going to cause the narrowing of the arteries, right?

Dr. Malcom Kendrick:

Well, if you look at it in the AHA, American Health Association, we know it was a complicated review, the structure of atherosclerotic plaques and what we found was about 40% of them had very distinctive layering like the tree rings layers where you can see layer after layer after layer after layer after layer. And the only explanation for that point ... It can be one clot stuck onto the wall. We treat it then another one came on, then another one came on, then another one came on. They were all kind of shaved down at the time but they built this layer. You can say, "Well, why

aren't they all like that?" Well, they're not all like that because a lot of them just start to break down into gunge if you know that word. It's an American word. You get a sort of gooey core because, essentially, that structure is lost as the whole thing starts to be broken down and attacked by the various processes that are trying to get rid of it.

Dr. Malcom Kendrick:

Yes, we can see that this is the case and the AHA, themselves and, in fact, all the major cardiovascular organizations agree that if you already have a plaque in your artery that these growths through a blood clot almost sticking to it. Then being absorbed into the existing plaque, being covered over, and then you have a larger plaque. That's an excepted process. And the accepted process at the final event, which is a heart attack or stroke, is that the clot forms. So the mainstream is completely comfortable with the idea that if you like, you have three stages that the plaque starts, the plaque grows, the plaque has a final blockage.

Dr. Malcom Kendrick:

Stages two and three, they're perfectly happy. That's all due to blood clotting. What they will not accept is that blood clotting starts the process in the first place and so all that I'm saying, in a way, is just move back and say, "But could a blood clot from a narrow artery wall trigger this whole cascade of events?" To start with, that makes ... That fits with the facts. It fits with the rest of the process that we see and so it's not really a great stretch. But unfortunately, the old hypothesis came along and said, "No, it's LDL that leaks into artery walls and makes them thicker. And then after that you can introduce blood clotting if you like but blood clotting has nothing to do with the plaque ... develops starting the plaque." It's not really complicated.

Ron Barshop:

I talked with a cardiologist professor who, obviously, talks about the importance of statins and talks importance of diet and LDL and very important to go on low-salt if you have hypertension. And, of course, hypertension drugs ... You dissipate all the ... You throw that out the window as well; the hypertension hypothesis, we'll call it. Can you talk about the importance of salt in a diet? It's almost the precise opposite of what we're told.

Dr. Malcom Kendrick:

Yeah, I will. It is. It's another idea. It's one of these ideas that first came out about the 1950s that if you reduce salt in the diet the blood pressure drops and this reduces the risk of heart disease. There's a very recent study just come out disproving that again. There's a thing called the nutritional study in American [inaudible 00:23:24], nutrition, health and something, something, something. And they looked at salt intake in the US over decades and they found that, that actually lower salt intake was associated with a higher risk of cardiovascular disease and overall mortality. And there's a good reason for this but I'm not really going into that because that's pretty complicated. But essentially salt does raise ... in excess or more so will raise your blood pressure by about, on average, looking at the Cochrane collaboration, by about two millimeters of Mercury. About that, which is essentially a minute difference.

Dr. Malcom Kendrick:

You wouldn't even notice. If you went to your doctor and said, "Measure my blood pressure," And then you went the next day and said, "Measure my blood pressure," the blood pressure would be different by a greater amount than two millimeters of Mercury. It would be about 10 or five or it could be up to 20. This is an unmeasurably small difference on an individual level and yet we're supposed to believe that will stop you dying of heart disease. In fact, that mad alderman who was the president in the American Hypertension Association, did some studies in the late 20th century where people with heart failure who are at most risk in heart disease ... And he reduced their salt intake considerably and increased their mortality rate by a fraction of four to five. And he went on a crusade after that and lost all of his friends and colleagues by saying, "This is nonsense. We should not be advising people to reduce their salt intake because it actually increases their risk of dying and that is a fact."

Ron Barshop:

Dr. Malcolm Kendrick, this has been a great show. We're going to pick it up again next show, talking about what specifically we should do on top of more salt intake, which is counterintuitive. Thank you for being on the show and we'll talk to you next episode. Tune in to hear what we need to do for our heart health. Thank you.

Dr. Malcom Kendrick:

Thank you.