New Science of Living Longer and How to Achieve It

DM: Dr. Joseph Mercola, DO
GB: Greta Blackburn

Introduction:

GB: Joe, I got to jump in here. I want to lay a little context in a minute. The first thing I have to ask is how did Dr. Joe Mercola happen? When everybody else was five years old and you’re playing with sleds and trains and wagons and cowboys and Indians, did you think I want to grow up to be the world’s top internet alternative holistic doctor? How did it happen?

DM: I was always passionate about being healthy. I read Dr. Ken Cooper’s book in 1968. I think I was in 7th or 8th grade at the time and got inspired to be healthy. At that time in the 60s, if anyone can remember back then, people weren’t running around as an exercise. Exercise really wasn’t very popular. If you were running on the streets you were considered a criminal. I had lots of cans and rocks thrown at me during those times.

I was just really passionate about staying healthy. I studied nutrition a little bit and I had a passion for science and I wanted to – actually, I was going to be an astronaut initially but then I had some experience with the Federal government of the United States and realized that collaborating with the military wouldn’t be a good idea. I realized that pretty quickly and I’m glad I made that decision so I decided to go to medical school and pursue health.

I have always been passionate about technology and science. I just integrated both of my passion with technology and passion for health. The combination was really providing a newsletter to help serve people and share the information I was learning.

GB: So you just hardwired for this.

DM: Yeah, it seems like it. It’s basically circumstances. There could have been more in retrospect, more efficient ways to get to this process but it is what it is. Hopefully with technologies that you’re advocating and embracing, you know, messing up with a few years here and there is going to matter because we can add 10, 20, 30, 40 years or more of high quality years on the long end which has not been available prior to human history.

GB: Wow, what a great segue into my next question. As you know, I’m the co-author with Dr. Mike Fossel and Dr. David Woynarowski of The Immortality Edge. I am also sort of pioneering a whole new movement which we’re just simplifying down to the phrase “100 is the new 50.”

So you’re really the big guy out there promoting total wellness, health, and fitness. I’m assuming that something like 100 is the new 50 isn’t going to shake your boat too much. It’s going to be something that you believe possible.

DM: Well, it’s not only believe possible, I’m counting on it. I’m going to be really disappointed if it’s not. It’s not idle speculation considering the advent of technology. It’s pretty obvious that
people can see the improvements we’ve had in computer technology. Ray Kurzweil of course is the expert on this and really one of the leaders in the world in helping people understand this progression.

You know, Moore’s Law and the increasing computing capacity by 50% a year or more and the reduction in the cost by 50% at least there are some pretty extraordinary technologies. Of course the transfer is throughout most of the industry.

GB: Speaking of technologies and Ray Kurzweil who did a little video presentation at something that I coach here at the Manhattan Beach Project. You were on the medical panel there. Of course Manhattan Beach Project was all about opening up the possibility that we can demonstrate by the year 2029 reversal of aging in a human. You spoke on the panel. I’m going to assume from what you just said that you believe pretty strongly that by 2029, we will be able to demonstrate reversing human aging.

DM: I don’t know the specific timeframe. I haven’t studied it carefully enough to make an accurate projection but I know at some point. Hopefully it’s in most everyone listening on this call in their lifespan. I really think that we’re going to see some improvements. It’s inevitable. There is just no question it’s going to happen. The only real question is when. My impression is it’s going to be sooner rather than later.

GB: Did you happen to see the Kurzweil piece in the recent Time Magazine?

DM: Yes.

GB: He’s talking about the year where immortality begins being at 2045.

DM: The singularity.

GB: I think somewhere between Manhattan Beach and Kurzweil at 2045, we’re probably in the realm of what we’re talking about at the point at which we stop aging.

DM: I don’t know that we’ll stop but we’ll be able to repair the damage of aging.

GB: Which is along the lines of Aubrey de Gray (indiscernible 4:59). It’s funny because I wrote The Immortality Edge and put together this team on the book. You’ll understand what I’m talking about. You and I are in fields where we have all of this stuff available to us. We’re in the trenches with these guys. We go to conferences. We know what’s available.

The goal of The Immortality Edge was to get this word out to the mainstream. In particular this is a prescriptive (indiscernible 5:26) telomere biology but it’s one of the bridges. It’s one of the pieces of the puzzle.

I’m wondering what your views are on when something is cutting edge, it’s controversial. I know you’ve been in the middle of controversy, how do you get past it? How do you get people to believe it? I know that Mehmet Oz had you on to sort of bridge the gap between traditional
medicine and alternative. What’s the secret in getting this stuff on the radar screen so that people look at it in a way that isn’t through the skepticism lens?

**DM:** There is a large number of reputable biologists and scientists who are working on this. So it’s just a matter of presenting their information in a way that people can understand and really digest and then take the fruits of that effort and apply it to themselves and offer it to them. They can’t force everyone to apply this. There is a lot of things that we know today that only a fraction of the people who really need to be using them are using them.

Ultimately, it’s incumbent upon the individual listening to it. There are strategies of course of sharing information. That’s one of the ways that we have become popular and really the leading health website out there, at least for natural health and the third most visited health site in the world. There are ways that you can communicate that with the technology and the internet. Ultimately, it’s incumbent upon the individual to make that choice.

**GB:** Yeah, agreed. We’re here to talk about high intensity interval training. I want to lay a little background because I believe it’s part of this puzzle, this 100 is the new 50. It’s crossing the bridges that will get you to the other side where aging slows down and stops and possibly reverses. We talked about Phil Campbell. I know that you – actually, it’s funny because you came to my Fit Camp that was about a year ago now.

**DM:** Most of the day, yes. Well, a little bit less but just about.

**GB:** Yeah. It’s kind of funny. That’s total serendipity I’ll call it. When you landed in Cancun, was high intensity interval training on your radar, to what degree was it and how did that change out of working with Phil at the camp in your experience?

**DM:** I was aware of it primarily through the work of Al Sears. I sought to apply it from his recommendations but they were just too nebulous and generic and non-specific. Actually, I did develop an injury because I just started sprinting without proper stretching or building up to it. I wound up tearing my hamstring attachment to my hip bone. This took kind of a nagging injury that prevents me from doing things.

**GB:** I have seen that happen if people enter into this kind of workout (indiscernible 8:12)

**DM:** But even in barring that injury, he didn’t provide enough details and had no information about the influence of growth hormone and the benefits of that. But provided some compelling arguments to use it. I was sensitized to it. I knew of it but I just didn’t have the practical tool.

Phil is just – I’m really so grateful for you in helping me connect to Phil and really providing a whole new revolution of exercise in my mind and helping other people understand this because it’s just so crucial to really improving your long term health.

**GB:** I got to give a shout out to his – your workout component, is it PeakPerformance.com?
DM: No just type in Peak 8 and Mercola in Google and it should come up. He started the Sprint 8. I didn’t really want to copy that directly. We added some other elements to it. It’s not like we stole it or anything. He knows exactly what we’re doing.

GB: I know. He’s a good buddy of yours and vice-versa. FYI, his website, for people who want to look into that is www.ReadySetGoFitness.com. I actually got a DVD coming out here pretty shortly, Figure 8 which is for women. It’s a walk people through it sort of educational experience.

Anyway, I’m wondering now that you’ve – so you got in touch with Phil Campbell. You got in the trenches with this. If we were going to put a pie chart up on the wall, and call it The Health and Fitness Pie, what piece of the puzzle would high intensity fitness training be? Would it be a 10% slice of the pie? Would it be 20%?

DM: Do you mean the whole pie or the exercise component of the pie?

GB: The whole pie. You know what let’s just talk about the whole pie. Is it going to be a little teeny sliver?

DM: No. That’s a good question. I would say it’s somewhere between 10 and 20 percent.

GB: That’s where I got it. That’s where I peg it.

DM: It’s hard to say. But you know, I think diet is more important because you can do perfect exercise and if you’re eating poorly, you know, just hang it up don’t even try it.

GB: Agreed.

DM: It’s just not going to work.

GB: Well, that’s the principle or the thinking behind people who eat whatever they want and then get on a treadmill for two hours and think that that’s going to take care of business. It’s just not. Particularly the kind of workout they’re doing typically on a treadmill isn’t going to do it either.

DM: But it’s an important part. In some ways the question is like what’s the most important part of a car. If you don’t have the wheels, you don’t have a steering wheel or the gas. I mean, you need all the parts.

GB: Yes. I mentioned that The Immortality Edge has this as sort of the key physical workout component of the anti-aging puzzle based upon telomere biology. Obviously, I and my co-authors believe that it’s a bridge just like telomere biology is a bridge. Stem cell technology is a bridge that will help elongate life, to get us to that point on the other side where aging dramatically slows, stops or reverses.
Our mutual friend David Kekich in Life Extension Express has a whole section on high intensity and Phil Campbell and blah, blah. Would it be fair to say that high intensity interval training is an anti-aging workout?

**DM:** There is just no question about it because it increases growth hormone. There is a large number of people who are using growth hormone therapy as part of their anti-aging protocol. Many of your listeners would know that it’s no inexpensive. It’s well over a thousand dollars a month, you know, it’s a shot. It’s not necessarily perfect because you’re sort of forcing it on the body and producing levels that is outside of the feedback loop so you may actually cause more harm than good.

**GB:** This is somewhat off-topic buy maybe not because I don’t know the answer to it yet. What current insight is the most important that you have gained that you would want people not to forget. What currently top of mind for you that you really want people to know?

**DM:** About what?

**GB:** That’s the number one in any area. That’s why I said I may be off topic, I may not. I don’t know what your number one insight is.

**DM:** Health is key. At this point in time, at the beginning of 2011, we’re going through some economic challenges, at least the United States is. I think it’s going to get worse. So that’s an issue. If there is an economic collapse it’s difficult to stay healthy when you can’t buy food as we have seen in countries like Egypt and such. I mean that’s a big thing. People need to the big picture so you have to make preparations for that.

But with respect to health, in light of this conversation, I think one of the most important keys is to bust the aerobics myth that I certainly fell under the influence of for well over 30 years in thinking that all these cardio is going to be great and it is good but if you have a choice, you really almost don’t need any cardio. I have stopped pretty much most all cardio for over a year now since I started doing the Peak 8.

**GB:** I remember your before and after pictures. You had taken pictures either at the camp or just before and then you sent me pictures I think six weeks later or two months later. It’s phenomenal.

**DM:** Yeah, it made a huge difference. I was able to actually cut down the amount of time I was exercising and lose a lot more body fat and gained muscle mass based on body composition analysis.

[Start Part 2]

**GB:** Let me ask you something, having seen your latest, I believe it was your latest newsletter where you had the Power Plate demo?

**DM:** Yeah, that’s actually today as we speak.
GB: I’m curious, we’re talking high intensity interval training, I think Power Plate and vibration technology is great. Is there an intersection? Can we imagine an interval training on a Power Plate.

DM: I never thought of doing that. I don’t think it’s necessary because they produce somewhat similar benefits with respect to growth hormone. Actually, I don’t know many, I’m sure there are some but there are probably very, very few people who are actually doing both Peak 8 type exercises and Power Plate. I may be one of the very few that have and I maybe one of the only ones who have actually measured their growth hormone.

I just got my repeat growth hormone from Dr. Jonathan Wright’s lab. I actually had the highest growth hormone he ever tested. It’s just shocking. And it was repeated. Actually, the repeat came back 25% higher. It came back so high that he wants rule out some pituitary tumors. I’m confident that’s not the case because my growth IGF levels were normal. So that wouldn’t be elevated in a pituitary tumor.

Once we establish that we’re going to start looking at other individuals who are doing both and see that there is this potentially phenomenally powerful synergy between acceleration technology like the Power Plate which I think is the best device out there for acceleration technology.

It really isn’t vibration. Vibration is sort of a lay misnomer of it. Really, it’s using acceleration to increase the forces of gravity so that you can actually get this strength-like benefit on your muscles without really using weight instead of just changing the force of gravity up to six to eight times the force of gravity. By doing that, they actually stimulate growth hormone release.

GB: Let me ask you something, again, back to the viewing I had of the Power Plate demo which was great. Having seen you, it’s been a year now and having looked at that video. Am I imagining that your quads have completely changed? I know there is like a quad there. I don’t know that that was there a year ago.

DM: It’s actually even gotten bigger since that video because the video was shot in the fall so that’s almost six months ago now. It’s just extraordinary. The improvements continue.

GB: That was the most noticeable thing because I know personally that’s one of the hard areas for me to develop or build a bunch of muscle. I’m like, “He’s got some quads now.” It’s good to see.

DM: I’ve been doing a lot of squats too. I do squats on the Power Plate and I do squats for strength training. Actually, what you can do rather than using acceleration technology and Power Plate, you can use strength training. Phil goes in this really – in his program on how to use that to a Peak 8. You can use those principles where you and your squats you just explode up. He calls it X Lifts for the explosion.

GB: E Lifts.
DM: I call it X Lifts. E looks like an electronic internet thing. He calls it E Lifts and I call it X Lifts for explosion. When you do that with squats – squats is probably the best thing you can do. You’re going to see amazing improvements in your muscular strength. Even in the strength in all the muscles in your body because a squat – a lot of people don’t understand they think it’s going to improve their leg strength but it actually will improve your arms and your chest.

GB: (indiscernible 3:41) let’s be serious.

DM: Well that too but the men, in their pecs and their biceps, it will improve the strength of those and the size of those too because of the hormonal shifts that occur when you engage in that type of activity I mean squats are a profoundly beneficial exercise.

GB: I got to digress here again for a minute because this is kind of tickling my mind. We’re talking about your top of mind current insight, boiling it down, distilling it down to a bullet point, it sounded like you were saying stockpiling food.

DM: Well just being prepared – definitely food. Probably not just one thing but just start looking at that area because there are people who have written a lot about this. It’s a very comprehensive strategy that one needs to engage in to be prepared. I was a Boy Scout…

GB: I was a Girl Scout.

DM: I fully believe in be prepared.

GB: Let me ask you, you’re Joe Mercola, what are you stockpiling? What foods are you stockpiling or being prepared with?

DM: Because of my website, we have access to a lot of whole food products. I got a warehouse of that stuff that’s easily available to me. But with respect to live foods, I live on a lake that’s well stocked that has tens of thousands of pounds of fish in there. I have the tools to get those fish if I need to.

Normally, I wouldn’t eat the fish from the lake but as an emergency that’s definitely a possibility. That’s one source and then having I guess precious metals that you can easily barter for other commodities that you may need.

GB: Are you a gold or a silver bug?

DM: I think both are useful. I think silver is more practical for most people because it’s more easily affordable. As we speak, it’s just about $31 an ounce. Last August it was under $20 so it has gone up 50% in six months. Many people think it’s going to be $50 before the end of the year.

It’s been an age old tool for bartering. Actually, in some communities in the U.S. it is an acceptable currency for exchange. If you have some of that, most likely it’s not going to lose
value. You’re not going to get interest but if an emergency happens, you can trade that for food or other items you might need.

**GB:** This is probably my last question unless I think there is something else here. Over the last three months – I’m asking you my questions, other people ask you their questions – if you took a look at the last three months, what’s been the most frequently asked question that you’ve gotten and what was your answer?

**DM:** I don’t know if I can give you a good answer on that because it’s not like I have a lifestyle that I guess push me in front of the public where people are asking me questions all the time. I give presentations a few times a year.

So for the most part, I’m just writing and editing articles and moderating the comments on those. That experience doesn’t really allow me to sort of enter a survey-like mode where I give a sense of what people’s questions are. I can’t give you a good answer on that.

**GB:** Is there one question you would like to ask me then? Heck, I’ll turn it around.

**DM:** One of my passions and one of the reasons we’re connected is basically strategies to optimize aging. Especially with your book, one of the big issues is the strategies to enhance telomere biology and basically minimize telomere shortening and eventually actually increase the telomeres.

One of the traditional strategies for the last few years and really the only strategy that has been approved to actually use this was a product called TA-65 which I know you’ve been on and Dave, your partner, has been on too. Actually, TA-65 is producing some less expensive alternatives because that has been a practical barrier for many. It’s relatively pricey for most to go on it.

**GB:** When I got involved and I was actually instrumental in the launch of that and I moved to New York from LA four years ago and just dug deep in, hunkered in and helped that get going. Initially, the price is $25,000 a year. Part of that was very expensive over the course of a year lab work but it was pricey. They have come down in price.

**DM:** I just recently got something from one of the principals I think in the company that said that they were actually – having the product go down like $200 a month or something.

**GB:** Yeah, they are. They have realized that they need to make it more affordable. It’s a lesser dose at $200 a month than the dose that some people would like to be taking although it’s an effective dose. But you know, disruptive technology, there are people in kitchens, in labs, in scientific institutes all over the world looking for the bigger and better mousetrap in that one. You and I will be I’m sure hearing about those probably pretty soon.

It’s a good product. It’s the only one out there now. I recommend it. We talked about it in the book. For those who don’t want to even spend let’s say the lesser price of $200, let’s say $50 a month and people don’t want to spend that money. The point of the book is really what can you
do in your everyday life without resorting to a telomere (indiscernible 9:27) that will help slow down shortening, rejuvenate your telomeres. I would like to say, here is to longer telomeres and beating the age limit.

The book is designed whether it’s nutrition choices. We have the Paleolithic diet in there. I know you’re a believer in that. We have high intensity interval training. We have some stress and mindfulness techniques. So those are all things that are just very useful, very helpful, very much part of this bridge, this telomere biology bridge to get us to the other side.

**DM:** I guess a follow up question on that would be – because this is relatively new technology that the prudent thing to do if you chose to participate in something like is that to recognize it – of course is going to be different in the future.

It would be wise to sort of bank your blood so that you can do an actual assay of what your current telomere length is now but then actually save some of that blood so that you could do a more accurate assay as the technology improves in the future because if you don’t save it, you won’t be able to test it.

**GB:** You’re so spot on. Again, in the beginning with TA-65, when everyone was getting their telomeres measured the savvy few because it was more expensive for various reasons. The current measures are iffy and sketchy. You can have your blood drawn one day and get two different readings on it.

The key thing is the current commercially available measures are mean telomere lengths. What they do is average out. What’s really important here and a few lucky ones of us had our shortest telomeres measured at a lab over in Europe – you may have the greatest telomeres on Earth running all through your body but if you’ve got just a small percentage of critically short telomeres you’re worst off than the person who’s got not quite so spectacularly long telomeres all over the course of this system.

Mean telomere length is available now. It’s somewhat sketchy. Everyone admits it’s somewhat off and not that reliable. Short telomere measures will be the gold standard. It’s coming down the pike. If you can bank your blood now, put it in a vault somewhere with your silver, hold on to it…

**DM:** That would be great except silver is relatively stable. Really, the practical part of this question is do you have any recommendations on where to bank your blood? Obviously, it has to be liquid nitrogen and kept at that temperature reliably for potentially years or decades.

**GB:** There are a couple of labs that do this but frankly it’s not commercially available so there is no real point in discussing it, at this point anyway. But it will be and we’ll keep everybody tuned on that.

**DM:** You mean there are no commercials labs that would bank your blood, even like an ounce or two? That would seem to me there would be a need for that.
GB: Yeah, there is a need for it. It’s my understanding that the guys who are doing it it’s for scientific studies and that sort of thing. It’s not a commercial endeavor at this point.

DM: That is surprising.

GB: You know what, I’m going to get back to you on that because that’s information that’s probably six or eight months old. That can all change. I’m going to actually dig around for you on that and get back to you.

DM: Please let me know because I’m personally interested in this. I would like to start a telomere (indiscernible 13:00) program but I’m reluctant to do so without some type of base measurement that I know I can reliably go back and re-measure when the technology improves.

GB: We’ll have to keep people apprised of that. It was great meeting you at the Manhattan Beach Project. I had heard so much about you. I was a big fan and then later to have you come to the camp and participate was just a blast. I love that we’re on the same page on so many things. I look forward to both of us keeping each other on every radar screen we need to be on so that we can remain cutting edge and keep getting the word out to people about what’s the newest and the best is.

DM: Absolutely. You’re a great delight and that was a real privilege to be able to connect with you at those events also and as I mentioned earlier, for connecting me to Phil Campbell who really is instrumental in fact, in changing my whole life. I have you to thank for that. I appreciate it.

GB: It’s my pleasure you’re very welcome. Great talking to you. I hope we can do this again soon.

DM: Okay, thank you Greta.

GB: Thanks so much.