# Why America Spends More on Healthcare but Stays Sicker | Dr. Camillo Ricordi | Ep. 160 Transcript

(Transcripts are generated by AI and may contain errors)

## Introduction and Guest Background

What we're dealing with is not a financial issue, it's an architectural issue that has to be restructured. I talk about healthspan engineering as a four-level intervention that you start from predictive diagnostic to intercept those risk factors that are invisible.

80% of this chronic disease are preventable. So if you save of these 5.3 trillion a year, you will have so much saving that can be reinvested. The Healthy Point of View podcast, your top-rated show, bringing experts from all over the world to talk health, wellness, beauty, and mindset.

Today, we have Dr. Camilo Ricordi. Transplant surgeon, physician scientist, inventor of the Riccordi chamber, the method that made eyelet transplantation possible, founder of The Cure Alliance, and author of two books, Dr.

Camillo Ricordy has spent 40 years chasing a cure for diabetes. We still lose over 11,000 people die every year for lack of organ donor. How big of a battle are we up against when it comes to changing the course of medicine?

It's an ecosystem that we have to change because if you think it is a chain reaction because it starts like… Welcome to another episode of a Healthy Point of View podcast, your top rated show, bringing experts from all over the world to talk about health, wellness, beauty, and mindset.

I'm your host, Sam Tahada, today's guest, we're bringing an expert, a pioneer, man who holds multiple different patents, pioneer in the word of diabetes, type one diabetes.

He's a transplant surgeon, he's physician, researcher, Today we have Dr. Camilo Ricordi. Thanks for having me. Absolutely. Welcome to Healthy Point of View podcast.

So you and I have had the opportunity to talk several times before the show, for me to really get to know your background and the things that you've been working on.

You were actually referred to me by a mutual friend, Jeffery Rose, who's, I see him in Washington DC every single month when I'm there for the Maha movement, the different meetings with Make America Healthy Again.

And Jeffy told me, he said, you have to interview this guy. Have to bring him on the Healthy Point of View podcast. When Jeffrey tells me that I have to interview someone, I interview them.

One of the things we're going to talk about today is about our healthcare system here in the United States, specifically in United states. I know we'll bring in other parts of of The Globe as well.

And one of the things that you mentioned is that what we're dealing with is not a financial issue, it's an architectural issue that has to be restructured.

Now before we get into the meat and potatoes and talk about that, I want the listeners of the podcast to get to know you a little bit better. So we're going to go way back, right?

We're gonna go back to when you were about five years old so people can understand who Dr. Ricordi really is and what your upbringing was that got you where you're at today.

All right, let's go five years earlier because I was born in New York, as you can tell from my accent, but I grew up in Milan, Italy, because they moved back to Italy when I Was three months old.

And I grow up, all the school were in Italy and I try to be involved. I've always been fascinated by science, even if my family has been for a couple of centuries in the music business.

## Early Life, Science, and Sports

There are no people who know the recording name, and Casa Ricarda has always associated with all the opera from Rossini, Donizetti, Bellini Puccini Verdi.

And still today I'm very much in contact with the whole music businesses. But I grew up more fascinated by science. I wanted to do astrophysics when I was in high school and then I Was lucky enough that I passed with a perfect SAT score and I could do everything and that summer I read the book the understanding of the brain and so I decided to that the universe was really in our brain, and there was much more to fascinating to discover I still love astrophysics, but I moved to medicine to study neuroscience.

And then my little cousin got diagnosed with type 1 diabetes and I decided, well, let's cure diabetes in a couple of years and then I go back to neuroscience, But actually that was 84, 85 and now we're still 40 years later, it's still without a complete cure.

Huge advancements, but not a cure." Absolutely, absolutely. So astrophysics, huh? So you love everything in space. Well, I grew up doing all kinds of extreme sports, like I was doing downhill ski racing with extreme windsurfing, motocross, karate, Shotokan competition for six years and so on.

In fact, it was funny that when I graduated with a perfect SAT score, a relative of mine told my mother, Oh, wow, I didn't understand. We didn' know that Camino, besides having muscle, has also a brain.

So that's a surprise. But my mother, when I chose medicine, medical school, told me, but are you sure you're smart enough to be able to finish medicine because it's six-year, very competitive program in Italy?

You should have a Plan B in life. I became a skin instructor and a windsurfing instructor. So I did the course of both the exams and said if I cannot finish medicine, I'll do Club Mediterranean or something like that.

That's pretty cool. How many broken bones have you had? How Many? Broken bones. I don't. It's amazing. I did one incredible falling downhill ski racing and I tumbled for a couple of hundred meters.

The ski was destroyed, but I was still in one piece. And I wouldn't try to repeat it now. Man, that's an amazing that you've never had any broken bones.

Because anyone who tells me that they've done all of that stuff that she just mentioned, usually they beat up their body quite a bit. And sometimes that's like the motivating factor of doing certain things that they do for a living, you know?

I had like, I have three herniated discs because the compression in downhill skiing and surfing is all bad for your back. When I started when I was 20, and I start having severe back pain, so the orthopedic doctor told me, if you don't stop doing this racing by age 30, your bike will be destroyed.

And back then I said, well, when I will be 30, my life will over anyway, why should I worry? You know, the attitude when you're 20 years old, say 30 looks like old.

So when started practicing medicine, were you always in research or were initially practicing seeing patients? No, no, still now I have a full license in Florida and Pennsylvania, but I started in medicine after the graduation.

I went to Washington University in St. Louis, and then I did the transplant fellowship at the University of Pittsburgh Transplant Institute. And I've been always in surgery.

My specialty is in surgeon and transplant surgery, But then when I developed the method to extract the insulin-

producing cells from the human pancreas that carries my name now, the recorded chamber, automated method, then Professor Startsley in Pittsburgh told me, like, you have the opportunity to develop a new field of medicine, cellular therapies and regenerative medicine.

Why should you do organ transplant? Everyone can do an appendix surgery, can a liver transplant. You should do something. It was tough because after 15 years, six years of medicine, five years in surgery, to stop active surgical procedure was a big decision.

But there had been so much that happened in cellular therapy and treating all kinds of diseases from diabetes to COVID-19 when there was the pandemic, now chronic kidney disease.

It's a fascinating idea that we can replace and restore function of failing organs before you need to do an organ transplant. It always fascinated me.

And it's in line with the attitude to try to prevent and reverse disease progression rather than waiting for the complete organ failure. What type of transplants have you done?

Well liver, multi-organ, kidney, pancreas. In the University of Pittsburgh we were like at the time was the number one center in the world. When I arrived there in 89, December 89 and in 1990-91 we we're doing more than a thousand transplant a year so it was a huge program.

That's a lot. Now Miami is number 1 by the way but yeah Pittsburgh back then was So in 1989, the technology that's utilized to do transplants has changed tremendously throughout those years, I would say, right?

Yeah, definitely.

## Transplant Surgery and Islet Cell Innovation

There have been both from the organ preservation, now you have systems that allow you to preserve organs before you transplant, allowing not to waste that many organs, because we still lose over 11,000 people die every year for lack of organ donors.

There is a big technological advancement for preserving and expanding hours and days that you can keep an organ before the transplant and then huge advance in technology to prevent organ rejection and to treat patients afterwards.

Yeah, I'll never forget when my sister received her first kidney transplant down in Miami. She got that phone call. It was late at night, a child had a car accident or something like that.

And she got the phone and if she wouldn't have answered that call, it would be the next people on the list. Yeah. and she get there and it was her and two other people waiting just in case if, you know, she had an issue that she wasn't able to get it.

the other people are ready to go. So I noticed how serious the transplant community, when it comes to the world of medicine of transplant, how how seriously everything is.

It's all about time. Yeah, because you have to check if you present it against the donor, the so-called cross match that you do to see if have already antibody against.

that donor you cannot receive the transplant because you would have a high probability of an acute rejection. So that's why you have backup plan to make sure you don't lose that organ in case the patient that is on the top of the list has a problem, immunological problem reacting against a specific donor.

Absolutely. What's your, in your 40 plus years of being in career, what has been your favorite type of transplant and why? Well, it is now early transplantation for diabetes because we developed in 1985, invented when I was in

Milan, but we didn't have the resources to develop the procedure, so I wasn't lucky enough to go to Washington University in St.

Louis where we were able to test This concept of disassembling progressively the pancreas in a digestion chamber and extracting all these clusters of cells that can be purified, retrieving only the precious load of the insulin-producing cells, that are contained in this microscopic grain of sand that is less than half a millimeter in diameter.

And they're spread out in hundreds of thousands in the human pancreas. And then you can resuspend them in like blood transfusion by kind and infuse them into the liver by gravity, like a blood trans-fusion, re-engineering the livers, becoming a double organ that does both the function of the lever and that of kind of procedure to be able to cure diabetes or treat diabetes with cellular therapy.

We did the first successful transplant in 1990 at the University of Pittsburgh Transplant Institute and then all the way to finish successfully the phase three trial in the United States and the procedure done pretty much all over the world.

Wow, wow. That's amazing. I mean, these are things that, as I recall, you've won certain prizes for this type of development. Yes, I got a little over 100 honors and prizes, but the first and most important maybe for these was the Outstanding Achievement Award of the American Davidis Association and then many other prices and recognition but still we are at third base.

I always say you don't stop until you get to the home run because the first base was to develop the method to extract cells from the pancreas. The second base performed the successful transplant Now we are just reaching the third base, eliminating some of the most toxic anti-rejection drugs that can create problems in the long term.

And the home run will be when we will able to do this transplant without anti rejection drugs in a recipient for life. and when we will develop unlimited sources of insulin producing cells like from stem cell derived sources, stem-cell derived pancreatic islets, so you will have an unlimited source to be able to treat the millions of patients who may benefit and avoiding immunosuppression for life would limit the applicability to the most severe cases of diabetes.

I mean, Dr. DeGarde, you've been at this for years. I'm joking around. You mentioned earlier that you have been doing 40 plus years and before we started the show you were talking about me at 22 and that was almost 40 something years ago for you.

You know, you've put in a lot of work in developing what you have and where it's at today. What does it look like in the near future? Because you're not going to be able to do this forever, right?

There's going be a point in time that you will retire, Right? You have any successors that You've been working with and training and teaching them everything that Well, I was thinking about you as a successor for Lifespan and Healthspan.

But should you accept that mission? I can get the word out, but definitely not a transplant surgeon here. I definitely have a lot of successors. And I train most of the people heading the transplant program worldwide in all continents.

There are amazing young innovators and scientists. I have Giacomo Lanzoni in our institute here in Miami. He's been working with me for 10 years and is now sort of my right arm as far as research progress in cell therapy.

But, you know, I think the most important thing is that we have now to modernize the regulatory system to make America competitive again because We developed this procedure and the rest of the world is leaving us in the dust because we are blocked by a last century kind of regulation with FDA today.

While France has approved a standard of care and did hundreds of this procedures, Canada doesn't even have a waiting list for an early transplant. China, Australia, UK approved based on our results in the United States and we are still regulated like a drug instead of an organ transplant, so we're limited.

Every time you want to do an islet transplant you have to apply to FDA for an IND or get permission to 5 or 10 patients or 12. And it's been painful to witness how we've been blocked and unable to compete internationally because of just the regulatory system that will be fixed and pretty confident in the next few months.

Let me ask you this. July 1st of last year, new regulations came into place in the regenerative medicine space. Did that help at all here in Florida? It helped for some applications like umbilical cord, mesenchymal stem cells, or osteoarthritis.

There have been a little easier to perform some procedure, but they are still regulated. I think that it would be so important for FDA and for us collectively to focus on what is really potentially of danger and instead let explore new path and new potential breakthrough treatment like other countries that are living us in the dust in this area are doing like establishing a dual track one that is the traditional IND towards the biological license application be treated like a drug when you have something that is commercially at that level of being applied massively.

But for other cell therapy, like allotransplantation that comes from each organ donor is different, will be never standardized like a drug, or like umbilical cord mesenchymal stromal cells that are The important thing is to allow new therapy to be explored more freely and then be very pragmatic and transparent on the outcome.

Don't allow selective outcome like from private clinics that you do 100 patients, 20 goes well and you report those and forget the other. So mandatory reporting and registry should be obligatory and mandatory, but at the same time you should allow with monitoring to perform procedure much more extensively so that you can explore also new strategies, new potential breakthrough that right now we see more and more often coming from other countries.

Interesting, absolutely. Doc, the International Diabetes Federation estimates that 589 million adults are living with diabetes today, and that number is projected to reach 853 million by 2050. Is diabetes really the problem, or is late intervention the bigger problem?

Well, diabetes is the tip of the iceberg of this tsunami of chronic degenerative disease condition that affect now over 90% of Americans after age 60, 65.

But this has been what made me thinking in terms of healthspan engineering, because I can do 100 transplant a year, 1,000 transplant, 10, 000, 100, But if the tsunami goes from 170 million in 2000 to 590 million today to 850 million into decades, we'll never win the battle only with advanced cell therapies.

You have to address how to prevent and mitigate the tsunamis of diseases that 80% of them are preventable. We know that, for example, in type 2 diabetes, 94% can be prevented in subjects at risk.

If you identify the risk factors that are often invisible, like you're talking before in another of your podcasts about insulin resistance and diabetes.

It's like insulin resistance. One third of Americans walk around with insulin resistant, but they don't know. Most of them don' t know about it. So you cannot, if you don t identify the invisible risk factor, you can not neutralize them years before they progress towards the disease.

That's the big battlefield right now to predictive diagnostic and prevention.

## Advancing Regenerative Medicine

When you look at the age management industry, the anti-aging business, it has grown substantially. But when you really start bringing more of that precision medicine, and the functional medicine side of things, I don't think there's enough of what you're talking about.

It's one of the things, in the back of my cup I have here, prevention, early detection, and treatment intervention. I feel like those are the three top things that we have to focus on.

But on that topic, a nature of agent analysis found that extending healthy lifespan by just one year could cost 380 trillion in a global economic value.

So when you look at what I just said, 38 trillion in a global economic value. Of savings. Why do you think governments still spend, you know, exponentially more on disease than investing on healthspan?

Well, because in the past, it was thought like, who can afford to live longer or extend lifespan of a decade? But actually, what we cannot afford is to extend life span in disease conditions that are costing now 18% of the GDP of United States.

But if you intervene and you work on healthy lifespan, how to expand health span, Every year that you add a healthy lifespan, you can save $38 trillion in global economic benefits.

So that is huge, because it is the only way that we will have enough resources to continue to invest in advanced health therapy, in advance therapies for cancer, genetic diseases, orphan disease condition.

But you cannot continue invest exclusively in a reactive health system without addressing the tsunami that's coming behind you. Because if you save so much money by preventive strategies, then you will have huge resources to invest in advanced therapies and in many other challenges facing our country.

So, you know, obviously you're saying that that medicine should be more focused on predictive medicine, right? Now, you and I both know that we live in a very secure system when it comes to our medical system.

Our country thrives on people being sick and for there not to be cures. So, and I don't want to speak for you, but the years that I've been doing this, the year that was an emergency medicine, working as a firefighter paramedic and taking people to the hospital nonstop and seeing from the first day that they called 911 to journey of the day they died because they call us when a family member passes away, and just seeing the amount of medications people get put on, the, amount, of doctors that get involved that are not communicating with each other, um, no one's addressing lifestyle, they're doing predictive medicine, none of that's being done.

So, how big of a battle are we up against when it comes to changing the course of medicine where it is more predictive based medicine? I think it's a huge battle and it is an ecosystem that we have to change.

Because if you think, it a chain reaction, because it starts like, if people become a subject of interest only when you get sick, see a doctor, go to a hospital, and then the for-profit chain of healthcare starts, so that you become point of interests only you when get you sick.

Then the whole system evolves around that. So if you are in medical school, for example, and you exit medical schools with an average of a few hundred thousand dollar debt, medical education debt or a hundred thousands, then you have to choose what career you can do.

Do you work in prevention where nobody is going to reimburse you a penny? How much are you paying physician for keeping people healthy and never get sick to prevent that people become patients?

So, of course, instead, a lot of medical graduates choose a profession like specialized profession, interventional profession where you get paid, like if you got paid a couple of thousand dollars for a 10-minute colonoscopy and $5 to keep the patient healthy, the person healthy because it's not even a patient.

There is no reimbursement structure for health, and that's where the architecture of the health system has to move from an exclusively reactive. I'm not saying don't cure anymore.

It's very important. to enable us to sustain the economic burden of developing and keeping people sick alive and producing new cures, you have to save.

And there is a huge opportunity, because 80% of this chronic disease are preventable. So if you save of these 5.3

trillion a year, 18% percent of the GDP, if save a fraction, we'll have so much saving that can be reinvested in other areas.

And then the whole is becoming so expensive that it's not only the health system problem for the government and the administration, it is also for people.

They found out that, for example, medical debt is one of the main causes of a bankruptcy in the United States. A lot of people have medical debts as a component of personal bankruptcy.

There's also a burden on people, on the population, and on health systems. So the question is not if we can afford to invest in prevention and predictive diagnostic.

The question can we afford not to do it? Right, right. So based off of a lot of research that you've done and your expertise, what is your professional opinion of which country is currently doing it the best when it comes to predictive medicine?

Well, that is a sore face because it's not very good for us in the United States because we've seen the top countries for efficiency of healthy lifespan compared to what you spend.

You have a ranking by healthspan. Exactly for health span, we see that there is the top three are Japan, Singapore, South Korea, Italy is number 10 or 7, and then United States is 69.

## Diabetes, Prevention, and Healthspan Engineering

So then you start saying, Why we are 69 if we're the one that spent the most worldwide in healthcare expenditure, 18% of the GDP, this 5.3 trillion a year, over $15,000 per person.

And what is wrong? So it shows you that it's not just how much you spend, it is not a financial issue because we're spending more than everyone else and we have the worst healthspan outcome in terms of healthy lifespan.

So there is obviously something that can be changed. And if you look at the efficiency index of health span compared to dollar spend you see that in the top five countries you have Singapore, South Korea, Yeah, I'm looking at it here.

Japan and China, Italy is number four. It's the only Western country in the top five. And I definitely want people to see this, what you've provided. This is actually incredible.

I mean, it's sad in a way because they say everybody come here to get cures. Like if you know you want to go to Mayo Clinic, Cleveland Clinic University of Miami if need a transplant diabetes or Bascom Palmer for eye disease and cancer.

but why we are not performing as far as outcome in healthy lifespan. So that's the opportunity, if you wish, because it's an opportunity that will allow us to save so much money to invest even more in advanced therapy and taking care of those who get sick because we don't leave anyone behind, of course.

So that's why I talk about healthspan engineering as a four-level intervention that you start from predictive diagnostic to intercept those risk factors that are invisible, that if you don't identify you cannot neutralize years before they evolve towards the disease.

Then you have early intervention, the second level that is as soon as you had prodromic symptoms, that's the early sign like that could be in type 1 diabetes, your appearance of autoantibodies or the first sign of defect in insulin production.

You can stop the destruction of the insulin producing cells early on when you still have 80% of them. Then you have treatment of those affected because you don't leave anyone behind like in the battlefields But the fourth level

is equally important is prevention of disease recurrence after an initially successful cure Because often like intransparent with when I let transplant you're off insulin then you see the patient posting on social media I have perfect glucose control I can go back to eat the pizza and ice cream like there is no tomorrow and say oh Not a good idea.

You just reset your health. But now is one reason more to adhere to the ecosystem of the health span pillars that we need to, which is not that easy because it's not just exercise and healthy nutrition, but those are two key pillars.

It's a whole ecosystem. There is no magic bullet or magic remedy. It's a challenge, but it's also an opportunity. I always say, when there is a change, there's an opportune.

That is definitely a powerful restructure that you're talking about, the architectural portion here in the United States. But you know, I'm looking at this chart that your provided, Singapore being number one when it comes to healthspan efficiency.

But I mean, there's so many other countries that are ahead of the United States. You have South Korea, Japan, Italy, China, Sweden, France. And I want to make sure that we post this here on the podcast so everyone can actually see it.

We have Canada, Australia, Switzerland, UK, Belgium, Netherlands, UAE, Austria, Germany, and then Saudi Arabia, which I've heard, even Saudi Arabian, I heard that they are actually implementing health span, right, longevity medicine into their actual, it's like the government's actually implementing this as the course of medicine for their country.

Yeah, they have the evolution foundation from Saudi Arabia has 1,500 billion dollars. They distribute 1.5 billion a year in healthspan project. But Saudi Arabias, one of the few countries that is worse than United States as health span rank in their like 97 and we are 69. but in in a healthspan efficiency compared to how much they spend they come above United states.

So it's a One thing is the overall ranking, and in that table I only choose 18 countries, but you can see the whole list of almost 200 countries. But the message is clear.

It's like we thought that the more you spend, the better you buy a healthy life. healthy years of life, and it's not the case. You can have the worst healthy lifespan outcome, spending the most of the entire world in terms of healthcare expenditure.

That's why it is so important that we move towards an exclusively reactive health system to more predictive, preventing, proactive health systems. And combine the two, because of course we want to continue to develop cures.

So with what we're talking about, you know, we always hear terminologies of lifespan and then we also hear health span. There's been a bigger focus in the longevity space.

I mean, I'm using the word longevity because that's what it's being named after. Um, there's a been bigger on lifespan versus healthspan. But in your opinion, for any person, regardless of what their age is, which one would be more important to you?

Well, it's definitely healthspan. That's why my book is the health span code and not the lifespan code like other books are. But it is important to understand that we've been very effective to prolong lifespan.

Lifespan overall is divided in healthspan, that is, the decades that you spent in healthy lifespan, physical, cognitive, mental. and sick span, typically the last decade of your life that you can spend in disease conditions that are the ones that crippling the healthcare system and bringing us to the collapse of the health care system within the next decade if we don't do something to mitigate the tsunami of these diseases.

So the most important of the two is the healthspan, because if you see now, if we want to reach the 100 years of blood zone, not to tell the 120, 150 or more that some people are thriving, we have now from 60, 65 to 100, you have 35 years opportunity zone to improve this healthy lifespan.

And covering this decreasing the gap and aiming at what is called the perfect would be the Perfect health span would the square wave that is like you live until you're a 100 or if you want to push your luck and 120 You run your marathon go to sleep.

Don't wake up like as a Instead, what we're seeing now is like 16, then increase your capability and you cost an arm and a leg to the health system that becomes progressively unsustainable.

But if you focus on increasing health span years, Inevitably, bystander effect will be that you will live longer as well. So at the end, you also work on extending lifespan, but through a much smarter approach, not just trying to live long.

When I do conferences worldwide, and they ask me, I start with this thing, if you have a huge audience in a theater, it says, how many of you wants to leave until you're 120 years old?

You see, less than 5% hands raised. Then you say, how many of you would like to live 120, feeling like when you were 20? Everyone. So that's the difference between lifespan and healthspan.

And yeah, I believe that the focus should be health span because the lifespan is almost like the side effect of healthspan. If you have good health-spans, naturally you're just gonna get the life span.

So, Doc, you got an interesting phone call from the White House. Let's talk about that. Off the record. Now it was a big surprise because I didn't… offer myself, but I received this phone call from the White House saying, you've been highly recommended for the position of commissioner of the Food and Drug Administration.

Should we accept this mission to be considered, not to the positions sent or updated by sketch and CV? So I did, and I had the most amazing series of interviews with leadership of HHS and FDA.

And for me, it's been a tremendous experience because I was able to present all the things we've been talking about, including expanding them to the regulatory reshape that I would try to implement that have been fighting for 10 years to modernize FDA regulation for ile transplantation, reclassifying them like organs, enabling stem cell therapy to progress.

faster to make America competitive again. So it has been a tremendous opportunity. And I'm sure that they will select the most appropriate candidate. There are many other people or many people in a better shape or more qualified.

But at least I was able to present my case. I think it's been incredible. One of the more interesting interviews I had was, I will not say who is the person interviewing me, but he asked me Ah, you came up with a plan that is exactly aligned with the objective of HHS and Make America Healthy Again, and prevention and intervening from the food industry, because I work also a lot in the industry and the toxic contaminants in their food chain.

Because the health plan is not just what we eat and exercise, it's what surrounds us and what can we consume. So you asked me, How did you come up with these strategies when Marty Makary stepped down from Commissioner of FDA and you knew that there was a position open?

Well, first of all, I didn't apply for the position. Second, i wrote about this the first time in 2016, my first paper. I published a book in 2021 and the second one on health planning in 2023. So actually, let me ask you, did you come out with this strategy reading my book?

This is incredible. And you should be extremely proud that all of your work has been noticed. Being able to get nominated to be the commissioner of the FDA, not too many physicians can say that.

So that just speaks tons about the work that you've done and the research that have done throughout your years as being a physician, a scientist, or a researcher, et cetera.

Being nominated as the commissioner for the FDA, if that were to happen, You know one question that's going to be asked of you many times, people are going ask you, why is our nation so sick?

What would be your response to that? Well, you have to look at this as an ecosystem. There is not a single magic bullet or a magic remedy to that bullet.

I work a lot in the food industry, I've been on the board of major food companies and I have been really trying to address because I started telling some of this leadership of food industries, look after the tobacco plus action lawsuit.

I think the next class action lawsuit will be against some food industries because you are crippling the population, the obesity epidemic, diabetes epidemic.

Insulin resistance, chronic disease. insulin resistance is a little the mother of all chronic diseases in my view because it can lead to chronic kidney disease, neurodegeneration, that beat is cardiovascular and so on.

And so they told me, well, stop complaining, come on the board, help us improve. And then you realize that is a very complicated issue.

## Healthcare Costs and Predictive Medicine

Like, for example, you have to feed the planet at the same time, but also eliminate pesticides that are now used even to dry crops and food products. Then you have to see what this animal, intensive animal feeding programs use to feed the animal in a competitive way to make a profit and make cows or chickens grow faster to go to rich market.

And it's amazing if you see the quality of the meat that you consume. For example, we say you shouldn't eat a lot of red meat because it could increase cancer, could bring to other problem.

But it is not meat in general. It's like how these cows are fed. Are those grass fed from Colorado? Or is it like the American Angus has like a 25% of fat that can be pro-inflammatory?

But in Italy, like Chianin or Piemontese variety of meat has only 1.5%. So even within the same category, you have to be very careful because protein-based or eating natural food, great.

We should eliminate ultra-processed food junk food or fast food. But then you go to the next level. It's not just the… calories, the glycemic index, but it's also the inflammation index of the food product that you consume.

And what are the contaminants? If you say you should eat more fish to increase your omega-3 compared to omega 6 that are more pro-inflammatory, Yeah, try to increase your omega-3 level just eating fish when the contaminants of mercury, heavy metals and others in the fish is like, if you're pregnant, you shouldn't even eat tuna or saltfish because of this problem.

So it's all. So then you have to start being careful. So eat smaller fish that have less contaminants or surface fish compared to bottom-feeding fish.

And so it's become difficult. You say resveratrol, you should have more polyphenols if to inactivate our compounds. Try to get it from that one glass of red wine or grapes.

You should eat 60 kg of grapes a day or 12 bottles of wine. That is not very good for your liver. Not that alcohol. It's like a tricky balance but it can be done.

But it has to be starting from addressing some economics. Incentivize healthy food production and tax even tax and healthy foot like some countries are thinking or already doing It could be a step in the right direction You know, and this is all the stuff that we talk about on the show quite often You don't have having a potential commissioner of the FDA.

One of things that people bring up quite often is about the amount of chemicals that are allowed into our food system today. Here in the United States, it's about 10,000 different chemicals.

You go into Europe, that's 400. That's a significant difference in numbers. What would be, if you were to actually step in that position as the commissioner of the FDA, what would one of first things you would do addressing our food system?

Well, it's incredibly important, first of all, to detect where and which food products. Like we were actually discussing with these collaborators in Europe that identified a way to find out if the spike protein is someone that is sick post-COVID or dies of post COVID, long COVID complication, if that spike proteins comes from the virus or from a vaccine.

Because still, when you have, it could be latent virus or it would be an effect of the vaccination. And they can now identify, they have such precise way to identify by the difference of two amino acids, whether it comes from the vaccine or from virus.

Why don't we develop this to identify invisible risk factor of disease progression to improve healthy lifespan? And then the last step that we propose and we're trying to study now is how can you use the same bio-revealed system to have a cheap and fast test for food products to go identify this trace element that could be, you know, maybe you have some elements that are okay, like you can survive for a few hundred years more.

their presence, but there are others that are toxic, like pesticides, some color stains, or practice just to improve the color so that you see a fruit and you say, oh, it's naturally so good, the taste.

Sometimes you'll see tomatoes in the United States that taste like cardboard compared to when you have a tomato in Naples or in Capri. It means fish also, the taste of fish.

If you have a farm fish, what are they fed? And the important thing is that not just what we consume are the toxic elements in our food chain direct, but it's also what the animal consuming.

Because thereby, rather, a hand that produce eggs and is fed an inflammatory diet will have a complete different composition. We are studying this with the bio reveal, like studying eggs of one certain kind and the other depending how the chicken were fed in that intensive care or grass fed cows the same for milk.

You can see difference not just in the meat of the animal but also in their by-products that are produced. So there is so much we can do on the food system and then You have to be also bold, but you have understand that you're going also against some pretty powerful lobby and interest.

Should you accept that mission, be ready to disappear in mysterious circumstances. Well, we could talk about that in a minute. So you were talking about the spike protein and things about, you know, the COVID-19 was a very created a lot of trauma for people throughout that period.

I want to hear your professional opinion on what you think about the actual COVID vaccine. Is that something that… So the principle, the guide, my philosophy and actions are for our safety, efficacy, affordability and transparency.

Transparency is key. If you are not transparent with the population, you'll lose credibility and suddenly people will start questioning anything you're proposing and say, is this true or there is an interest behind or who is behind this decision?

And I think that in COVID-19, I had the honor to be able to save 100% of the people we treated under age 85. We

lost only one patient that was older than 85 because the family signed do not intubate, do no resuscitate order.

And we did stem cell therapy that needs a few days before it seemed therapeutic effect. But that was amazing. So you could save and you can prevent, try to mitigate.

For example, if you have a high level of vitamin D, you'd have much higher probability not to develop severe COVID. We developed a combination of protective factors that they call at the time I was in the Supreme Council of Health of Italy, Consiglio Superiore della Sanità, and I asked the Vice Minister then, why don't we give this combination of cheap supplement that costs like less than $50 for one week to everyone that is tested positive.

And then you randomize half of the positive test, you give it as a combination or supplements. It was very simple. omega-3 vitamin D and sirtuin activators, polyphenols kind.

None of the people that I treated, I developed sickness to go to the hospital, by the way. But at the same time I was treating with stem cell intervention, the one that were ending the SU intubated.

So again, you work on predictive prevention of evolving towards a severe case and also intervention if people fails and ends up in the ICU intubated. But the biggest mistake that, and I was not renewed in Supreme Council of Health of Italy, by the way, because I did an editorial criticizing the management of the COVID pandemic, but it's not to point out that Italy or here or other countries but it's like what we failed was transparency.

You should tell the population what are the risks or I don't know what the risk is but we will find out.

## Global Healthspan Rankings and System Reform

you can save 10 million and you have 10,000 die or 1, 000 but tell don't hide those 10 000 then make everybody's call informed consent say look you if you so then you start thinking like i have comorbidity i'm obese cardiovascular diabetes i am at higher risk maybe i should get vaccinated i m older or you decide You decide, you don't impose, especially you do not impose based on misinformation.

Let science drive the course of the decision, but let transparency be your guiding principle too. That informed consent is critical with a lot of things that we are talking about.

You know, people need to know at least. And then from there, they can make an educated decision if they're going to get, you know vaccinated. If they are going decide to purchase a product that's been, sprayed with certain type of pesticides like glyphosate.

But let people know what can the potential outcome be of that. Because at that point, I always tell people it's like, Everyone knows that smoking cigarettes is bad for you.

The informed consent on that, it's there. It's on the box that this thing can give you cancer, and it can kill you, there's no one alive here in the United States who doesn't know that smoke and cigarettes are bad.

For you the people that purchase cigarettes it because they've made that decision at that point. I can't do nothing for those people. Unfortunately they made the decision.

Did you get the COVID shot yourself? I got two. I didn't do any booster because I was so sick after the second injection. For a month I had rheumatoid factors through the roof, pain, joint pain.

So I really was in bad shape, but working in the hospital. It was important to follow that rule. But then I also got COVID four times despite the vaccine.

Oh, wow. That I treated with my combination of omega-3 vitamin D polyphenols, 13 activators. And I never got sick for COVID. So that saved me from the requirement of booster because my antibodies were through the roof.

I had a good level of protection. which doesn't mean that the vaccine has to impede. It's not a criticism to the vaccines because the vaccination doesn' t impde contraction of COVID, mitigating the effect of the virus.

But in my experience, the worst experience has been the second shot of vaccine and then I work a lot on prevention of progression of symptoms of COVID, try to help a lots of people among family and friends.

I didn't publish because I don't want to be. Are you, with everything that we've been talking about, especially the healthspan engineering and the architectural of what you've put together, that plan, are you scared about going too public with that?

Like if you do get in the commission enrolled with the FDA, you know, listen, we all know there's been a lot of physicians, right, going to this other side and They're battling against, you know, the big food companies, big pharmaceutical companies.

You hear about these guys missing, right? You here about people that have a lot of this information. People find them at their home. They never woke up from that last night dream they were having.

Does that ever scare you? Well, not scare me because I've been crazy enough in my life with all the extremes for risking my own life in other ways, but I think it is important to think like, for example, I wanted to create a stamp that I make fit for healthspan, a little thing that you can put on food products.

That you say this is good tested and I can guarantee if you go in a supermarket and you see that little stem You know is something that is being validated by this crazy scientist Doctor and then they said are you sure you want to do this?

You see the lawsuit that you may get and them you can get call saying from lawyers like our company has a hundred lawyers full-time you have time and resources to fight a lawsuit for 10 years, and then the other level is the threat to your life that you mentioned.

That was funny because Desmond Child, who was the producer of Bon Jovi, Ricky Martin, Aerosmith, a good friend and co-founder of the Cure Alliance, this little foundation that I have to fund little projects like the COVID pandemic when we had to do the stem cell treatment and saving life and many others.

He told me, we should do a movie on your story and your alliance and the battle to improve the regulatory system, all the impediments to the development of cures that are regulatory, institutional, political, whatever.

But then the story is that you will go to Congress to have a hearing, the Senate, and the night before in Washington, you get killed by two killers that come in your room and do the injection, a famous injection in the foot, between the toes, simulating a heart attack.

But you predicted that this may happen. and you gave the whole folders and files to this friend of yours that is a famous press journalist that goes to the hearing of the senate with all the things and starts bringing out one folder after the other and then you come back.

Like in the movie, you come back alive again to tell the stories about all these impediments and what we could do to re-engineer the health system so that your proposal, even if you have been killed, can be presented and eventually will be implemented, save in America.

But then the COVID pandemic came in and we didn't do the film. Man, what a story. You know, that kind of sounds like a real story that that can definitely happen.

But you know I think I'm 69 year old, I will be 70 on April 1st next year. And I had a good life, did a lot of contributions, so I can do something for my children and grandchildren.

If I get killed in the process, we'll be okay. Yeah, man, that's Living Life Through Purpose, right? Let's talk about

Living life through purpose. You've put these books together.

We have two books here. The Healthspan Code and then you have Therapeutic Revolution. What made you put this books and what are they all about? Well, actually, the inspiration for the first book, The Hellspan Code, was my wife during the pandemic in 2020-21.

Is she a physician also? No, no, she's in the fashion. She's a credible… She was a first flute of the opera and then one x-factor with 30,000 singers and went into business fashion is an amazing creature.

But she told me, but it's possible that you spend all your life curing the most severe cases of diabetes, the more serious cases COVID. During the pandemic, I was going in and out the intensive care unit and doing the whole procedure, undressing outside and washing myself with the hose before going back in the house.

Why don't you do anything? What are you doing to prevent people get to the stage of sickness and advance? disease and that is something I said you know something.

I was thinking thinking about and but you not to Prove that you can prevent a disease, and have an impact on healthy lifespan. It would take Ten years for the outcome primary and point of a trial 20 years.

They don't have that much so why don' t you? write a book and say based on everything I learned in 40 years of research and practice, this is what I would do, and then let young generation validate this concept or hypothesis.

And the interesting thing that when I wrote the first book, they were telling me, ah, but there are no randomized phase three trial. This is not evidence-based medicine or hypothesis.

You say, yes, but let's see. And then month after month, now you can find validating article coming out from Big Studies. So then what at the beginning was an hypothesis, and now after the book was published, every month I read new papers from big studies.

## Lifespan vs Healthspan

meta-analysis, randomized trial, proving every concept we discuss in the book, which was that the invisible risk factors that we have to identify to mitigate and neutralize are very similar between the pandemic of autoimmune diseases that affect 20% of the population with 100 different pathology, are similar in case of severe COVID-19 that evolved towards becoming a problem, and are similar to the chronic diseases that are age-related, that have an inflammatory base too.

So it's like in the food industry, there is not a diet to prevent cancer and a diabetes or chronic kidney disease. There is a good, healthy, anti-inflammatory diet that helps you mitigate all the risk factors towards progression of the disease And then the second book, Therapeutic Revolution, came to say, what do you do if you realize that you are losing the battle and you start having a sign of an initial disease in early stages?

And this addresses the whole issue of the GLP-1 receptor, argonins, the ozempic, monjaro, thyrsipatide, a new triple receptor that are coming out now, that have been a true revolution because you see, You could prevent 94% of diabetes in people at risk if you identify those risk factors.

Some are visible, like overweight or the other insulin resistance you have to identify. And then how they affect not just obesity, but also chronic kidney disease, diabetes, cardiovascular, neurodegeneration, autoimmune diseases, even addiction.

and how the issues will they be having also an effect on prolonging healthy lifespan and lifespan at the end. And now that's what came out from a paper, a GLP-1 receptor agonist improving healthspan and reversing biological age.

So that shows again how you can anticipate. You don't have to wait to be incredibly sick to start trying to mitigate

the disease because it's much easier to intercept disease progression in early phases or to prevent it altogether.

Absolutely. So one of the things that, obviously, I grew up in the inner city. I have a lot of friends that they live paycheck to paycheck. So what are the thing that people will say, well, a lotta this stuff sounds expensive to be able to do.

What would be your response to that? Well, it's critical. That's one of the four pillars of my philosophy, is safety, efficacy, affordability, and transparency.

Because if you have a GLP-1 receptor, some of these drugs, you know that they cost less than $10 a month. Then you see them on the market for $1,000 a year.

You know this is another big battle that you can have to fight. But that raises also the issue of how important is access to technology, the right cures and affordability.

Because if you see diabetes, like a child diagnosed with diabetes at age 10 in the United States loses 13 years of lifespan as an average. Average in the world is 24 years of lifespan.

If you are in a low-income country, 47 years' lifespan loss for a 10-year-old diagnosed with type 1 diabetes is terrifying if you think the disparity of economic ability to access to cures and proper treatment.

But then if you say, I don't want to scare anyone in the United States because of those 13% average, you have those that can access all the top new glucose monitor, glucose sensor, insulin pump, and best care.

And then you The next zip code, like Chicago is a classic. They were telling me, look, you don't have to go between United States and low-income country.

Just go to Chicago from one zip to the other. You may have 10 years difference in health span. So it is really affordability and access to healthspan is incredibly important.

That's why my battle is always when you start to develop a new cure, think also, is this something that is the cure that will never be able to be? applicable because nobody can afford it or a few and so that like in the bio revealing this testing to reveal this factor I said this has to be something that is less than a hundred dollar cannot be a thousand or thousand five hundred dollars screening and that's what we're working on but It's so important to keep us realistic and make sure that everybody can access the ability to remain healthy, physical, cognitive, and mental health.

Absolutely. And Doc, how important, when we talk about health span and longevity and predictive medicine, How important is your health data? Health data is critically important.

AI is playing an incredible role, not only for your health data, but also to prevent medical errors. Let's start also avoiding the hundreds of thousands of deaths from medical error.

and see when doctors have a tendency to say, ah, nobody can replace a physician because the intuition and the thing and system biology and all your experience.

But actually now, there are AI doctors and nurses and AI hospitals, like agent hospital in China, in many countries. It's not exactly aligned politically, but they can see tens of thousands of patients a month.

The accuracy in the diagnosis is over 95% versus 25% the physical doctor.

## FDA Nomination, Food Policy, and Transparency

Embracing technology in access to medical data and algorithm AI doesn't mean not recognizing the risk if something is not done with the proper precaution and oversight and having a physician behind it eventually, but I

think AI and predictive diagnostics and health plan engineering are what will save us from the collapse of exclusively reactive health systems.

They go hand in hand. The ability to have your health data, to your so-called digital twins. between that you can analyze and say, oh, I have all these parameters, this risk factor, have this genetic background that defines what are your risk factors at birth that are very little and modify about those, even though something can be modified.

But then the 80% of what you could modify with the epigenetic intervention that can modify your race progression, your progression towards disease, And it's so complicated, there are so many data that to have an AI algorithm that creates this digital twin that allow you to do not just predictive diagnostic but also personalised intervention based on that predictive diagnostics and your genetic risk factor.

And when it will be affordable enough also the occasional MRI full body and photon counting. the scan that now will give you less and less radiation, more and more safe.

So it's the combination of data that to be managed by a doctor, you have to spend three days to analyze everything, patient by patient. You have three to eight billion people in the world.

It becomes very complex. But with AI, and then you then have all of the other tools that are not so advanced, like the MRI or the CT scan, that all of these are AI driven now when you look at pre-nuvo or you're looking at the clearly harsh scan.

But when, when start looking other tools, they're out there like, the oar ring that I wear, or, you know, something like you get the Fitbit, have the Garmin, The Whoop, having these tools to all integrate together on some kind of dashboard and then you're implementing the AI, I feel like that could be very powerful.

And now you have a new potential revolution. That is the iSelfie. It is this little Canadian company that developed. You move from wearable to image. And so there is a system that from your iPhone or in the future will be put probably in mirroring while you're brushing your teeth in morning.

It's giving a detection that can detect heart rate pressure and can even detect COVID from the eye reading because of the goblet cell and make diagnosis of different level of COVID that you may be affected.

So to me that is Will be potentially if he's validated a revolution because you could put it there No, you can have an assessment every morning when you wake up without having to read them wearables But we'll see the wearable sub progressing very well, but it's imaging technology.

Yes, I quite impressed. That's pretty incredible Wow, Doug, we're gonna have a little quick fun here. So the guests can get to know you One of my favorite podcasters, Stephen Barlet with the diary of a CEO, he came out with these conversation cards.

So I'm going to have you just other way. Yep, that way, you'll take the sleeve off. And then you pick two random cards from the middle of that deck. and you read the card and answer it.

All right. One, two, So next. Oh, boy. No. What is an innate inadequacy you admit to that you could work on starting tomorrow? Well, it is practicing better, the practice what I know very well in theory, that is exercising more beyond the tennis match that my wife forced me to do and how to compensate the intense, like it's often you work 12 hours in the hospital and you go home and say I'm too tired to exercise and tomorrow Practice what you preach practice what to preach is a very good thing.

I can be better in that and And then how will you control your own greed is My own grid, you know, my problem has been I've not been greedy and Up to now, I never charge a patient a dollar in my life, the way that can be checked.

If someone out there has ever been charged by me, please come forward. I own my own book because I can give them for free. So when I go to conferences, as I said, do you want a PDF of the book?

Send me an email and I send the PDF for the books. But of course, if I sell books, it's not, I say no, money is not important at all, is important. And also, my children once told me, besides 1,250 papers and the H index of 123, what are we learning?

What are left from you? And then I'm trying to become, when I will grow up, i will think also about greed and making a little more money. Absolutely. Dr.

Descartes, if there's someone listening or viewing this podcast that really resonates with today's message, what is that last thing that you can leave them off with?

Well, start seeing what I can do. What can I do for my country without waiting what your country can for you because that may not happen very quickly because you don't just have to prove what is important and what can be changed, but we have also to see if we can win the battle against the powers, the incredible powers against progress in this direction.

## Books, AI, and Closing Reflections

It is very difficult that we will change the food industry, the whole ecosystem around us that could be damaging, but we can mitigate it if we start identifying this factor and then trying to neutralize them.

I'm not pretending that there is no inflammatory element or toxic element in the food chain, but if you identify that you have low vitamin D, for example, that have a high arachidonic acid and low omega-3, a more inflammatory background that can figure out immune diseases or age-related Inflammatory diseases, I'll try to mitigate that you can take supplements You can apply diet and correct with exercise Try to do what can you do to?

Contribute to a better system overall that waiting that the government I love that I loved that and Doc if someone wants to find you where can they find?

You? where they can find social media. You don't have to give me your exact address, but no, it happened during COVID. I live in Miami and I had my wife call me and say, there is a girl outside crying our daughter that wants to see you.

What did you do? Put someone pregnant or something. And it was this lady, this young lady that says my husband is dying of COVID and I heard that you're doing this stem cell, what you can do to save him.

And she broke through the gate and the security was looking for her. but she got my address and was able, I said, look, it doesn't matter what happened to your husband, you should get a medal because to be so determined to go crash through the security gate, she just fall in another car that entered before the bar came down.

Went in, arrived to the doorstep, and then my wife called me to crash home because there is someone that is completely devastated, crying. I don't know what happen, but I'm not opening the doors.

So now you can find me on social media, like if you do Camillo Recordi or CamillorecordiMDofficial on Instagram or Excel, LinkedIn, Instagram, Facebook.

I'm pretty transparent. Awesome, which we'll have all those links listed down below. So dr. He called it It was a pleasure having you on a healthy point of view podcast.

This was very informative. Thank you Thank You for having me and thank you for the amazing work you're doing Transmitting and creating awareness of this critically important issue The work we are doing without communication is nothing.

Absolutely. Guys You heard that the recording here He said something that's very incredible. Think about what you can do for our nation versus what our government can for you.

That's powerful, right? When we talk about changing the trajectory of health for a nation, you have to do your part as well too. We covered a lot of topics, a lotta topics on what we can actually do to change the architectural structure of our healthcare system.

But you have to do your part, too. That's how we truly change The Health of Our Nation. If you know anyone who will resonate with today's message that will benefit from todays message, make sure you take this podcast and share it with them.

Make sure like, subscribe, do all that other fun stuff, and we'll see you for the next one.