

# Dean Ornish, MD

## The Transformative Power of Lifestyle Medicine



Dean Ornish, MD, is an expert in heart health, using lifestyle strategies to heal, and in increasing energy and pleasure in life. He's the founder of the nonprofit Preventive Medicine Research Institute, a clinical professor of medicine at UCSF, and the author of seven bestselling books, including (with Anne Ornish) *Undo It! How Simple Lifestyle Changes Can Reverse Most Chronic Diseases*. Dr. Ornish's 40 years of research has scientifically proven, for the first time, that lifestyle changes can reverse heart disease and prostate cancer, turn on health-promoting genes, and reverse aging on a cellular level. The Ornish Program was the first lifestyle-based program for reversing disease to be covered in the history of Medicare. *LIFE* magazine has recognized Dr. Ornish as "one of the fifty most influential members of his generation" and by *Forbes* magazine as "one of the world's seven most powerful teachers."

Join in to hear insights from Dr. Ornish's 40+ years of pioneering lifestyle medicine experience, and how you have the power to prevent and reverse chronic disease.

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**Ocean Robbins:** Welcome to the Food Revolution Summit, where we explore how you can heal your body, and your world, with food. This is Ocean Robbins, and I am joined by my dad and colleague, John Robbins. And welcoming our guest, Dr. Dean Ornish.

Dr. Dean Ornish, MD, is founder of the Preventive Medicine Research Institute, clinical professor of medicine at University of California San Francisco, and author of seven best-selling books including his latest, written with his partner Anne Ornish, *Undo It: How Simple Lifestyle Changes Can Reverse Most Chronic Diseases*.<sup>1</sup>

Dr. Ornish's 42 years of research have proven that the lifestyle changes he recommends can improve heart disease, type II diabetes, and prostate cancer. And can lengthen telomeres which begins to reverse aging on a cellular level. The Ornish Program was the first lifestyle-based program to be covered in the history of Medicare. Dean has been recognized by *LIFE* magazine as one of the 50 most influential members of his generation and by *Forbes* as one of the seven most powerful teachers in the world.

So now, Dean, we're so glad to have this time with you. And now for the interview I'm gonna hand it over to my dad and colleague, John Robbins.

**John Robbins:** Well thank you, Ocean, for that introduction. And thank you, Dean, for once again being with us.

**Dr. Dean Ornish:** It's a great pleasure, thanks for having me back.

**John Robbins:** Oh it's always a pleasure and a privilege actually to have you. Your work has been of the essence in bringing about the growing awareness of the power of simple lifestyle changes to prevent and to reverse the progression of the most common chronic diseases. Often even without drugs or surgery.

Now in your latest book, *Undo It*, that Ocean just mentioned and that you've written with your partner Anne, you say that lifestyle medicine is now the most exciting movement in health and healing today.<sup>1</sup> That it's a tidal wave that hasn't yet even begun to crest. Why do you say that?

## **Lifestyle Medicine: What is it?**

**Dr. Dean Ornish:** Well because it's true. (laughs) Lifestyle medicine is a field that I helped create, which uses lifestyle changes not only to help prevent disease, but often to treat and sometimes even to reverse it. And it's by addressing the underlying causes of why we get sick, which to a larger degree than I think people had once realized, are the lifestyle choices that we make each day. What we eat, how we respond to stress, how much exercise we get, how much love and support we have.<sup>2</sup>

To reduce it even further, to eat well, move more, stress less, and love more. And the more diseases

we study and the more underlying biological mechanisms we look at, the more scientific evidence we have to show how powerful these changes are and how quickly they can often cause improvements that we can measure.

**John Robbins:** Well many commercial insurance companies are now covering your program. And what's remarkable to me is that some of them at least are covering it not only for reversing heart disease, but also for reversing type II diabetes, for high blood pressure, for obesity, for elevated cholesterol levels. The list is growing. And it's inspiring to me to see how these same lifestyle changes can actually reverse so many different chronic diseases. And how quickly the benefits can occur.

**Dr. Dean Ornish:** Well that's true, and so in the *Undo It* book that my wife Anne and I wrote - and we've worked together for now 20 some odd years - we put forth this new unifying theory which is that, pardon me, I was trained like all doctors to view these diseases you mentioned - heart disease, type II diabetes, hypertension, hypercholesterolemia, obesity, early stage prostate cancer, perhaps dementia, autoimmune diseases - as being fundamentally different diseases, different diagnoses and different treatments.

But as I was looking back over our 43 years of research, why is it that there wasn't like there was one set of lifestyle changes for reversing heart disease - which we're able to show for the first time in a randomized trial - or type II diabetes, or these other conditions we mentioned. It was really the same for all of them.

And it kind of hit me, in what in retrospect may seem like a blinding flash of the obvious, that the reason why these same lifestyle changes were so powerful is that these diseases are not really so different from each other. They have more in common than they have different.

Because they all share the same underlying biological mechanisms. Things like chronic inflammation, changes in the microbiome and telomeres, gene expression, overstimulation of the sympathetic nervous system, changes in angiogenesis, apoptosis, immune function, and so on. And each one of these mechanisms, in turn, is directly influenced by what we eat, how we respond to stress, how much exercise, and how much love and support we have.

To me, the best ideas were the ones that seemed kind of obvious in retrospect, but no one had really talked about them before. It also helps to explain why you often find that, what are called comorbidities, the same person will have heart disease and type II diabetes, and high blood pressure, and high cholesterol and be overweight and so on. Because they're really just different expressions of the same underlying mechanisms. And again, why these same lifestyle changes can be so powerful in addressing such a wide variety of chronic diseases both in reversing and preventing them.

## Lifestyle Medicine, Comorbidities, and COVID-19

**John Robbins:** You mentioned comorbidities, diseases that occur alongside each other or together almost as a package. We're hearing that term, comorbidities, a lot these days because it's been found that people who have comorbidities along with COVID-19 fare much, much worse with the disease, with the virus than people who encounter it but are healthier to begin with.<sup>3</sup> Does your program help people to not have the very conditions that we're finding predisposed people to bad outcomes with COVID-19?

**Dr. Dean Ornish:** They do. I mean, as you know, as you've indicated, the people who are most likely to die from being exposed to the coronavirus, or getting sick from the coronavirus are those who have chronic diseases. The ones we've been mentioning. And so most of the focus so far has been on preventing exposure to the virus, which of course is very important. You know, staying at home, social distancing, washing your hands, gloves, disinfectants, and so on.

But relatively little has been written about the other half of the equation, which is, first of all, how to reduce your risk of getting these chronic diseases, or to reverse them if you have them. And also how to enhance your immune system so that if you are exposed, you can reduce your chances of getting sick, or at least to mitigate the intensity of the disease.

Some people have very mild cases and some people die from it. And the chronic diseases really are a big factor in that. And the four aspects of our lifestyle medicine program - eat well, move more, stress less, love more - not only have been proven to reverse a wide variety of chronic diseases that often predispose someone to having bad outcomes if they get COVID, but also they enhance immune function.

**John Robbins:** It's telling to me that the same diet and lifestyle that you've proven can prevent and reverse heart disease, prostate cancer, and many, many other of the serious conditions that plague so many people today, can also greatly lower your risk of having a bad outcome with COVID-19.

The virus is not the only pandemic we face. 2020 was the deadliest year in US history, with the total number of deaths exceeding 3 million for the first time in history, and the total number of deaths jumping more than 15% above the previous year. This was the largest single-year percentage leap in deaths since 1918, when tens of thousands of U.S. soldiers died in World War I and hundreds of thousands of Americans perished due to the worst flu pandemic in recorded history.<sup>4</sup>

Much of the increased deaths in the US last year was due to the coronavirus pandemic, which took about 350,000 lives.<sup>5</sup> But in this same year, in 2020, more than 650,000 people died from heart disease in the US. Another 600,000 died from cancer. Another 300,000 died from the obesity epidemic.<sup>6</sup>

We've gotten used to so many people dying from what are actually almost always preventable

diseases. We've normalized that level of death, so much so that we almost take it for granted. Right now, there are huge numbers of people who feel lonely and isolated and depressed, and 40 percent of Americans are suffering from a chronic disease associated with a poor diet and lifestyle, and all of these people are at much higher risk of death and of serious adverse outcomes if they become infected with COVID-19.<sup>7,8</sup> Which, to me, points once again to the incredible importance today of eating a whole foods, plant-based diet. You dramatically reduce your risk of all of these problems, and you greatly lessen your risk of a bad outcome if you become infected with COVID-19.

Dean, I have heard you say elsewhere that when we're depressed, our immune systems are depressed. I know you've done a great deal of research into how your diet and lifestyle program affects people with depression. Did you find that depression scores were significantly decreased when people ate a whole foods, plant-strong diet, and did the other simple lifestyle practices your program entails?

## **What Diet, Connection, and the Internet Have to Do With Mental Health**

**Dr. Dean Ornish:** Yeah, we found the depression scores were decreased by 50% overall. And in some cases even more.<sup>9</sup> That's actually better than you get with antidepressants like Prozac and Zoloft and other SSRIs. And we weren't really trying to address depression, we were just doing the same intervention which generally improves health and wellbeing. But I think the real epidemic, or pandemic, is not only heart disease and diabetes and of course COVID, but loneliness, and depression, and isolation.

There's been a radical shift in our culture in the last 50 years with the breakdown of the social networks that used to give people a sense of love and connection, and community. 50 years ago most people felt connected. They had a neighborhood that they grew up in and they knew their neighbors and saw them regularly. They had two or three generations of families living together in the same neighborhood. They had a church, or a synagogue, or a mosque, or a club that they went to regularly. They had a job that they'd been at for 10 years or more that felt secure and stable. And so they got to know their coworkers.

And many people today don't have any of those things. And you say, well, we get connected online. But one study, which we talked about in the *Undo It* book, showed that the more time you spend on Facebook, the more depressed you are.<sup>1,10,11</sup> Because it's not an authentic intimacy. What makes intimacy healing, is that you're seen in all of who you are.

Not just - I mean the thing with Facebook, or Instagram, or these other things is, or WhatsApp, is it looks like everybody has this perfect life but you. You know, here we are in front of the Eiffel Tower. Or here we are, our son is graduating college.



Most people don't post their failures, their demons, their dark sides. You know, the things that we all experience. But if you grow up in a family with two or three generations of people living together, they know you. They don't just know your Facebook profile, they know where you messed up, they know where you got busted or you had a nervous breakdown or your kid got on heroin or whatever it happens to be.

And so I think that anything in our support groups that we use in our studies are not just to help support people in staying on the diet, which is what people usually think about, or exercising, as important as those things are, it's really trying to replicate that experience of being fully seen by focusing on what's really going on in your life, which somebody can say, "You know, I may look like the perfect parent, but I'm really not. My kid's, you know, whatever. He's failed school or he's on heroin, or whatever." And somebody else can say, "Gosh, you know, that must be awful." Or, "Gosh, you know, my kid's having problems too," and, or, "I'm having problems too." You know?

And it doesn't change the fact that the kid still is whatever, but it changes everything in terms of the shame and the guilt and the sense of being seen and fully regarded. And that often can give people the power and the motivation then to go back out and, and be a better parent or be a better father or be a better spouse or whatever that happens to be.

And so we tend to focus on things that we can measure and yet sometimes the things that are the most powerful are the ones that are the hardest to measure and yet the most meaningful.

## Why Plant-Based Foods Reverse Disease

**John Robbins:** In your new book, *Undo It*, that you wrote with your wife, Ann, you quote an ancient proverb that says, "When diet is wrong, medicine is of no use, when diet is correct, medicine is of no need."<sup>1</sup> Now, Michael Pollan, a very widely read author, is famous, among other reasons, for his saying, "Eat food, not too much, mostly plants." And now you've come up with a variation on that, which is that in order to reverse most chronic diseases, eat real foods, just plants, not too much sugar or fat. Can you help our listeners to understand why a whole foods, plant-based way of eating can reverse the progression of so many chronic diseases?

**Dr. Dean Ornish:** Yeah, and Michael is a good friend and I think he's right on when you're talking about preventing disease. It's the ounce of prevention and pound of cure. It takes more, it takes a lot, to reverse a chronic disease. That's why we were the first to be able to show that from a research standpoint in so many cases because most people didn't go far enough. And yet if you're just trying to stay healthy, what matters most is your overall way of eating and living.

So I wrote a book about 10 years ago called *The Spectrum*, which is really based on preventing disease as opposed to the newer book, the *Undo It* book, which is really more about reversing disease.<sup>1,12</sup> And in *The Spectrum* book, what I made the point was is that what matters most is your

overall way of eating and living. If you indulge yourself one day, it doesn't mean you cheated or you're bad, eat healthier the next.<sup>12</sup>

In fact, the language of behavioral change has this kind of fascist, moralistic finger wagging, Nurse Ratchet kind of quality that really turns a lot of people off. Because even more than being healthy, most people want to feel free and in control and as soon as I tell somebody, you know, "Eat this, don't eat that, do this, don't do that," they immediately want to do the opposite. That's just human nature. And when I lecture sometimes, I say, "It goes back to the first dietary intervention, you know, when God said don't eat the apple and that didn't go so well and that was (laughs) God talking." So to me the lesson is even more than being healthy, being able to feel free.

And so if you're just trying to say healthy, instead of saying "eat this, don't eat that, these are...", once you call foods good or bad, it's a very small step to saying I'm a bad person 'because I eat bad food. At that point, just might as well finish the cheeseburger because you're a bad person, but that doesn't work very well.

And so in *The Spectrum* book, I categorize foods from the most healthy, group one, to the least healthy, group five, as opposed to saying these are good foods and these are bad foods.<sup>12</sup> Now the group one foods are the whole foods, plant-based foods, fruits, vegetables, whole grains, legumes, soy products, the usual suspects. Group five are the usually unhealthy suspects, fried foods, doughnuts, red meat, things like that. And groups two through four are intermediate.

And I say, "Look, instead of me telling you what to do, what do you wanna accomplish?" "Oh, I don't know, I wanna lose 10 pounds. I wanna get my cholesterol down, I wanna get my blood pressure, my blood sugar down, I wanna-" whatever. You say, "Good. what are you eating now?" "I'm eating mostly unhealthy group four and five." "Great. How much are you willing to change?" "Wow, no one's ever asked me that before, everyone's telling me what to do. I don't... that's kind of cool. I like that you're asking me what I'm willing to do because now it's my choice. Okay, well, I'll eat less of the four and five and I'll eat more of the groups one through three, but I'll indulge myself sometimes."

## Getting to the Roots of Our Health Problems

**Dr. Dean Ornish:** "Okay, great. How much are you exercising?" "Not enough but-" "How much are you willing to do?" "Well, I'll walk a half an hour a day." "Okay, that's good. How much meditation and yoga are you doing?" "Zero." "How much are you willing to do?" "Oh, I don't know, I'll do 20 minutes a day of meditation." "Cool. How much love and support do you have in your life?" "Not enough but I'll spend more time with my friends and family." "Great."

So we'll support that degree of change, we'll track it, and then after a month or six weeks, we'll recheck everything. Let's say they wanted to lose 10 pounds and they lost five or they wanted to get their LDL cholesterol down 40 points and it went down 20, say, "Great, look at that, you're getting better. Now



if you're willing to make even bigger changes, again, not all the time, but most of the time, you can probably get the rest of the way." And then I just find that's a much more sustainable approach because no one's telling them what to do. It's very empowering.

**John Robbins:** I get that people vary in how much they want to change. And if you are only wanting relatively small improvements in your health, then you can often accomplish those benefits by making some simple changes. But Dean, one of the things that always fills me with awe is that people, if they are willing to make significant positive changes and stay with them, are often able to reverse even conditions that are immediately life-threatening. It's not easy, necessarily, but it is possible.

**Dr. Dean Ornish:** If you're trying to reverse a life-threatening condition, it's hard. And that's what the *Undo It* book is about.<sup>1</sup> It's about what it takes to actually reverse disease and we're finding that in all of our studies, that there was a dose response correlation between the degree of lifestyle change and the degree of improvement, at any age, which was really... I had thought, incorrectly, that the younger people who had milder disease would do better, but it wasn't how old or how sick they were, the more they changed the better they got, at any age, which is a very empowering message.

But to get reversal, they had to follow the program pretty close to 100%, which is basically a whole foods, plant-based diet, meaning it's essentially a vegan diet, fruits, vegetables, whole grains, legumes, soy products.

It's also low in fat and sugar. Walking for a half an hour a day or an hour three times a week or some kind of aerobic exercise and some strength training as well, some resistance training. An hour a day of meditation and yoga, which is a lot for, for many people, and the support groups. And as you say, Medicare and many insurance companies are now covering the program. They now have cover virtually so we're making it available virtually as well, which makes it much easier for people. And it's working. We're getting bigger changes in lifestyle, better clinical outcomes, bigger cost savings and better adherence than anyone's ever shown.

And the reason it works is that our bodies have, in many cases, a remarkable capacity to begin healing if you just stop doing what's causing the problem. I mean, there are hundreds of thousands of protective substances in fruits and vegetables and whole grains and legumes and so on, that have anticancer, anti heart disease and anti-aging properties.<sup>13-17</sup> And it's also what they're not doing that you get really a double benefit when you go on a whole foods, plant-based diet. You're not only not consuming the things that promote disease, but you're also getting hundreds of thousands of others that are protectant.

## **Eating Less Fat, But Fatter Than Ever**

**John Robbins:** Well there's a belief today that's wide spread, that we've been told, to eat less fat. We're eating less fat, but we're fatter than ever, so the low fat diet recommendations were wrong. And

according to this thinking our problems really are due to sugar and refined carbs and that's the end of the story. Dean, it is true that we've been told to eat less fat and it is true that we're (laughs) fatter than ever. So what's really going on here?

**Dr. Dean Ornish:** Well, it's true that we've been told to eat less fat, but actually if you look at the US Department of Agriculture database, which actually tracks not what people say they're eating, but what they really are eating, they are fatter than ever.<sup>18</sup> We are eating more fat, more sugar, more calories, decade by decade since 1940 when they started tracking these things. So it's not surprising why we're fatter, because we're eating more fat.

But there's this reductionist thinking that it's all sugar or it's all fat, or it's all meat or it's all stress or it's all smoking or it's all lack of exercise or it's all whatever, and it's not all any of those things, it's a multifactorial condition. Each of these things is important. That's why you know, we have four components to our program - eat well, move more, stress less, love more. They all play an important role.

So, an optimal diet is low in fat and low in sugar and refined carbs. It's mostly plant-based, fruits, vegetables, whole grains, legumes and so on. And again, it's not just the diet, but these other aspects as well. And so, the studies showing that for example, if you go on an Atkins type diet, which is now kind of morphed again as a ketogenic diet or a paleo diet, it comes in different forms, is that they're all based on the half truth, which is that most Americans eat way too much sugar and refined carbs and if you eat less of them, that's a good thing.

But it's what you replace them with that really matters. If you replace them with... I'd love to be able to tell people that bacon and pork rinds and sausage and so on are healthy, but they're not. You know, but if you replace them with good carbs, fruits and vegetables and whole grains and legumes as they come in nature, then you get a double benefit.

## Refined Carbs and Your Body

**John Robbins:** I know what you mean when you say that you'd love to be able to tell people that bacon and sausage are healthy, because people do love to hear good things about the foods they have come to like. But I think it's much more important to do what you do, which is to tell people the truth. Dean, a lot of people really like eating pastries and donuts and white bread. Can you help our listeners to understand why refined carbs like sugar and white flour are bad for them?

**Dr. Dean Ornish:** The reason why refined carbs like white flour are bad or sugar is that they get absorbed very quickly from your stomach into your, and your gut into your blood. And so your blood sugar spikes really quickly, your pancreas makes insulin to bring it back down, which is good, but the insulin accelerates the conversion of calories into fat, it promotes inflammation which is one of the mechanisms that underlies this unifying theory that we were talking about, all these conditions.<sup>19-21</sup>

You can consume virtually unlimited amounts of sugar without getting full because you remove the fiber that would otherwise fill you up before you get too many calories. You can only eat so many apples, you're gonna get full before you get too many calories.

When you eat whole grains, whole wheat flour, and brown rice, and fruits and vegetables as they come in nature, they're rich in fiber. The fiber fills you up before you get too many calories, but it also, and it also slows the absorption from your gut into your blood so instead of getting these rapid spikes in blood sugar that provoke an insulin response, and over time, those insulin surges decentralize and down-regulate the insulin receptors, so you get your body's making more and more insulin to get the same affect and that's what causes what's called insulin resistance. Then ultimately metabolic syndrome and even type two diabetes.<sup>22</sup>

But when you eat whole grains and fruits and vegetables in their natural form, the fiber slows the rate of absorption so you don't get those rapid rises in blood sugar and therefore you don't get those repeated surges of insulin which cause the downregulation and the insulin resistance and the inflammation.

## Animal Protein and Your Heart

But you're also getting the hundreds of thousands of other substances that are good for you, and you're not getting the things that are bad for you. It turns out that animal protein, independent of the whole fat versus carbs debate, is harmful as well. And there was a wonderful article in the *New England Journal of Medicine* years ago by Steven Smith, it had this beautiful picture, which I reproduced in the *Undo It* book about what happens in your arteries on different diets.<sup>23</sup>

And on a diet like I recommend, the arteries are open and clean. On a standard American diet, the SAD diet, in every sense of the word, they're partially clogged. But on the Atkins, Paleo, Keto diet, even though your blood sugar may go down, the arteries are severely clogged. And that's why, when Dr. Atkins died, his autopsy was released to the public and it showed that he died of heart failure.

Just because you can lower your triglycerides or your blood sugar doesn't mean it's necessarily good for you. What really matters is what's happening in your arteries.

**John Robbins:** Sometimes people go on a Keto diet, and they lose weight or their blood sugar numbers come down, and they're excited. But I hear you saying that even with these short term improvements, their arteries are becoming increasingly clogged, which leads to more heart attacks and strokes. Dean, do we have evidence of what happens to the arteries of a person eating, say, a single meal of even high-quality meat, compared to what happens to the arteries of someone eating a single meal of wholesome plant foods?

**Dr. Dean Ornish:** You know, there's a wonderful documentary called *The Game Changers*, I'm sure

you've seen, that Louie Psihoyos and James Wilks and others did - that is still the number one most downloaded documentary in iTunes history just to show how much interest there is in that.<sup>24</sup> And there's a great scene in there where first they drew blood on athletes after a single high animal protein meal, high fat meal and then a plant-based meal, then showed how the blood was really cloudy after the single high fat meal and was clean and clear after the healthier meal.

## **Animal Protein and Male Sexual Health**

**Dr. Dean Ornish:** But they did another scene which has become almost legendary now, where they had three elite athletes in their mid 20s and they had them eat a meat-based burrito, and then at night they had this device that they put around their penis to measure how frequently and how hard their erections were when they slept at night, which is a normal guy function when you sleep, at different times during your sleep, you have erections. It's kind of how your plumping keeps healthy.

And then they did the same thing the next night, with a single plant-based meal, also in a burrito. And they found that after the plant-based meal, they had three to 500% more frequent erections and 10-15% harder erections when compared to the single meat-based meal the night before.<sup>25,26</sup> And apparently the film crew (laughs) went on a plant-based diet after shooting that scene. It shows so many things that are so powerful, that are so motivating, because so often people are, again, coming back to fear, they're saying, you know, "Eat your vegetables, you'll live longer." Or, am I gonna live longer or is it just gonna seem longer. I wanna have fun, I wanna enjoy my life.

But you know, if you say wow, if you eat this way, your sexual function improves, would you rather... and so you'll say, "You know, I like eating cheeseburgers, but I like having sex a lot more." Or for athletes, they have all these elite athletes who raised their game and became NFL champions. NFL Titans won their first championship ever and Olympic athletes, medalists at the age of 39 and so on, how quickly the athletic performance improves.

## **A WFPB Diet Impacts More Than Just Ourselves**

**John Robbins:** It seems that everyone's functioning improves with a whole foods, plant-based diet. Athletes, as you mentioned, have faster recovery times and so can train harder and often perform better. People have far lower rates of disease, and much more vitality, emotional resilience, and joy in their lives. And I find it extraordinary that the same food choices that provide all these benefits to our lives and health, are also vastly better for the earth.

**Dr. Dean Ornish:** Well, as you know, better than anyone, more global warming is caused by livestock consumption than all forms of transportation combined, and also more deforestation of the Amazon. It takes 14 times more resources to make a pound of meat-based protein than plant-based protein. There's really enough food to feed everyone. Nobody really ever needs to go hungry, it's more of

a distribution issue. If everyone were to move towards eating more of a plant-based diet. And, not to mention, billions of sentient beings are put in crates that they live their whole life in and then are massacred.

Sometimes it's so easy to say, "What can I do as one person about global warming? You know, it's, it seems like such an overwhelming thing." If we understand that something as important as what we put in our mouths every day can make a meaningful difference, I find that if it's meaningful, then it's sustainable. My younger son is 20 and he's a really accomplished musician and there's an indie band called Wolfpack that he likes. We went to their concert and the front man is a vegan. And he ended up going backstage and said hello to him.

And he said, "Hey," in the middle of our concert, "Would you come out and say a few words about why eating a plant-based side is a good thing?" I said, "What, what didn't you just say? (laughs). He wanted me to come out in the middle of your concert and talk about why a plant-based diet is healthy? He said, "Yeah." So it was at the Greek Theater in Berkeley, and there's like 18,000 mostly millennials. So for 15 minutes I was cool to my 20 year old son. It didn't last, but for at least for a short time, talking about these things. But I didn't talk about heart disease and diabetes and prostate cancer, because when you're 19 or 20 years old, you can't relate to that. You think you're immortal, you're going to live forever.

I talked about global warming, and I talked about feeding the hungry, and I say, "You know, something as primal as what you put in your mouth and can free up resources to feed the hungry, to reduce suffering, to reduce global warming. Even if it's just a meatless Monday, you don't have to be a vegan, just to the degree you move in that direction, what's good for you really is good for the planet." It was very well received. And I got the feeling of why people like to be rock stars. Being on stage with thousands of people screaming good things at you is a good thing.

But again, it's really what motivates us is if it's meaningful. And if we realize that we're not powerless and there's a lot that we can do. And sometimes something as simple as what we eat can make a meaningful difference around the world.

**John Robbins:** It is amazing how much difference we can make to the quality of our lives, to the level of vitality we experience, and to some of the great issues of our time such as reducing hunger and addressing climate change, with our food choices. Dean, are there also economic implications to all this?

## **Economic Implications of Diet**

**Dr. Dean Ornish:** 86% of the \$3.7 trillion we spent last year on health care, which is mostly sick care, was for treating chronic diseases that are largely and often preventable and even reversible through these same lifestyle changes we've been talking about. It also turns out that 5% of Americans account for 50 to 80% of all healthcare costs. And these are the ones with chronic diseases as well.<sup>27,28</sup>

We did a study with Highmark Blue Cross Blue Shield years ago, showing that in the first year they cut their overall healthcare costs by 50%. And four times fewer people, did they spend \$25,000 or more on the year after they changed their lifestyle. And we did another study with Mutual of Omaha where they found they cut, they saved almost \$30,000 per patient in the first year, because almost 80% of people who were told they needed a stent or a bypass for an angioplasty were able to safely avoid it by changing lifestyle.<sup>29</sup>

It's important to show cost savings in the first year because they know that a third of people change jobs every year. And with that, they change insurance companies and insurance companies say, "Why should we spend our money for some future benefit that someone else is going to get?" But if we can show cost savings in the first year, which is when you really show this to treat disease and not simply to prevent it, then the cost savings are in the first year. And then, if it's a self-insured corporation, those savings accrue to their bottom line. If it's an insurance company, they go to their bottom line and then it becomes really just good economic sense to do this as well.

So whether you're looking at it from an economic standpoint, an animal suffering standpoint, a global warming standpoint, a better sex standpoint, (laughs) a looking better standpoint, it all converges in like, "Oh, these are the really the things to do." And, not to live longer, although you probably will, but to live better, which is really what makes them sustainable.

## Your Doctor May Not Know the Power of Nutrition

**John Robbins:** There are so many benefits and advantages to the program that you're advocating, and have been advocating for a long time, that you've proven can reverse most chronic diseases and certainly can prevent even more. It sometimes boggles my mind that there's resistance. There's so much resistance to this. And some of that resistance is coming from the medical profession.

I've always thought it's kind of a scandal that nutritional education isn't taught in medical school. Most of our practicing physicians haven't learned anything about it.<sup>30</sup> And yet people go to their doctors assuming that their doctors will have some expertise in the relationship between food and health. How is that happening? What, what and how, what's your take on it?

**Dr. Dean Ornish:** Well, it's that old saying from Abraham Maslow, "If the only tool you have is a hammer, you tend to see everything as a nail" and we're trained to use drugs and surgery. We're reimbursed to use drugs and surgery. And so we use drugs and surgery. That's why I spent 16 years of my life working with CMS, to create a new benefit category, to cover our program for reversing heart disease.

In the early '90s, through my nonprofit institute, the Preventive Medicine Research Institute, we trained 53 hospitals and clinics around the country for almost nothing in our program for reversing heart disease. And there were academic centers and at UCSF and at Scripps and Harvard and Beth Israel, New York, and then community hospitals in Omaha, Des Moines, Columbia, South Carolina, et cetera.



And we worked, we got bigger changes in lifestyle, better clinical outcomes, bigger cost savings, and better adherence than anyone's ever shown. And yet a number of the sites closed down, which was shocking to me. They're like, "Why would you do that?" They said, "Well, this is the best program we've ever had of its kind, and it's not reimbursable. So if it's not reimbursable, it's not sustainable."

So that's what set me on this 16 year journey with Medicare, because I knew no matter how many studies we did, if it wasn't reimbursable, it would always be a footnote. And it's not because we doctors are only interested in money, but if you're trained to use drugs and surgery and you're reimbursed, then that's what you do.

**John Robbins:** Do you see this changing? What do you see on the horizon?

**Dr. Dean Ornish:** I think that this is a wave that hasn't even begun to crest, because there really is a convergence of forces that make this finally after so many decades, the right idea at the right time. Because on the one hand, the limitations of drugs and surgery are becoming increasingly clear. There are now two tenure randomized trials of men with early stage prostate cancer. And they showed that only one out of 50 actually lived longer when they had surgery or radiation. The other 49 really didn't and often got more side effects of being impotent or incontinent, or sometimes both.<sup>31</sup>

In the case of type II diabetes, getting your blood sugar down with drugs doesn't work as well at preventing the horrible side effects of, or the quality of diabetes. Amputations and kidney failure and blindness and impotence and heart attacks and strokes, but getting it down with lifestyle. If you can get your A1C down below seven, according to the American Diabetes Association, you can prevent most, if not all, of those complications.<sup>32</sup>

In the case of heart disease, there are now these eight randomized trials showing that stents and angioplasties really don't prolong life, prevent heart attacks, or even reduce chest pain. Whereas we showed you could reverse it through simple lifestyle changes at a fraction of the cost. And the only side effects are good ones.<sup>33-35</sup>

And so, and not to mention the costs that we talked about earlier, the economic costs of this, as well as the human costs. So I'm optimistic by choice. I'm not optimistic by nature, but I'm optimistic by choice because I was suicidally depressed when I was in college. It's very easy to get depressed by all these things, but then you just can't really function. But if I choose to be happy, (laughs), I feel like I have a lot more choice in that, and that can be self-fulfilling in a good way. But it also gets me out of bed every day and helps me to do the kinds of things that hopefully can make a difference in the world.

**John Robbins:** Well, you are in an enormous sense. I was thinking about a friend and colleague of yours and mine, Kim Williams, who of course is a former president of the American College of Cardiology. And at one point in his career, he realized that his cholesterol levels were very high, his other blood markers were too high. And he began to study the literature to see what he could do,

because he had not learned anything in his training as a cardiologist about diet and how that might help. And he found your work and he began to undertake your program and he got enormous results.

And as a result of that, he's become a leading spokesperson, to say the least, for the health advantages, particularly the cardiological health advantages, of a whole foods, plant-based diet. And I think his life and work and his mission now are another example of what you're about, which is that we're seeing changes. Things are happening that are making it possible now for more and more people to understand, and to take advantage of the benefits that they can themselves receive and gain from a whole foods, plant-based diet and the other lifestyle actions and choices that your program so beautifully includes.

**Dr. Dean Ornish:** Well, it's true. And I think he's a wonderful example of that. When he was the president of the American College of Cardiology, a few years ago, he held a keynote session at their Annual Scientific Sessions in Chicago. And over 3000 cardiologists showed up for a seminar on lifestyle medicine that included me and Kim and a few others, and they were turning people away at the door. And so I realized that there is a real hunger for this information.

**John Robbins:** There is a real and growing hunger for accurate and credible information about the proven benefits of a healthy diet and lifestyle. Cardiologists and other physicians want this information, and so do people who want to reverse disease conditions by correcting the underlying causes, rather than just trying to suppress the symptoms by taking drugs that invariably have side effects and do not get at the underlying causes. Dean, what is the significance of lifestyle medicine for you?

## Significance of Lifestyle Medicine

**Dr. Dean Ornish:** I think that lifestyle medicine, for me, is a way of being able to function as a real healer to really help people deal with the underlying causes, which are lifestyle related. But even the lifestyle choices themselves are often functions of deeper issues that result in many ways of the depression and the sense of loneliness and isolation that are truly pandemic in our culture with the breakdown of the social networks that we talked about earlier.

I mean, I'd ask people - and we've talked about this in our prior interviews, but it's worth repeating that - I'd ask people, in our studies because we've really get to know each other well, we'd lived together for a month at a time, or meet regularly for years at a time. And I'd say, "You know, teach me something. Why do you, why do you smoke? Or why do you overeat or drink too much or work too hard or abuse opioids, or play so many video games? These behaviors are maladaptive." And they look at me, they go, "They're not maladaptive, they're highly adaptive. You just don't get it there. They help us deal with our loneliness, our depression, our pain."

One person said, "You know, I've got 20 friends in this pack of cigarettes and they're always there for me, and nobody else is. You're gonna take away my 20 friends. What are you going to give me?"

You know, it's not like it's not on every pack of cigarettes. It's not like I say, "Hey, Mr. Jones, I want you to quit smoking. Did you know, it's bad for you?" And they go, "Wow, I didn't know that. Thank you so much. I'll quit tomorrow, I'm sure." Everybody knows it is bad for you. But the question is, why do people do these things?

And my spiritual teacher Swami Satchidananda, for many years, an ecumenical teacher, always says there's always a causal chain of events that leads to something. And the farther back in that chain, you can go the more powerful the healing can be. And so if you just focus on the behavior, the information that's important, but that's not usually enough. If you focus on the behaviors, that's better, but still not enough.

But if you focus on the cause, then people are much more likely to make lifestyle choices that are life-enhancing than ones that are self-destructive. I mean, I've had people say things like, "Food fills that void that I feel in my heart," or "Fat coats my nerves and numbs the pain," or "Video games numb the pain," or "Opioids numb the pain." We have this huge opioid epidemic. Or, you know, "Drinking alcohol numbs the pain," or "Other drugs numb the pain," or "Working all the time distracts me from my pain." You know, it's more socially acceptable but serves the same function.

And so by focusing on the deeper issues, which we don't learn that much in medical school, and they're harder to measure, and yet often the most motivating and meaningful. I think then we can really function more as healers than simply as technicians, and that can make the burn-out that's so prevalent in medicine... The real antidote to burn-out is a sense of meaning that comes from really being able to empower people and not just to treat them, giving them pills and operating on them.

I remember years ago, I'm looking at on my wall of this guy, I was running this thing called the Beta Breakers Race, which is a very San Franciscan tradition where you got the serious runners, and then you've got people like me that just go out for fun, and then you've got people who run naked or in costume or whatever.

And around mile five, I was getting kind of tired and looking for an excuse to slow down, and I saw a guy lying face down on the ground, on the pavement, and I said, "That's a good excuse. Let me, let's see what's going on with him." Didn't have a pulse. Did CPR. Another guy came and did CPR together. Someone brought up a defibrillator, got his heart started. He ended up having emergency bypass surgery that saved his life. And then, he went through one of our programs to keep his arteries open

Drugs and surgery can be life-saving. When I saw this guy on the ground, I didn't tell him to eat broccoli and meditate. But once you get people stable, then that's where it really begins, not where it ends. That's where we then need to, you have their full attention. There's a receptivity to change when someone is suffering. Suffering can be a real doorway for transformation, but unfortunately, we often, whether in medicine or in life in general, see suffering as something to be numbed and killed and bypassed, literally and figuratively, rather than as a way of getting our attention because, you know, change is hard.

But if you're hurting enough, and then the change becomes more appealing, and because these biological mechanisms are so dynamic, when you change, you feel so much better so quickly in most cases. In the case of someone who has heart disease and they have angina or chest pain when they, they can't walk across the street without getting chest pain or make love with their spouse or play with their kids or go back to work without getting chest pain, and usually within a few weeks, they're pain-free, then they say, "Okay, yeah, I like, you know, doing bad things to myself, but boy, I feel so much better. What I gain is so much more than what I give up. It makes it sustainable and worth doing."

**John Robbins:** When you talked about the guy who you found face down in the race, I was thinking about a friend of mine, a woman whose husband some years ago was in a race and had a heart attack during it and was rushed into surgery, and they saved his life, and she went through this real scare. Afraid that she would lose him, which she didn't at that time because of the surgery that was performed. But he didn't change his lifestyle. He didn't go through an Ornish program, and less than a year later, he had another heart attack, and this one was fatal, and my friend did lose her husband.

And I keep thinking how important it is for people to understand that we really do have the power to control our health in our hands in a tremendous way, a whole lot more than we realize, a whole lot more than we've been taught, a whole lot more than is generally believed in our culture. And-

**Dr. Dean Ornish:** It's true.

**John Robbins:** Yeah.

**Dr. Dean Ornish:** Well, it's true. And I (laughs), I'll tell you a funny story. I did my core surgery training as a medical student with Michael DeBakey, who was one of the pioneering heart surgeons who really basically invented the procedure. But he would tell people after he'd operated, he'd say, "You're cured." And then more often than not, they would go home and eat the same junk food and smoke cigarettes and not manage stress and not exercise, and all too often, their bypasses would clog up, and we'd cut them open again and sometimes multiple times. And for me, that became the metaphor. We were literally bypassing the problem rather than treating the cause.

Anyway, fast forward to about three years ago, decades later, probably four decades later, I got this call, and I said, "Hey, Dave. This is Mike DeBakey." And he had the very distinctive Louisiana accent, which I recognized immediately even though I hadn't heard from him in literally decades. And I said, "Hello. To what do I owe this honor?" He said, "Well, remember those ideas that I used to give you such a hard time... Those ideas of yours that I used to give you such a hard time about when you were my medical student?" I said, "Oh, yeah. I remember very well." He kind of said, "That's what's kept me alive all these years." (laughs)

**John Robbins:** Wow.

**Dr. Dean Ornish:** (laughs) He was 99-

**John Robbins:** Wow.

## Perspective Changes Take Time

**Dr. Dean Ornish:** He was 99 years old, and he died a few months later. He said, "I just wanted to let you know that before I pass because my wife got really interested." He remarried, and his wife got really interested in all these things, and he just wanted to let me know that. And so if you live long enough, you know, it's kind of changed my whole event horizon about change takes time sometimes, and I think things are moving in a good direction, just not as fast as I would like.

I used to get into friendly discussions with Al Gore, when *An Inconvenient Truth* came out. I said, "You know, you can scare people for a while and get them to, you know, buy, less polluting cars and fluorescent lights and whatever, LEDs, but telling people the world is going to melt down in 10 years and we're all going to die, it's just so staggeringly horrible that people can't hold that thought for very long, and so they just tune it out." And that's true when you tell somebody you've got to quit smoking because you're going to get lung cancer. You've got to change your diet because you'll get a heart attack.

It's just, for a month or so, they'll do pretty much anything that their doctor or nurse tells them, but then they stop doing it because fear is not a sustainable motivator. What's sustainable is joy and pleasure and love and feeling good, and altruism and compassion. What Aldous Huxley called the perennial philosophy, which you find in all great spiritual paths and religions, once you get past the rituals that people fight and kill each other over all too often because that's really where healing, in my limited understanding, is at its most profound.

Even the so-called stress management techniques that we use are really not just about managing stress, because they weren't developed by the ancient swamis and rabbis and priests and monks and nuns to manage stress. They certainly do that. They're really very powerful tools for transformation, to quiet down our mind and body to experience more of an inner sense of peace and joy and well-being and to realize that our natural state is to be healthy and happy most of the time until we disturb it.

So then the question becomes not how can I get what I need to be happy, but how can I stop disturbing the peace that's already there, and the great irony is that not realizing that that's already there, we often run after, "Gee, if only I had more money, more power, more beauty, more accomplishments, whatever, then I'd be happy. Then I wouldn't feel so stressed. Then people would love me. Then I wouldn't be so lonely." Once you set up that view of the world, it generally turns out badly because until you get it, you feel stressed, and if someone else gets it, then you feel really stressed, and even if you get it, it doesn't last. You know, it's either now what? It's never enough. Or so what? Big deal.

And so when, if anyone's listening to this and you do anything like meditation or if you're religious,

prayer, or yoga or whatever it is that quiets down your mind, and when you're feeling more peaceful, to remind yourself, to remind yourself that the techniques, the meditation, for example, didn't bring you a sense of peace that you didn't already have. Rather, what it did was to help at least temporarily to stop disturbing what's already there.

Now, that may sound like splitting hairs and parsing words and semantics, but the implications are profound, because if we get our peace and our help from outside ourselves, then everyone who has what we think we need has power and control over us. But if we say, "Oh, I've got it already. What am I doing that's disturbing that?" Often, ironically, it's the thing that I've got to go get something to be healthy and happy, and in the process of running after those things, I disturb what I can have already. Then, that's very empowering, not to blame myself, but to empower myself because then I can do something about that.

**John Robbins:** Well, your work has empowered so many people. I consider it a privilege to be your friend and colleague.

**Dr. Dean Ornish:** Me, too.

**John Robbins:** Thank you. On behalf of Ocean and myself, and everyone involved in the Food Revolution, I want to thank you, Dean, for your outstanding work. Your deep commitment to the healing of our lives and our spirits and our bodies and our world, and of course, for being with us today.

**Dr. Dean Ornish:** Well, it's a deep honor and a deep pleasure, and if people realize that this is the most fun way to live. It's the most erotic, the most pleasurable, the most exciting, the most adventurous way to live, that you're not, that what you gain is so much more than what you give up in every way, and certainly the most meaningful way to live. Then it becomes much more sustainable for everyone. So deep bow to you and to Ocean for your pioneering work and for giving me this opportunity to be of service, and I hope it's been useful.

**Ocean Robbins:** We've been talking with Dr. Doctor Dean Ornish, founder of the Preventive Medicine Research Institute, creator of the Ornish Diet, which has been ranked by *US News and World Report* as the number one diet for heart health yet again in 2021, an author of seven bestsellers, including *Undo It: How Simple Lifestyle Changes Can Reverse Most Chronic Diseases*.<sup>1</sup> Dean, you might be the most influential preventive medicine advocate in world history.

**Dr. Dean Ornish:** (laughs)

**Ocean Robbins:** We are so grateful for you and for the work you've done and for your leadership and for your science-driven wisdom and for your huge heart that imbues everything you do, and we are so grateful for your partnership in the Food Revolution.

**Dr. Dean Ornish:** Deep gratitude to you both. Thank you so much.



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