Interview with Dean Ornish, MD

Q: Out of all of your accomplishments, which are you most proud of?

A: I guess probably being a good husband and father.

Q: Now, specifically with regard to your career, out of all of your accomplishments, which are you most proud?

A: I would not limit it to one thing. First, I would mention the scientific research that I have completed with my colleagues. Our ability to use the latest high-tech, state-of-the-art scientific measures to prove the power of very simple low-tech and low-cost interventions, in not only preventing, but even reversing the progression of the most common chronic diseases, beginning with coronary heart disease, and type 2 diabetes, early stage prostate cancer, gene expression, the aging process itself as reflected in telomeres, really became the foundation for lifestyle medicine as a new discipline and helped provide the credibility and the scientific basis for it.

Equally important was ultimately being successful in getting Medicare to pay for our program, which was a 16-year journey in itself.

Through a 501(c)3 nonprofit institute that I started in 1984 when I moved here from Boston, called the Preventive Medicine Research Institute, we were able to conduct our randomized trials and demonstration projects showing that our lifestyle medicine approach worked to treat and to reverse cardiovascular disease. And then the next research question really became, “How practical is this? How scalable is this? Will it play in Peoria?” and so on. People often said to me, “Well, you live in California. It’s an altered state. They’ll do anything there.” So we wanted to see if people in other places would follow the program and benefit from it in the same way.

So we began training a total of 53 hospitals and clinics around the country. And we showed bigger clinical improvements, better adherence, and even larger cost savings than anyone had ever shown before. We had 85% to 90% adherence. We also showed impressive savings. Mutual of Omaha in the first demonstration project found they saved almost $30 000 per
patient. In the second demonstration project, Highmark Blue Cross/Blue Shield found that they cut their overall health care costs in half in the first year and by 400% in the subgroup of people that they had spent at least $25,000 dollars on in the preceding year.

And yet, with all of that success, a number of the sites closed down. And they all said the same thing, “This is the best program we’ve ever had. And we have to close it down, because you don’t have reimbursement, you don’t have Medicare, you have some insurance companies, but not most.” And the painful lesson was that, if it’s not reimbursable, it’s not sustainable. So that set me off on the journey to see if we could achieve Medicare coverage for the program, which, after 16 years, we did, for which I remain deeply grateful.

That was a real game-changer, because if it’s reimbursable, not only is it sustainable, but we doctors do what we’ve been trained to do, and we get trained to do what we get paid to do. So if you change reimbursement, you change not only medical practice but even medical education. And then it becomes sustainable. And now that Medicare is paying for these lifestyle medicine programs, many of the other commercial insurance companies like Blue Cross/Blue Shield and Anthem and Aetna and HMSA and others are paying for it.

We’re really creating a new paradigm of health care that’s a lot more fun for doctors and other health care professionals to practice. With the current system in a managed care environment, if you have to see a new patient every 8 to 10 minutes, you really don’t have time to talk about the things that matter most. You listen to the heart, lungs, talk to the patient for a moment, get their chief complaint, write a progress note, write a prescription, and you’re off to the next patient. It’s profoundly unsatisfying for both doctors and patients. That’s why most doctors wouldn’t recommend medicine as a career for their kids, why they’re trying to get out of the field. They’re selling their practices to hospitals. We have among the highest rates of divorce, drug addiction, and suicide of any identifiable groups.

Now, we have a new paradigm, where Medicare is paying for 72 hours of training as opposed to 8 or 10 minutes, and the doctor’s the quarterback. We work with a team consisting of the doctor, the nurse, the stress management instructor, which is a certified yoga meditation teacher, exercise physiologist, registered dietician, and clinical psychologist. Medicare will pay for 72 hours, which we divide into 18 four-hour sessions. This way, patients get an hour of supervised exercise, an hour of yoga and meditation, an hour of a group meal with a lecture, and an hour of a support group, which is really more than a support group because it’s creating a safe environment where people can bond very deeply by being open and authentic with each other.

The doctor is ultimately responsible for everything, but it doesn’t take an inordinate amount of their time. And since doctors receive very little, if any, training during medical school in nutrition, meditation, or emotional support, they can use their time wisely to do what they were trained to do in medical school and delegate the other aspects to the rest of their team. It’s a profoundly satisfying and rewarding way, both economically and emotionally, and even spiritually, to practice medicine this way. With this lifestyle medicine intervention model, now we can go back to the spiritual roots of why people went into medicine. Most people went into this field to help people deal with the underlying causes of why they get sick, and to transform suffering into healing and joy, which is incredible.

Q: What’s your next step in your career?
A: Well, professionally there are several things we’re doing. Now that Medicare and other insurance companies as well as commercial carriers are paying for the program, it enables us to perform large-scale studies at a fraction of the cost and the time that it would otherwise take.

Now, we can measure outcomes in much larger groups of people who make these lifestyle changes. We can take a closer look at cost savings and adherence.

Most of these large-scale studies can be extremely expensive. The Women’s Health Initiative was at least a billion dollars, and maybe as much as two. And yet it didn’t really show that much, because they had a hard time getting the women in the experimental group to change their lifestyle as much as they wanted them to. Also, people in the control group changed more than the experimenters wanted. They couldn’t tell them not to, because there’s so much information out there. So that really diluted the differences between the groups. And they really weren’t able to show much at the end.

Whereas what we’re doing is we—because the expensive part of any of these studies is the intervention, which is now paid for by Medicare or commercial carriers, we—can piggyback onto that and look at interesting research questions in large numbers of people at very low cost and very quickly. And because we have 72 hours to train and support them, we can achieve much bigger changes in lifestyle than in the Women’s Health Initiative or similar studies.

So, for example, we’re collaborating with Stan Hazen at the Cleveland Clinic to measure TMAO levels in the people who go through our program. And so, from our standpoint, we can work with the best person in the country to do these studies, and we can publish them together. From his standpoint, he gets access to people who are making much more intensive lifestyle changes than they did in the Women’s Health Initiative, for example. So we’re likely to see much bigger differences in outcomes. We’re working with Dr Elizabeth Blackburn, who got the Nobel Prize for her pioneering work with telomeres. We did a study earlier with her. And it is still the only controlled study showing that any intervention can actually lengthen telomeres, in a sense reversing aging in a cellular level, which we published in The Lancet Oncology. Now, we can measure changes in telomeres in much larger groups of people.

We can measure results in much larger groups of people who make these lifestyle changes, and then we can look at cost savings and adherence. We’re still getting 87% to 90% adherence in all of the various sites we’ve trained.

Another goal I have is to continue to iterate on this new paradigm of clinical medicine—lifestyle medicine—that we’re developing, and make that better and better based on more and more experience doing this.

Third, I’m interested in doing additional randomized trials, for example, to look at Alzheimer’s disease. Dale Bredesen at UCLA did a pilot study of a version of our program with 10 men and women who had early to moderate dementia. Nine of the 10 people showed significant improvement in cognitive function in just 60 to 90 days. I’d love to do a randomized trial to see if we could stop or reverse the progression of men and women with early Alzheimer’s disease.
Fourth, I plan to write another book. I enjoy trying to find new ways to make it easier for people to make and maintain lifestyle choices that it can be so transformative. I’m medical editor of the Huffington Post. They had over 100 million unique visitors last month. So it’s a great platform. I write a periodic column for Time Magazine. I’m a LinkedIn influencer. So that provides different formats and forums to reach large numbers of people with information that can really empower and transform their lives for the better. Having seen what a powerful difference these lifestyle changes can make, I’m always looking for leverage points where we can influence things for the better, as well as empowering people and making it easier for them to make, maintain, and incorporate these changes into their own lives.

My wife and partner, Anne Ornish, created and produces our website—Ornish.com—which includes a lot of valuable resources, including instructional videos on cooking, yoga, meditation, and exercise, as well as pdf reprints of our research, an online community, recipes, menus, and more that can make it easier for people to make and maintain these changes. Everything on there is free.

Q: Who is your hero?

A: I have many heroes. My wife, Anne, is my hero right now. She has this amazing quality of making everyone and everything that she comes into contact with feel and look beautiful. She embodies extraordinary grace in everything that she does. We’ve worked together for almost 20 years, and I still learn something new from her almost every day. She’s as brilliant and loving as she is beautiful.

Q: What words of advice would you give to lifestyle medicine practitioners trying to make a living with their practicing of lifestyle medicine?

A: Well, again, that’s part of the reason that I spent 16 years working with Medicare, and a lot of time with the commercial insurance companies, to get reimbursement, because I didn’t want this just to be concierge medicine or medicine for the affluent, I wanted this lifestyle medicine to be for everyone. The components of the lifestyle program don’t really cost anything. I designed it that way, so you don’t need any special equipment. You just need a pair of walking shoes and a yoga mat (or a carpeted floor). The diet is inexpensive as well as it is essentially a third world diet.

Government subsidies of unhealthy foods are part of the nutrition and poor diet problem in our country. When I consulted with the CEO of McDonalds in 1999 and 2000, I was able to persuade them to put salads on the menu. But, because the burgers were subsidized and the salads were not, the burger was 99 cents, and the salad was $5.95. So if you’re on a fixed income, you get a lot more calories for your dollar by eating junk food, because (a) the unhealthy foods are subsidized and (b) it doesn’t really price into it the real cost to your health and to society.

Working on a legislative level is something that I’m also trying to do, to see if we can change these things. But for me, the opportunities are worth it.

To the extent we can train lifestyle medicine practitioners and certify them, then they get the Medicare coverage and can make a living by practicing the medicine they want to practice. But also, as we move to the era of accountable care organizations, integrated delivery networks, Obamacare in general, whatever people think about it, it’s turning all of the incentives on their ear. In a fee-for-service environment, the more operations, the more stents,
the more angioplasties, and the more hospitalizations, the more money is generated for the
doctor or for the hospital or both.

Now we move into the era of bundled payments: here is X amount of dollars to take care of a
group of patients, and the doctor, the hospital, or the clinic can keep what’s left over. In this
new model, the fewer procedures you do, the more revenue is generated. Although I’ve been
doing this work for almost 40 years, I’m encouraged because there’s a convergence of forces
that’s really like a tipping point. It’s the right idea at the right time.

On one hand, the limitations of drugs and surgery are becoming increasingly clear. For
example, a series of randomized controlled trials has shown that angioplasties and stents don’t
work in most stable patients. Getting your blood sugar down with drugs if you have metabolic
syndrome or type 2 diabetes doesn’t work nearly as well as getting it down with diet and
lifestyle, in terms of preventing the complications and premature death from type 2 diabetes.
Studies have shown that only about 1 of 49 men who have early stage prostate cancer benefit
from surgery or radiation. The other 48 who undergo radical prostatectomy or radiation often
get maimed in the most personal ways if they become impotent or incontinent, or both, for no
benefit and huge economic cost. We can provide a third alternative. We conducted a
randomized controlled trial showing that this comprehensive lifestyle medicine intervention
may slow, stop, or even reverse the progression of early stage prostate cancer.

In summary, my advice is to consider getting trained in a lifestyle medicine program that
works, has been proven in multiple randomized controlled trials, and has reimbursement.

Q: Is there someone in your professional life that influenced the trajectory of your career?

A: Two people had a major influence in my life. The first was Swami Satchidananda, who I
first met in 1972. Much of what I’m doing professionally and personally is based on things
that I learned from him. This idea of lifestyle as treatment really came from him, and the idea
of addressing the underlying cause of the problem also came from him. The components of
my program, including a whole foods plan-based diet, exercise, yoga, and meditation, as well
love and support, all derive from what I learned from him. I also learned a lot from my own
suffering when I was in college. That suffering helped me learn how, when someone’s in
pain, there’s an opportunity for transformation. Because change is hard, but if you’re hurting
bad enough, you say, “Well gosh, that may be kind of weird or different or hard. But since
I’m hurting so badly, let me try this stuff.” And because the underlying biological
mechanisms are so dynamic, most people feel so much better, so quickly, it reframes the
reason for changing from fear of dying to joy of living. People often look back on their crisis
or their suffering as something that was a blessing in disguise in many respects because it got
their attention and motivated them to make these changes that they might not otherwise have
done.

Dr Alexander Leaf also had a major influence on my life. He was chief of medicine at
Harvard and at the Massachusetts General Hospital when I trained there, and he became a
mentor and a lifelong friend until he passed away last year.

Q: Who do you consider the best teacher?

A: I think the best teacher is a good example. And if we can embody the core values that we
teach others, and people see that, they learn. I studied with Swami Satchidananda for so many
years, and we talked once a week for decades. He embodied his teachings. He used to tell a
story about a convention of unlit candles, arguing about whether or not light exists. There were big candles, small candles, and expensive candles holding heated debates about whether or not light exists. And then, this tiny little birthday candle walks in. It’s lit. Then, the whole room turned around and looked toward the light. That’s all it takes. So, to the extent that we can really let our light shine and embody the principles we are teaching, people can feel our light when they’re around us. Then, they want to learn. They will ask, “So what did you do? And how come you look so good? And how come you feel so good? And how can I get some of that?” That opens the door to them. But otherwise, we become like a room full of unlit candles, you know, preaching about why light is such a good thing. Obviously, I don’t embody every principle of lifestyle nearly as well as I would like to, but it becomes aspirational and becomes a guiding principle. To the degree we change our lifestyle, there is a corresponding benefit. It’s a process. And, unlike so much of what we’re trained to do as doctors, the only side effects are good ones.

Go to:

Footnotes

These articles are based on The Annual Conference of the American College of Lifestyle Medicine (ACLM) held November 1-4, 2015, in Nashville, Tennessee—Lifestyle Medicine 2015: Integrating Evidence into Practice.
"Man kann die Uhr zurückdrehen"

Er ist ein gefeierter US-Mediziner. Bill Clinton hört auf ihn ebenso wie Clint Eastwood. Mit manager magazin online sprach der Präventivmediziner Dean Ornish darüber, wie man Alter und Krankheit ein Schnippchen schlagen kann - und wieso sein Freund Steve Jobs dennoch sterben musste.

mm: Doktor Ornish, sie haben jüngst eine Studie präsentiert der zufolge sich mit dem richtigen Lebensstil Krankheit und Alter zurückdrehen lassen. Eigentlich müssten ihnen die Leute doch die Bude einrennen. Trotzdem hat es selbst bei Ihrem Langzeit-Patienten Bill Clinton eine Bypass-Operation gebraucht, bis er durch eine komplette Lebensstiländerung zwölf Kilo verloren hat.


mm: Gibt es denn Tricks den inneren Schweinehund zu überlisten? Oft hält man ja nur wenige Tage durch - und kehrt dann wieder in alte Verhaltensmuster zurück.


mm: Aber muss wie Clinton man gleich komplett auf Fleisch verzichten, damit es einem besser geht?


mm: Um Krankheit und Altern aufzuhalten dürfte das aber doch wohl nicht reichen?

2. Teil: Was neben Bewegung und Ernährung noch wichtig ist

Ornish: Und wieviel Einsatz muss man dafür bringen?

mm: Und wieviel Einsatz muss man dafür bringen?


mm: Sie propagieren für ein längeres Leben neben einer gesünderen Ernährung und mehr emotionaler Bindung auch Stressbewältigungstechniken wie Yoga oder Meditation. Das liegt nicht jedem. Viele haben es lieber etwas dynamischer, wollen sich beim Sport lieber verausgaben. Ist das auch ok - oder bringt nur Verlangsamung und Besinnung was?

Ornish: Man muss nicht Marathon laufen, um gesund zu sein. Wer Marathon laufen will, soll das ruhig tun. Allerdings bringt moderate Bewegung auch viel - bei geringerem Risiko. Bei der Meditation, die im übrigen auch viele Leistungssportler nutzen, geht es um Kraft durch Fokussierung, um das Mentale. Es ist nicht das eine oder das andere. Optimal ist beides.

mm: Wir haben einen Exkanzler. Der raucht wie ein Schlot - und scheint für seine 94 Jahre doch ganz gut beisammen. Spielen da die Gene nicht doch eine Rolle?


mm: Bei ihrem Freund und Patienten Ex-Apple-Chef Steve Jobs hat das mit dem Krebs revidieren allerdings nicht geklappt. Er ist gestorben - trotz seines gesunden Lebensstils.


Aber das ist ungewöhnlich. Brustkrebs, Prostatakrebs, Darmkrebs, Herzkerkrankungen, Bluthochdruck, Diabetes, Fettsucht - sind in der Regel lebensstilinduziert. Und wenn Menschen wirklich dazu bereit sind, ihren Lebensstil zu ändern, können sie die Erkrankungen häufig zurückdrängen, besonders wenn sie früh eingreifen.
Sie sprechen sich für weitgehend vegane Ernährung aus. In Deutschland gab es einen kollektiven Aufschrei als eine Partei nur vorschlug, in Kantinen einen fleischlosen Tag einzuführen. Was ist an Fleisch so schlimm?

3. Teil: Welche Rolle Stress spielt


Welche Rolle spielt die Arbeitsbelastung. Gibt es da eine klare Grenze, ab wann es ungesund wird?

Ornish: Das ist ganz individuell. Stress kommt nicht davon, was man macht, sondern davon, wie man auf Belastungen reagiert, wie man sich fühlt. Wenn man mit Stress erfolgreich umgehen kann, kann man sehr viel arbeiten ohne krank zu werden. Fühlt man sich über eine lange Zeit jedoch erheblichem Stress ausgesetzt, kann das die Lebensdauer um Jahre verkürzen. Der gefühlte Stress ist entscheidend.

Und was kann ich tun, um belastbarer zu werden?

Ornish: Freunde, Familie spielen hier eine enorme Rolle. Studien haben gezeigt, dass Menschen, die alleine und deprimiert sind, ein drei bis zehn mal höheres Krankheitsrisiko haben und früher sterben als Menschen, die emotional aufgefangen werden. Ich kenne nichts in der Medizin das einen solche Auswirkung hat. Wenn wir realisieren, dass das kein Luxus, sondern Notwendigkeiten für ein gesundes Leben sind, wird sich vielleicht unser Umgang damit ändern.

Und was bringen Ihrer Ansicht nach die aktuell so angesagte E-health Gadgets mit denen man Schlaf, Kalorienaufnahme und Bewegung messen und mit Freunden "sharen" kann?

Dr. Dean Ornish is a cardiologist and the author of *Eat More, Weigh Less*. He is a strong advocate of a low-fat diet and suggests that high-protein, low-carbohydrate diets, such as Atkins, are based on "half-truths." "If you're eating a typical American diet, which is high in simple carbs, and you go on an Atkins-type diet, you may lose weight because you're eating fewer simple carbs," he says. "But you could lose even more weight by eating fewer simple carbs and less fat, because both are the reasons why people get too many calories." Ornish says his diet has been proven to stop or reduce heart disease and has been backed up by scientific studies. "The burden of proof is on people who promote-high protein diets," he tells FRONTLINE. This interview was conducted on Jan. 2, 2004.

"I'd love to be able to tell people that bacon and eggs are health foods, but they're not."
eat fewer calories without having to eat less food. And so you can enjoy what you're eating, and you can eat whenever you're hungry, you can eat until you're full, but you lose weight and you keep it off without hunger and without deprivation. Because even if you eat about the same amount of food, if you eat a low-enough-fat diet, you're getting about a third fewer calories, as opposed to eating a third less food. So this is a diet that people can sustain. I wrote a book called *Eat More, Weigh Less*, which is really based on this concept.

I've actually picked this book up. It's in all the bookstands. But *Eat More, Weigh Less*? I mean, that's a fairly provocative title. Is that possible, really?

… A study from the National Institutes of Health found that most people who lose weight, two-thirds of the people who lose weight, gain it all back within the first year, and 97 percent gained it back within five years. We looked at the data from our studies and we found that people were able to lose weight and to keep it off without hunger and without deprivation, because they changed the type of food and not just the amount of food.

… *Your studies show that with your diet, with a low-fat diet, you can really lose weight and keep it off?*

Yes. We found the average person lost 25 pounds in the first year. They kept half that weight off five years later, and we weren't even trying to get them to lose weight. This was a study to reverse heart disease, which we were also able to show for the first time. And we published this in the *Journal of the American Medical Association*, *The Lancet*, and other leading peer-reviewed journals. And so what sets this program apart from most of the other weight-loss programs is that it's been scientifically proven and it works, and the reason it works is because it's based on abundance rather than on deprivation. You can eat whenever you're hungry, you can eat until you're full, and you can still lose weight and keep it off. …

One of the reasons I wrote a book called *Eat More, Weigh Less* -- and it was designed to have a provocative title, because if I called it, you know, *How to Help Prevent Heart Disease and Cancer and Lots of Bad Things*, it wouldn't have been as interesting to people. In a way, you really can lose weight and keep it off by eating this way, but you're also enhancing your health at the same time,
because we've done studies that you can actually reverse heart
disease and may be able to stop the progression or even reverse
some of the more common forms of cancer, like prostate cancer.

But what concerns me about the high-protein diet books, like the
Atkins book, is that it's the opposite. There are ways of trying to get
people to eat this way to lose weight, but they may be mortgaging
their health in the process rather than enhancing it.

How so? I mean, reading your book, you really say that the Atkins
diet and diets like it are dangerous to your health. How dangerous?

Well, I think they are dangerous to your health, because there's a
wide body of evidence from scientific studies showing that when
you go on a high protein diet, you significantly increase your risk
of heart disease, diabetes, hypertension, breast/prostate/colon
cancer, most of the chronic degenerative diseases. [In] the studies
that have been done on the Atkins diet, none of them have actually
looked at underlying diseases. They've only looked at what are
called risk factors, like cholesterol and triglycerides and HDL.

In our studies, ironically, we use the latest high-tech, state-of-the-
art measure to prove how powerful these very simple and low-tech
and low-cost interventions like diet can be. And we weren't looking
at risk factors. We were looking at actual underlying disease, and
what did we find? We found that even people with severe heart
disease, that 99 percent of them were able to stop or reverse the
progression of their heart disease. We found there was a 91 percent
reduction in the amount of chest pain or angina, and that occurred
within the first few weeks. What that means in real life terms is that
people who literally couldn't walk across the street before the light
changed without getting severe chest pain, they couldn't walk, they
couldn't have sex, they couldn't take a shower, shave, or just do the
normal activities of daily life, within a few weeks were essentially
pain-free, without bypass surgery or angioplasty or changing their
medications -- except in most cases, under their doctors’
supervision, to reduce or even get off many of these medications.

So having seen what a powerful difference these changes in diet
and lifestyle can give people, it saddens me that so many people are
being misled by this idea that by telling people what they want to
hear, that somehow that they think that bacon and eggs are a health
food, and they're not. I think people need to know that.

Why are the Atkins diet and diets like it so incredibly popular? And
also, why do they seem to work?

They're popular because they tell people what they want to hear,
and they work to some degree because they're based on a half-truth.
I debated Dr. Atkins many times before he died, and so I'm very
familiar with the Atkins diet. The half-truth is that Americans eat
too many calories. One reason is that they eat too much fat, because fat is so dense in calories. The other is that they eat too many simple carbohydrates, and that's the area that we both agreed on.

The problem with simple carbohydrates -- and these are things like sugar, white flour, white rice, alcohol, which your body converts to sugar -- is that you get a double whammy. You get all these calories that don't fill you up, because when you go from, say, whole wheat flour, which is complex, to white flour, which is a simple carbohydrate, you've removed the fiber and the bran. Those ordinarily would fill you up before you get too many calories. You can only eat so many apples. You're going to get full before you get too many calories. But when you remove the fiber and the bran, you can consume virtually unlimited amounts of, say, sugar or white rice without getting full.

So, basically all agree that white rice, white bread, things like that, lay off. Alcohol. All these diet plans, essentially.

If you're trying to lose weight, it's better to avoid or reduce the intake of simple carbohydrates. We agree on that.

The other reason that simple carbohydrates cause people to gain weight, besides the fact that you can eat so many without getting full, is that they get absorbed quickly. So your blood sugar zooms up, your pancreas makes insulin to lower your blood sugar, which is good, but insulin also causes you to convert calories into fat, which is not good. We both, Dr. Atkins and I, agreed that Americans eat way too many simple carbs, and so if you're eating a typical American diet, which is high in simple carbs, and you go on an Atkins-type diet, you may lose weight because you're eating fewer simple carbs.

But you could lose even more weight by eating fewer simple carbs and less fat, because both are the reasons why people get too many calories, and rather than harming your health, you'd be enhancing it by eating the way that I suggest. Because it's not only what you exclude in your diet; it's what you include that's protective. A number of studies have shown that there are substances that have anti-cancer, anti-heart disease, anti-aging properties: things like phytochemicals and bioflavonoids, carotenoids, retinals, isoflavones. There's a whole alphabet soup of these. Where do you find these protective substances? With few exceptions, you find them in fruits, vegetables, whole grains, and soy products and other legumes. To tell people they shouldn't be eating these foods saddens me.

I'd love to be able to tell people that bacon and eggs are health foods, but they're not. A number of studies have shown that eating a diet that's rich in animal protein increases your risk of osteoporosis, kidney disease, and heart disease, and the most
common forms of cancer, particularly breast cancer, prostate cancer, and colon cancer, and lymphoma. …

When I read some of what you've written, you don't care for meat.

I grew up in Texas, eating meat five times a day, and I liked meat. But I began being a vegetarian when I was 19 because I found that I felt better. To me, there's no point in giving up something that I enjoy unless I get something back that's better, and quickly. Studies have shown now that your brain gets more blood; you think more clearly; you have more energy; your heart gets more blood in ways that we've measured; your arteries get less clogged in ways that we've proven. Even your sexual organs get more blood flow, in the same way that Viagra works, and so for many people, these are choices worth making.

Now, you don't have to be a vegetarian if you're just trying to lose weight and be a little healthier. There's a whole spectrum of choices, but to the degree that you move in that direction, you're going to lose weight and gain health.

You're saying the Atkins diet people -- their breath is bad, halitosis, constipation, headaches, hair loss?

I'm not saying this. This was actually in the study in the *American Journal of Medicine* by Dr. Eric Westman from Duke, that was actually funded by the Atkins Center as one of the first studies that came out on the Atkins diet, and that's what they found. The reason is, that's how your body gets rid of toxic substances, toxic waste, is through your breath, your bowels, and your perspiration. So if you go on an Atkins-type diet, you might start to lose weight and start to attract people towards you, but when they get too close, they might have a problem because of the way that you smell.

It doesn't sound so good.

It's not so good. And even more worrisome are the studies that actually look at blood flow to the heart. There was a study that Dr. Richard Fleming did in Omaha, that was published in a peer-reviewed journal, where he put people on a diet, one like I would recommend, or on an Atkins-type diet. And on the diet like I would recommend, the blood flow to the heart improved. They replicated what we found. But on the Atkins-type diet, the blood flow to the heart actually worsened, and that is really what concerns me, is that studies have come out saying: Well, you know, the Atkins diet is better than, you know, a so-called low-fat diet because your HDL goes up on an Atkins diet and your triglycerides may go down.

Meaning what?

Meaning that -- the HDL is the so-called good cholesterol, and
people think that anything that raises your HDL is good and anything that lowers it is bad. But again, that's a half-truth as well, because your body makes HDL -- think of it like garbage trucks. So if everybody's eating the same kind of diet, like a typical American diet, those people who can make more garbage trucks, make more HDL, are going to be at lower risk than those who can't. They've got more garbage trucks to take out the garbage, so they're going to be healthier.

That's very different than: if you put people on a really healthy diet, like what I recommend, we've found that their HDL levels -- the so-called good cholesterol -- may actually go down a little. The bad cholesterol goes down way more. But the point is that in these same patients we found their arteries became less clogged, the blood flow to the heart improved. They got better. It's almost like your body says: Hey, there's not as much garbage; I don't need as many garbage trucks. And so it has a very different prognostic significance to have a lower HDL on a healthy diet than on a harmful one. If I give you a stick of butter, your body will try to make more HDL to get rid of it, but that doesn't mean butter's good for your heart.

So are you actually saying that the Atkins diet is harmful to your health?

I think for many people it is definitely harmful to their health. And it's not just me that's saying that.

And in what way? What's the worst thing that can happen?

The worst thing that can happen is sudden cardiac death. … But even short of that, as I mentioned, the blood flow to the heart is reduced. Your kidney function may be compromised. Osteoporosis is increased. And so again, the goal is not just to lose weight.

Now, are we seeing these things? I mean, correct me if I'm wrong, the Atkins diet has been around since the early 1970s. So presumably a lot of people have done this. I walk into bookstores, I see Atkins diet books everywhere.

These are not things that I'm suggesting might happen. These are things that have been published in peer-reviewed journals, proving that they happen. Okay. This is not my speculation. This is scientific fact. And the burden of proof is on people who promote high-protein diets. When I debated Dr. Atkins, he would say things like, "Well, my diet can reverse heart disease." And I'd say, "Well, show me any data to support that." And there are none.

Whereas what we have are data published in peer-reviewed journals in the last 25 years, proving that this kind of approach can actually reverse heart disease. I think before making statements like
that, the whole point of science is to help people sort out these kind of conflicting claims, and we have done the science and they haven't. I think it's incumbent upon them to do so before making these kinds of promises to people that can't be fulfilled.

Let's talk about your diet now. … The knock on the low-fat diet is that in this long stretch of time while it's been popular, in fact, Americans are getting fatter. We're in a national obesity crisis. So some people would say -- in fact some people have argued -- that the low-fat diet, the popularity of it, has in fact led to this obesity epidemic.

Well, that's silly, for one thing, and it's also based again on a half-truth. And a half-truth is that people say things like, "Well, Americans have been told to eat less fat, the percentage of calories from fat is going down, Americans are fatter than ever, therefore fat is not the problem." Actually, Americans are eating more fat than ever, but they're eating even more simple carbs. So the relative percentage of fat in the diet may be lower, but the actual amount of fat is higher than ever. The goal is to eat less fat and fewer simple carbs, and then you can do so in a way that enhances your health rather than one that may harm it.

What's your best guess as to what has caused this obesity crisis which everyone's very concerned about now? I mean, you're having fat kids and type 2 diabetes, which used to be adult onset diabetes, now people are seeing it in adolescence. It's scary.

Yeah. Diabetes in adolescence has risen 70 percent in the last 10 years. There really is clearly an obesity crisis, but it's silly to just blame low-fat diets as the cause, because they're not. They're part of the solution. The problem is that people get in good-bad ways of thinking: that all fat is good, all fat is bad; all carbs are good, all carbs is bad, when in fact there are good carbs and bad carbs, there's good fat and bad fat, and there's good protein and bad protein. And so an optimal diet is one that's high in the good ones and low in the bad ones.

So let's take fat, for example. In the early '70s and '80s, a number of manufacturers said: Oh, we'll make low-fat foods, but they're very high in sugar: The Snackwell cookies, the Entenmann's cakes and pies and so on. I even had a patient once who was starting to gain weight on a so-called low-fat diet, and I said, "What are you eating?" They said, "Oh, I'm eating just one or two a day." I said, "One or two pieces of these Entenmann's cakes?" "No, one or two cakes at a sitting." They said, "Well, it's low fat. Why not? It can't be bad for me." But it was high in sugar.

But isn't that just the problem? That someone like myself goes into a store or supermarket, and I see something that says "low fat." I think, "Well, of course. I'm going to buy the low-fat whatever it is."
But then you think, okay, it means there's no fat in it, and you end up eating a lot of it.

And now the pendulum is going the other way. We're seeing, if it says "low-carb," it must be good for you. So you can buy low-carb vodka, you know, or low-carb whatever.

What people need to understand is that you want to find foods that are low in fat but also low in simple carbs, but not low in total carbs. Low in simple carbs, high in complex carbs. Fruits, vegetables, whole grains, legumes, soy products are good for you. Okay. Low in animal protein, higher in the plant-based protein. It's a spectrum. It's not "all or nothing." And to the degree that you move in that direction, you're going to feel better, you're going to look better, and you're going to lose weight.

So it's still a good thing that there are these low-fat indicators on products in the market?

I think again people need to be more mindful of what they're buying, and to read the labels. Just because something is low fat, or for that matter low carb, doesn't mean it's healthful. You want to find foods that are low in simple carbs -- the bad carbs -- [and] high in the good carbs -- fruits, vegetables, whole grains, legumes, soy products, things like that. You get a double benefit. You're reducing your intake of disease-promoting substances like cholesterol, saturated fat, oxidants, simple carbs and you're getting at least a thousand others that are actually protective.

People are making the same mistake that was made 15, 20 years ago, with thinking that all fat is bad, to think that all carbs are bad, and that's not true. Some fat is good, some is not good. The omega-3 fatty acids, for example, can reduce sudden cardiac death by 50 to 80 percent. My mentor when I was doing my training at Mass. General, Dr. Alexander Leaf, discovered this 20 years ago. Just 3 grams a day of fish oil or flaxseed oil can reduce sudden cardiac death by 50 to 80 percent and lower your triglycerides, [it] can reduce inflammation of arthritis, many other benefits. But you don't need more than that. Just a little can provide what you need without getting too much, so you can get the benefits without getting too many calories. …

Doesn't this basically come down to common sense and moderation? I mean, I know moderation doesn't necessarily sell books, doesn't sell diet plans. But isn't really the best advice to eat good food moderately and exercise?

Not necessarily. It depends on what your goals are. For example, let's say you had heart disease and you wanted to reverse it. Now, the National Cholesterol Education Program, the American Heart Association and others say: Eat a moderate diet, a 30 percent fat
diet that's less red meat, more fish and chicken -- take the skin off the chicken -- four eggs a week. The problem is that that diet doesn't reverse heart disease, and it doesn't do much for your cholesterol level, and so if you came to most doctors or most dieticians, they would say, "Your cholesterol's too high. See, we need to put you on an American Heart Association diet." You come back a month or two later, it hasn't come down very much, and they say, "Gee, I'm sorry, you've failed diet. Now we have to put you on cholesterol-lowering drugs for the rest of your life," which $13 billion were spent on, just in the U.S. alone last year.

Now, what I would say is: Fine. We can try a moderate diet, and if that's enough to get your cholesterol level down, great. For most people, it isn't. … On the other hand, what we've found in our studies is that if you were to make bigger changes in diet and lifestyle, we found an average 40 percent reduction in LDL, comparable to what you can get with drugs, without the cost or the side effects of those drugs. And rather than the arteries getting more and more clogged over time, which was thought to be the so-called natural history of heart disease, we found they could get less and less clogged, that you could get better and better instead of worse and worse. And that was the first time that had ever been shown, because until then the recommendations didn't go far enough.

So if you're just trying to lose a few pounds and your cholesterol level's fine, moderate changes are fine. But if you're trying to do something more than that, if you want to get your cholesterol down more, if you want to lose more weight, if you want to reverse heart disease and perhaps some forms of cancer, you have to make bigger changes.

Now, to what degree people want to make those changes is a very personal choice. I never tell people what to do, because I learned, even more than being healthy, people want to feel free. And as soon as I say, "Don't eat this and don't do that," they immediately want to do that. That goes all the way back to the first dietary intervention, you know, when God said, "Don't eat the apple," and that didn't work. And that was God talking, so we're not going to do better than that. I used to, when I started doing this work 25 years ago, say, "Don't eat this. Do this." And that didn't work, but what does work is giving people information and say, "Look, it's your life. I'm only here to provide you the latest information so you can make informed and intelligent choices. And I'll support whatever you choose." …

Can people really stick to your diet? I mean, again, the idea that you go in, you have the conviction: I'm going to lose some weight, but you know, I'm not getting to eat the things I really like, and this isn't filling me up, and what can I do?
You know, the thing I get so frustrated by is that people say, "Nobody could follow your diet." First, the idea when I began doing studies was that heart disease can't be reversed. It's impossible. Then we proved it could be, and they said, "Well, okay. But you know, you live in California. It's an altered state. They'll do anything there. You can get people to change and no one else can. So what good is it?"

So beginning in 1993, through our nonprofit Preventive Medicine Research Institute, we began training hospitals around the country, and these were very diverse hospitals in Omaha and Des Moines and Columbia, South Carolina, where they told me, "Gravy's a beverage. This will be a big change in our diet." But also at Harvard and at Beth Israel, New York, and at UCSF and at Scripps and at Broward General Hospital. We did this and Mutual of Omaha funded it. We found that almost 80 percent of the people who were told they needed to have a bypass or angioplasty were able to follow the program well enough that they didn't need that. Mutual of Omaha saved almost $30,000 per patient, immediately, because it's so much cheaper to teach people how to change their diet and lifestyle than to operate on them. …

Now, on the other end of the spectrum, the idea that taking a pill like a cholesterol-lowering drug, like a statin drug -- Lipitor, Zocor -- is easy and everybody will do it, but changing diet and lifestyle is impossible and no one will do it, is not what the data show. Because the data actually showed that within a year, two-thirds of the people who've been prescribed statin drugs are not taking them, just a year later.

Why?

The reason is that they don't make you feel better. … If that were the choice between leading a fun, interesting life that you're going to get sick and die sooner, or am I going to live longer [or] is it just going to seem longer because life is so boring, I would choose the, you know, have fun and die sooner.

But that isn't the choice, because whereas taking a pill like a statin drug doesn't make you feel better, the paradox is that sometimes it's actually easier to make big changes than small ones. The conventional wisdom is that small, gradual changes are easy, and big, rapid changes are impossible. And I think there are people that both appeal to them. On the one end, you have the programs like America on the Move, which are really small incremental changes: Walk 5,000 steps more a day. Eat 500 or 1,000 calories less a day. That will help to prevent you from gaining weight. Anybody can do that.

But it's also true that when you make really big changes, most people find they feel so much better so quickly, it reframes the
reason for making those changes from fear of dying to joy of living. Because your brain gets more blood. You think more clearly. You have more energy. …

But if you don't want to make big changes, make small changes. You have a spectrum of choices, and the nice concept about a spectrum is that it preserves the feeling of being in control. You're free. If it's a diet you get on, it's a diet you may get off. You feel constrained immediately when you get on a diet. "Oh, I can't eat this, I can't eat that." Instead if you say, "Look, I'm going to try to eat more on the healthier end of the spectrum. More fruits and vegetables, more whole grains, more soy products, less red meat, less simple carbs, you know, fewer of the bad stuff, more of the good stuff. If I want to go out and indulge myself sometimes," and [if] you don't have a heart problem, it's no big deal. "Maybe I'll just eat a little healthier the next day to make up for it."

Some studies have shown that the healthiest people are those who actually indulge themselves from time to time, but that allows them to eat healthier the rest of the time. By having it as a spectrum of choices, it's a way of living, it's a way of eating. It's not a diet that you get on and get off. And otherwise, if you get off the diet and you eat something you're not supposed to eat, you feel like, "Oh God, I'm a loser. I failed." And that makes you feel depressed, which makes you want to eat more, and it just becomes a vicious cycle.

I want to ask you about exercise, because the old cliché [is], "no pain, no gain." You got to go in and suffer. And you say no, moderate exercise is better. …

Right. Well, fitness and health are not the same thing. The more you exercise, the more fit you become. That's it. Now, what gets people into trouble is when they are weekend warriors, when you don't do anything six days a week and then you go out and play full court basketball or shovel snow. That's not a good idea, and those are the people who drop dead. If you're going to exercise more than just walking, that's great, but do it on a consistent basis. If you can't do it consistently, it's better just to do something more lightweight like walking.

Now, what's also interesting is that studies have shown that from a health standpoint, walking 20 or 30 minutes a day can cut premature death rates in half. These are studies that Ken Cooper and Steve Blair and others did, who were very big exercise enthusiasts, and that's really not what they expected to find. They thought the marathon runners would do better than the people who ran, jogged, and they'd do better than the walkers, and they'd do better and so on. But they actually found that if they were looking at different levels of fitness, the sedentary people had the highest death rates; the people who walked 20 or 30 minutes a day were cut
in half, and there was just a slight improvement beyond that for doing more than that. …

There was a *New York Times* magazine article, got a lot of press … "What If It's All Been a Big Fat Lie?" Gary Taubes attacks what he calls the low-fat dogma, and says that diets like yours have led Americans to be fatter, that you're part of the problem.

The reason I spend so much of my time doing science is that the whole point of science is to help people resolve conflicting claims by saying: Show me the data. Now, we've spent 25 years conducting randomized control clinical trials, published in the leading peer-reviewed journals, like the *Journal of the AMA, The Lancet, Circulation, New England Journal of Medicine*, and so on. And what did we find? That when people eat this way, they lose weight and keep it off. Those who have heart disease were able to reverse it, and we were the first to be able to prove that. And more recently we're showing that even the progression of some of the most common forms of cancer, like prostate cancer, may be improved when people go on these kinds of diets. LDL cholesterol, the bad cholesterol, went down by an average of 40 percent.

Now, when someone like Gary Taubes, who's not a physician, writes an article attacking, I say, "Show me the data." Now, the data that he talks about are purely circumstantial. He'll say things like, "Well, Americans have been told to eat less fat. The percentage of calories from fat is down, and yet Americans are fatter than ever. Therefore fat doesn't make you fat." Now, he knows better, because I've actually debated him as well. And it's a half-truth. The percentage of calories from fat is down, but actually Americans are eating more fat than ever. The only reason that the percentage is lower is that they're eating more fat and even more simple carbs. So the goal is not to say, fat is good, carbs or bad, but to say there are good fats and bad fats, there are good carbs and bad carbs, there's good protein and bad protein, and so an optimal diet would be low in the bad carbs but high in good carbs. …

So something like this article, "A Big Fat Lie," this is just balderdash? This is provocative? This is selling newspapers? Well, it is provocative. It does sell newspapers. And you know, it tells people what they want to hear, which is also a good way to sell newspapers. It's like that scene in Woody Allen's movie *Sleeper*, where he wakes up a few hundred years in the future and finds out that chocolate and steak are good for you. …

[There's a] big debate over revising the food pyramid. Walter Willett at Harvard [has suggested a revised food pyramid]. What do you think of his work?

Well, I'm a big admirer of Walter Willett's work. I think he's done
some really important research. He and I agree on most things. We both testified before the U.S. Senate recently about the need to change the food pyramid, and the reason is that a lot of decisions get made based on the food pyramid. It's not that most Americans, you know, spend their time looking at the food pyramid, but a lot of food service people and schools and others do. And so to that extent we agree.

The only area we differ on is that he's a big proponent of olive oil. Olive oil is a better choice than, say, butter, but that's different than saying that it's really good for you. The concerns I have about olive oil are that olive oil, like any oil, is pure fat. One tablespoon of any oil has 14 grams of fat. So people who pour olive oil on their salad, or they dip their bread in it, get tons of calories that don't really fill them up. If they just were to reduce their intake of oil, they'd be better off. …

You've been at this for a long time, and you came to it as a way to deal with heart disease. When you read the statistics about obesity, when you look at size or portions of food that are being served, do you think of this as a losing battle? I mean, do you ever give up hope? It's kind of depressing, isn't it?

I never give up hope. I wouldn't be doing this work if I felt otherwise. … You can get depressed when you look at the statistics, but at the same time heart disease rates have actually been declining substantially in the last 30 years, I think in part because of people changing their diet. Americans, unfortunately, are eating more fat than ever. It's not that they're eating less fat. They're eating more fat, so I think that we need to get the information out to people who can benefit from that.

I used to think if I just did good science that would change medical practice. In retrospect, I think good science is important but not sufficient. We also have to change reimbursement, which is why I've been working with insurance companies and now Medicare. We doctors do what we get reimbursed to do, and we get trained to do what we get reimbursed to do. If we change reimbursement, we change not only medical practice but even medical education. So we can start to get nutrition into schools, which are so lacking in such a terribly important area that affects everyone.

I've been working with some of the major food companies and consulting with them, like PepsiCo and McDonald's and others, and ConAgra, to get them to make healthier foods, and to use the wonderful resources and advertising and celebrities and so on, to make it hip and cool and fun and exciting to eat healthfully, to make it convenient, to make it tasty, to have healthy foods in vending machines and so on. And then I think we can make a difference by taking a coordinated approach.
On the other hand, when people say things like, "Oh, fat's okay, you can eat all you want," I think that's a real disservice, and it makes me sad because I think it's going to push people in the wrong direction. …

Why then, [is] the Atkins diet so popular now?

Because it tells people what they want to hear. You know, it tells people that bacon and sausage and pork rinds and butter and brie are good for you. And nothing could be further from the truth.

Brie is not good for me? [laughs] You're killing me here, Dr. Ornish.

Now, the other thing that we really haven't talked about are the studies that came out like in the New England Journal of Medicine, saying the Atkins diet is good for you. Now, I have two problems with that. First of all, what are they comparing to? They're comparing it to an American Heart Association's 30 percent fat diet, which I've been critical of for years. And so what they found is that the LDL cholesterol on both diets actually went up, the bad cholesterol went up, but the triglycerides went down more on the Atkins diet, and the HDL went up more on the Atkins diet.

Now, the triglycerides went down because the American Heart Association diet is very high in simple carbs, which I've been critical of for years. Whereas on the diet that I recommend, your triglycerides go down as well as your LDL going down. You know, it's like the old story about Dr. Johnson's dog. The fact that it can stand on its hind legs is amazing even if it can't sing very well. The fact that it does anything well surprised a lot of people.

Now, HDL is another issue. Your HDL will go up on an Atkins diet, but that doesn't mean it's good for you. You know, your body makes HDL to get rid of excessive fat and cholesterol, and so if you feed someone a stick of butter, their HDL will go up because it's trying to get rid of it, but that doesn't mean it's good for you. In our studies we've found the HDL went down a little, the LDL went down much more, and they showed reversal of heart disease.

And that's the other problem with these studies, is that they haven't actually measured the underlying heart disease as we have. It makes me want to tear out what's left of my hair when I hear people say things like, "Oh, the Atkins diet is better for your heart than the diet that Dean Ornish recommends," when we've actually done studies to look at the underlying heart disease and find it's reversing, whereas the only studies that have been done on Atkins diet show that the heart disease actually gets worse.

Don't you think at this stage a lot of Americans are just totally confused? Because they hear what you say, they hear what Atkins
says, they read totally conflicting advice in many ways.

That's the whole point of science, is to conflict claims by saying, "Show me the data." And I think the more thoughtful people are saying -- there is an emerging consensus that an optimal diet is low in the bad carbs -- in other words, low in the simple carbs -- but high in the good carbs, like fruits and vegetables and whole grains and legumes and soy products. It's low in total fat, and low in the bad fat, but it has enough of the good fats, like the omega-3 fatty acids, about 3 grams a day [is] all you need. It's low in the bad protein -- the animal protein -- but high in the protective plant-based protein. I think as we can all move towards a science-based, evidence-based consensus understanding, and still present a spectrum of how much people want to move in that direction. I think that, more than anything, can help people understand what they should be eating, without trying to sensationalize it in other directions. …