

Change Your Life & Live!

Roberto Suro, New York Times

Bypassing the bypass, Dr. Dean Ornish uses diet, exercise and meditation to unclog coronary arteries. But he unclogs more than just arteries.



Dean Ornish, MD

When in 1975 Nathan Pritikin claimed coronary artery disease reversal, he was scorned and laughed at. When in 1989 Dean Ornish claimed similar results in a carefully controlled experiment, using space-age medical technology, he, at first, was also pushed aside as a charismatic physician and “a health evangelist.” Since then, however, Ornish’s reversal program is now increasingly being used in cardiac rehabilitation centers.

The Rebel

Dean Ornish, MD, was embarrassed. His patients were in revolt. He was being ignored by people who moments earlier had said he deserved a Nobel Prize for saving their lives. They had all been his guinea pigs, some of them for as long as six years. First, they had changed their diets. Then they had changed their lives. It was all because he had told them that only *they* could heal their hearts. Now, mellow from meditation, they just wanted to form a circle and hold hands. And he was telling them to go home.

As usual, Dr. Ornish and his research patients had met for one of twice-weekly sessions in a remodeled firehouse in the Marina district of San Francisco. But, on this night, visitors were present. So Ornish was concerned about appearances. An Austrian doctor and his wife, two journalists, a publisher of a health newsletter and a prominent Los Angeles cardiologist had all come to see Ornish in action.

A rebel who has challenged the medical establishment to change their fundamental practices, Ornish claims to have found a way to reverse heart disease, America’s number one killer, solely with a package of lifestyle changes. No need for cholesterol-lowering drugs or surgery.

When he first started researching the causes of heart disease some 15 years ago, he was merely a second-year medical student, and for a long time he could be dismissed as young, inexperienced and foolishly Idealistic. Scorned by traditional sources of research money, Ornish developed his program with aid from wealthy businessmen, mostly fellow Texans, intrigued by the Idea that expensive health care could, for certain people, be replaced by something as simple as diet, exercise and stress management.

Then, in 1989, he started publishing data showing that members of his

firehouse gang, all of them seriously ill at one time, had reduced the blockages in their arteries overall. In 1990 his findings were published both in a bestselling book, *Dr Dean Ornish's Program for Reversing Coronary Heart Disease*, (Random House), which includes more than 150 vegetarian recipes, and in *The Lancet*, the British medical journal that specializes in publishing provocative studies. Soon invitations to medical conferences began pouring in, and currently he is receiving \$450,000 in grants each year for further research from three mainstream organizations, including the National Institutes of Health.

Despite all these signs of respect from venerable institutions, Ornish, who refers to himself as a medical researcher and educator and maintains only a small private practice, remains an iconoclast.

Lifestyle Therapy In Action

On this particular Tuesday night, the visitors had been invited to join the patients in their carefully structured treatment program, which is intended to reinforce their daily habits at home. They began with a brisk 45-minute walk from the water's edge as the sun slipped behind the Golden Gate Bridge. Dressed in sweatsuits and fancy warm-ups, the mostly grey-haired coronary cases resembled members of a cruise ship aerobics class more than participants in a scientific rebellion. They then returned to the firehouse. They stretched out on the floor, all 18 of them, including some spouses along for moral support. The lights were turned down and the therapist, with a voice as soft and steady as the lapping of the waves, led them through a half-hour of meditation. By the end of the hour the soft voice was telling the patients to visualize the arteries dilating to allow the blood to course through more freely.

Next came a dinner prepared by the staff chef. Buffet tables were crowded with dishes like rice salad with currants, artichokes with non-fat yogurt dressing, lentil torte with cabbage leaves and zucchini-stuffed tomatoes. Ornish's message is that switching from whiskey to chardonnay and from steak to sole is not nearly enough. He advocates that people with serious heart problems change their diets radically from animal to vegetable.

Exercised and relaxed, well-fed and glowing, the patients settled into folding chairs for their version of group therapy. An Episcopal priest, a construction subcontractor and an antiques dealer talked about their progress. At the end, Ornish made a few announcements and affectionately bade them good night.

That's when the revolt started. One man said in mock protest, "What about holding hands?" Looking across the room towards where the visiting journalists and medical specialists sat watching, Ornish shook his

“Bypasses bypass the problem.”

head wearily and said, “No, no. Not tonight.” The patients started linking up anyway.

He relented when it became clear they would go on without him. So he led them in their final rite. Everyone sat in a ring, holding hands, eyes closed. Ornish, whose dark, curly hair surrounds a balding pate, spoke gently in a voice of prayerful sincerity, invoking the deep and powerful connections among them symbolized by their gesture of physical affection.

The next morning, sitting on the deck of his house in Sausalito, looking back across the bay at San Francisco, Ornish told me why he had not wanted outsiders to see that closing moment.

“It’s important for the patients, but it is just the sort of thing that can be trivialized and satirized,” he said. “If you are interested in stuff like meditation and vegetarian diets, people lump you together with cults and a lot of other approaches that are antithetical to the kind of research that I’m conducting.”

“Doctors think it’s conservative to saw people open and bypass their arteries—but they view eating a healthful diet as too radical and an ordeal.”

Medical Limits

More than half-a-million Americans die each year from the effects of atherosclerosis in which the arteries that carry blood to the heart are progressively clogged with fatty deposits called plaque. Cholesterol-lowering drugs, which are expensive and sometimes have troublesome side-effects, can retard disease, and four recently conducted studies show that high doses of these drugs can cause arteries to re-open. At the moment, however, the only widely-accepted technique that actually increases the flow of blood through existing arteries is angioplasty in which a catheter with a balloon-like tip is threaded through the vessel, forcing it to open up. Otherwise, the standard recourse is bypass surgery, which circumvents blockages by splicing in veins taken from the leg.

Time and again, Ornish reminds listeners on talk shows and at lectures that neither an angioplasty nor a bypass affects the progress of the disease. He repeatedly cites studies showing that in four to six months, up to 50% of the arteries treated by angioplasty will have clogged up again, and that 15-30% of vein grafts will have occluded within 12 months after the surgery.

“Bypasses bypass the problem,” is a sound-bite Ornish uses to dismiss the 500,000 coronary bypass surgeries performed annually in North America. And he holds no better regard for the 400,000 angioplasties performed. After a pause to let the thought sink in, he continues in a gentle but

persistent cadence favored by motivational speakers who portray their visions as self-evident: “I don’t understand why asking people to eat a well-balanced vegetarian diet is considered drastic while it is medically conservative to cut people open or put them on powerful cholesterol-lowering drugs the rest of their lives.”

Detractors

For such brashness, Dean Ornish, 42 years old, has been called both a boy wonder and an *enfant terrible*. His contention that a small, experimental group of patients reduced arterial blockages under his care is accepted as a clinical fact. Professionals, however, raise many questions about the wideness of its applicability and ultimate scientific value.

Doubters point out that his sample is very small (the experimental group consisted of 22 people who underwent his program and 19 who were in the control group that received standard care from their own cardiologists. The skeptics wonder if his patients would have responded so well without the first-class meditation coaches, the catered meals and the special attention Ornish lavishes on them. And some of his supporters wonder whether, other doctors could get the same results. One of Ornish’s early mentors, Dr. Antonio Gotto, chief of internal medicine at the Baylor College of Medicine at Houston, said: “There are charismatic doctors all over the world, and sometimes it’s hard to separate the personality of the physician from his application. Maybe there’s something like an *Ornish Factor* here. Maybe others will not be as successful in getting people to change their behavior.”

A rival researcher recently labeled him a health evangelist. “He has always been convinced that he is right, and he wants to prove it so badly that you have to be concerned over whether his work will come up with any conclusions other than the one’s he is supporting,” said Dr. B. Greg Brown, a professor of medicine at the University of Washington. In a study last year, Brown found that combinations of two cholesterol-reducing drugs did bring about reversal in artery blockages.

Ornish insists that he has always wanted to be a mainstream researcher, but he also takes wry pride in being something of an iconoclast. “You know the old joke about how you can spot a pioneer?” he asks. “The pioneers are the ones with arrows in their backs, and I’m a little defensive with all the arrows I’ve been hit with.”

Lifestyle Approach

The Ornish plan for reversal of heart disease has four major disciplines:

- 1) Patients adhere to an extremely low-fat vegetarian diet that permits no

“To some, Ornish is a boy wonder; to others, an *enfant terrible*.”

“In one year, 82% of the patients showed reduction of their arterial blockages.”

animal products, except for egg whites and non-fat dairy products. (No fatty nuts or seeds either).

2) Patients are given a very moderate regimen of light aerobic exercise, usually nothing more vigorous than half-an-hour a day of walking.

3) Patients are asked to stop smoking.

4) Patients practice stress management, which involves at least an hour a day of meditation, imagery and breathing exercises.

In the average American's diet, some 40% of the calories come from fat. The American Heart Association calls for atherosclerosis patients to reduce

their fat intake to 30% of their calories. The Ornish reversal diet allows only 7% or less, requiring not only a drastic change in the content of meals but also in the way they are cooked.

Ornish is not the first to suggest that such a stringent diet could have major medical results. In the 1970s Nathan Pritikin popularized a near-vegetarian diet very low in fat, cholesterol, sugar and sodium. Indeed, each element of Ornish's reversal program has been individually shown to help retard the progress of heart disease and in various combinations they are increasingly now used in many cardiac rehabilitation programs.

While most cardiologists advocate lifestyle change for their patients, Ornish goes

And Interview with Bill Moyers, PBS

Moyers: Is it really necessary to put heart disease through this *dietary boot camp* to get these reversal results?

Ornish: I'm not so sure that my patients would see it that way. We have gotten to a point in medicine where it is somehow considered *radical* or an ordeal to ask people to stop smoking and manage stress better and walk and eat a healthful diet. And it *is* considered *conservative* to saw people open and bypass the arteries or to slip balloons inside the arteries and squish them or to put them on powerful drugs for the rest of their lives. I think our medical priorities are a little topsy-turvy.

Moyers: What about these high-tech approaches?

Ornish: No one has shown that angioplasty can prolong life or prevent heart attacks. Also, three major randomized control trials have shown that bypass surgery does *not* prolong life either. The major benefit is the reduction of chest pain. And our lifestyle approach showed that blood flow to the heart improved, and as a result, the chest pain diminished markedly-by 91 %, in fact

Moyers: Medical approaches often try to treat the *symptoms* of chronic disease. They try to eliminate more of the pain rather than the causes.

Ornish: Any time a person is in pain there is an opportunity for *transformation*. *Simply* dealing with the pain without addressing the underlying causes is a little like clipping the Wires to a fire alarm while your house burns down and then going back to sleep. We have an opportunity to *use* pain as a catalyst for transforming not only behaviors like diet, exercise and smoking but also the more fundamental issues that underlie those behaviors. When people learn to experience inner peace, then they are more likely to make and maintain lifestyle choices that are life-enhancing rather than self-destructive.

much further. While accepting that some will need surgery or drugs, he says that for many patients a combination of changes he proposes greatly enhances the body's ability to break down arterial plaque and increases the smooth flow of blood to the heart.

The Evidence

The evidence lies in data drawn from the chests of his firehouse crew, most of whom have been measured for more than five years against the control group. In the first year, blockages were reduced in 82% of the Ornish group while they *increased* in the majority of those who received standard medical care. The frequency of angina, that pain in the chest that is a *memento mori* for the cardiac patient, was reduced by 91% for the experimental group, but increased 165% in the control group on the American Heart Association diet with standard cardiological care.

When Werner Hebenstreit, one of the most successful cases, began the Ornish program 10 years ago, the angina was so severe even the exertion of taking a shower would cause pain.

When I met Werner, who is now 81 years old, he was about to take his walk at the start of the Tuesday night program. He looked at me with evident satisfaction and said, "I'm guessing that you're about half my age. I bet you can't keep up with me." He then bounded up a steep staircase, two steps at a time.

In 1990 when the final results of the firehouse experiment were available, Dr. Claude Lenfant, director of the National Heart, Lung and Blood Institute, part of the NIH, said, "I feel that this is a tremendously important study in the control of heart disease. It's the very first study indicating regression of coronary heart disease without pharmaceutical intervention."

While physicians are still skeptical and while the medical establishment still questions Ornish's bottom-line claims, no one is saying he can be ignored anymore. As a matter of fact, Ornish today enjoys greater respectability than ever.

Who is this man?

The Man

Dean Ornish was born and raised in Dallas where he was an "A" student in public school. His father, a dentist, saw an heir for his practice. But at Rice University at Houston, Dean was no longer the brightest kid. What happened next is a story he has told many times over. Worried that he was stupid and beset by a crisis of self-worth, Ornish contemplated suicide. A bout of mononucleosis kept him from doing it. Why does he still recall it so vividly 23 years later?

**“Within weeks,
angina was reduced
by 91%”**

“A sense of isolation is at the root of many self-destructive behaviors.”

Ornish says, “I go back to it all the time because .it was a transforming moment.” And, he says, much of his medical approach has developed out of his experience of that moment. It was 1972, and like many of his generation, Ornish sought enlightenment. He found it in meditation. “I realized,” he recalls, “that the less I needed success, the less I felt stress about my ambitions, the more I succeeded.” Later, when he began to work with heart patients, he began to suspect that there might be a connection between the causes of depression and heart disease.

His Supporters

He went on to graduate *summa cum laude* from the University of Texas at Austin and got into Baylor College of Medicine in Houston. There, in his third year, Ornish got a big break. Through an acquaintance he was introduced to Henry Groppe, an oil-business consultant with a long-standing interest in preventive medicine. A tall, gaunt Texan who wears rimless glasses, Groppe analyzes deals and works out market forecasts for a long list of high-rollers.

In 1979 and 1980 Groppe gathered his friends at a series of luncheons at a downtown club to hear Ornish talk about his work.

“From the start,” Groppe says, “Dean was very persuasive and professional. He came across as the kind of person who could make the big leaps, the important discoveries, and that kind of person can get a hearing in Houston pretty much regardless of who they are or where they came from.”

Groppe also recalls a very positive reaction to Ornish’s assertion that heart surgery bypasses the origins of the disease. “We’re engineers and problem solvers,” Groppe says. “His idea of going after the causes of heart disease had a very clear and practical appeal.”

After doing his internship and residence at Massachusetts General Hospital and at Harvard University, Ornish moved to the Bay Area in 1984. Before moving west, however, he raised enough money to set up the Preventive Medicine Research Institute, essentially his one-man show, which is affiliated with the University of California at San Francisco. Although he says he has not totaled it up, Ornish reckons that he has raised and spent over \$3 million in money from foundations and individuals in the last 10 years.

“The thing about fund raising,” Ornish says, “is that it is a very small group of people that have a lot of money in this country and they all know each other and they all seem to owe each other favors of one sort or another. And in some ways our research was the beneficiary of this situation.”

Groppe plugged the young doctor into his network. Some of America’s richest men have sought treatment for their own heart problems. At least two now travel everywhere with their own vegetarian cooks. And many oth-

ers have backed Ornish because he holds out the possibility of a cure for a disease that strikes down so many people with big offices.

His Philosophy

Heart disease is only a model and a metaphor for what I'm doing and it is certainly not limited to heart disease," says Ornish. "It is about trying to help people heal their lives in ways that go beyond illness. The idea is that everyone experiences pain—the pain of isolation, the pain of separation, the pain of loneliness or whatever form it comes in. I am becoming increasingly convinced that a sense of isolation is at the root of many self-destructive behaviors and of the chronic emotional stress that can lead to illnesses like heart disease."

Ornish seems especially proud when he talks about how his patients learn to cope with the emotional pain and isolation and makes group support and talking about feelings an important part of his program. Several patients tell of how they were happier in their marriages than ever before. Others explain that they have changed jobs and entire careers to find less stressful employment.

As we strode along the bay front during our walk before the Tuesday evening meeting, Werner boasted to me: "I used to be a Type A all the way and I was a very hard person to get along with. Now I'm a real C-. I'm a whimp, and proud of it. I don't let anything bother me. That's what Dean has done for me."

In a later conversation he added, "Look, I would not go as far as to say that this is a cult. But there is a great deal of spirituality to it. We're taught in the group that the amount of love and friendship we contribute makes us all stronger."

Just then Ornish came in. I had not met him yet and as I introduced myself, Werner blurted out, "We were just talking about you, Dean Ornish, the guru."

As he took my hand and looked me in the eye, Ornish said with a grin, "Oh, no; anything but the g— word."