

**Dr Dean Ornish**

Mark Masselli: This is Conversations on Healthcare, I'm Mark Masselli.

Margaret Flinter: And I'm Margaret Flinter.

Mark Masselli: Well Margaret we are getting more details about the pathology of the Zika virus which is still fraught with many unknowns, Global Health Officials are still trying to connect the dots between women being infected during pregnancy and the likely result of birth effects in their offspring and whether there maybe other causal factors at play.

Margaret Flinter: Well Mark at this phase where there are still so many unknowns but a lot of fear, experts are emphatically warning women of child bearing age and certainly women who are pregnant already to simply avoid the hardest hit areas South and Central America as well as the Caribbean for now.

Mark Masselli: Now there is an added threat health officials have recently determined that the virus can be sexually transmitted based on a recent case they examined in Texas.

Margaret Flinter: Well another pathway to transmission now to be very concerned about Mark, and as we have seen with other epidemiologic studies the recent Ebola outbreak is a great example. We have just got to get far more data on the pathology of the virus, all transmission roots, potential risk assessments and of course prevention. All around just another new major global worry.

Mark Masselli: You are absolutely right. And as health providers it's important that we all know the facts and members of Congress are also concerned about getting the facts. HHS Secretary, Sylvia Mathews Burwell updated members of Congress on the latest details about the virus and what Federal or the State precautions are being put in place.

Margaret Flinter: Meanwhile epidemiologists are converging on ground zero, the region in Brazil with the highest number of cases as well as babies born with the signature birth defects in order to get to work on a vaccine. Officials caution it could take years to produce a viable one but to protect population health that's the goal at the moment.

Mark Masselli: Another threat to population health Margaret is the obesity epidemic, the USDA just released new federal nutritional guidelines to help educate the public about ways to achieve optimal health and weight, something our guest today is a renowned expert on.

Margaret Flinter: Dr. Dean Ornish the Founder of The Preventive Medicine Research Institute which has been dedicated for decades to producing sound empirical evidence on the link between good nutrition and good health. And he is going to bring some

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unique insights into solutions to the obesity epidemic which also underlines so much of the chronic disease burden in our country.

Mark Masselli: We will also hear from Lori Robertson, Managing Editor of FactCheck.org, she is always on the hunt for misstatements spoken about health policy in the public domain but no matter what the topic, you can hear all of our shows by going to [chcradio.com](http://chcradio.com).

Margaret Flinter: And as always if you have comments, email us at [chcradio@chc1.com](mailto:chcradio@chc1.com) or find us on Facebook or Twitter because we love hearing from you. Now we will get to our interview with Dr. Dean Ornish in just a moment.

Mark Masselli: But first here is our producer Marianne O'Hare with this week's headline news.

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Marianne O'Hare: I'm Marianne O'Hare with these healthcare headlines. President Obama's final budget proposal includes request for a number of health issues that have taken center of stage in his last year in office. The president's budget proposal includes more than \$700 million for cancer research to support his moon shot for cancer initiative being led by Vice President Joe Biden. President is also asked \$1.1 billion to help combat the opioid addiction problem in this country, roughly 30,000 overdose deaths occurred on opioids in 2014 both with prescription opioids as well as heroin. Half the money will go towards creating treatment facilities to meet the rising tide of addicts in need of treatment. The other half of the money will go to programs intended to prevent prescription drug overdoses crackdown on a legal sales and improve access to naloxone a drug that can rescue those who have overdose.

US experts will travel to Brazil next week to start work on the development of a vaccine against the mosquito borne zika virus, ministers from across South America met to discuss the public health emergency and how the region can coordinate its fight against the virus. Zika has been linked to a birth defect known as microcephaly, most babies are born with abnormally small heads and underdeveloped brains and is also spreading rapidly through the Americas. The World Health Organization has declared an emergency.

Meanwhile the recent revelation that zika virus can be sexually transmitted between partners, adds a new level of concern and warning to those planning to travel to the region and certainly those of child bearing years living in South and Central America as well as the Caribbean. And the growing concerns of burnout among medical residents a recent study shows calling on young medical trainees to work longer hours maybe exhausting for the residents but the study shows no real harm done to patients.

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The New England Journal of Medicine Study looked at a recent effort to cap the number of hours medical residents were expected to work to protect not only their health but the health of their patients. A study conducted a direct experiment tracking patient outcomes after loosening rules for doctors in 58 surgical residency programs, found their patients did not die or suffer complications anymore than a 59 residency programs that didn't waive from the current rules. I am Marianne O'Hare with these healthcare headlines.

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Mark Masselli: We are speaking today with Dr. Dean Ornish, Founder and President of the nonprofit Preventive Medicine Research Institute and a Clinical Professor of Medicine at UC San Francisco. Dr. Ornish has served both the Obama and Clinton administrations advising on nutritional guidelines for optimal health, a prolific writer and author Dr. Ornish serves as the Medical Editor of the Huffington Post and has written several New York Times bestsellers including Dr. Dean Ornish's Program for Reversing Heart Disease, Eat More, Weigh Less and the most recent The Spectrum. Dr. Ornish has earned numerous awards for his work including the National Public Hero Award from UC Berkeley. He earned his medical degree from Baylor University School of Medicine and was a Clinical Fellow at Harvard Medical School. Dr. Ornish welcome to Conversations on Healthcare.

Dr. Dean Ornish: Thank you, glad to be here.

Mark Masselli: Yeah. And you have been on the leading edge for a long time now conducting longitudinal studies on the science and nutrition, its impact on health and wellness. And your studies point to the potential of proper nutrition in not only preventing illness but reversing illness as well and I wonder if you could describe for our listeners the relationship between nutrition health and wellness and how your work has evolved over the past few decades?

Dr. Dean Ornish: Well you know we tend to think of advances in medicine as being a new drug, a new laser, something really high-tech and expensive and what we have done for the last, almost 40 years now is to use the latest technology that high-tech, state-of-the-art scientific measures to prove how powerful and how dynamic these underlying lifestyle changes can be, and everything we have done was thought impossible at the time we were able to show for the first time that even severe heart disease can often be reversed by making lifestyle changes that Type II diabetes can be reversed, that early stage prostate cancer maybe slowed, stopped or even reversed. When you change your lifestyle in these ways it changes your genes turning on the good genes that protect us and turning off the genes that cause oxidative stress and inflammation which is you know are often at the root of so many chronic diseases, as

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well as downregulating or turning off what are called oncogenes that promote prostate, breast and colon cancer over 500 genes in just three months.

And we have found in our latest work that the same lifestyle changes can actually begin to reverse aging at a cellular level by lengthening telomeres the ends of our chromosomes that actually control how long we live it's really the only control study showing that any intervention including drugs can actually lengthen telomeres. And so the more we study, the more mechanisms we find to explain why these simple changes in dieting lifestyle were so powerful, and how dynamic they are, how quickly you can feel better. And so that in turn reframes the reason for making these changes from fear or for preventing something bad from happening to joy and pleasure. When you make these changes most people find that they feel so much better so quickly it reframes the reason for making them from preventing something bad or fear of something bad happening to joy and pleasure and ultimately it's joy and pleasure that make these changes so sustainable.

Margaret Flinter: Well Dr. Ornish certainly one of the biggest challenges when it comes to health of the American public is the throws of the obesity epidemic that we find ourselves in with a third of the nation's population obese or overweight, and the USDA recently upgraded their nutritional guidelines for healthy eating and I understand that you have supported them. So tell us about these recent changes and why you think there are step in the right direction and what else would you like to see in terms of those recommendations and guidelines?

Dr. Dean Ornish: What I like about them is that for example they call the plant-based healthy eating something that they would recommend. Unfortunately between the initial recommendations, the draft recommendations and the final ones, they got a lot of pressure from Congress to take out parts about the fact that what's good for you is good for the planet because it turns out that one of the leading causes of global warming is lifestyle consumption, and so you know more global warming is caused by eating meat than all forms of transportation combined. So for all those reasons I think that there is the convergence of forces that after doing this work for almost 40 years is finally making of the right idea at the right time.

Mark Masselli: You know I was interested when you were talking about telomeres and obviously in your book *The Spectrum* you, I think a way ahead of you know the human gene almost only being mapped around then and I always wonder what the resistance is for people to believe this and do you think the mapping of the genome and the work that's going on there is advancing your cause you know what's the tipping point in getting people to sort of connect the dots as you so eloquently you have done?

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Dr. Dean Ornish: Well I think that we have reached a tipping point in part because the limitations of high-tech medicine are becoming increasingly clear the randomized trials have shown for example that angioplasties and stents really don't work in people who have stable heart disease that while they can be life saving in people who are in the middle of having a heart attack let's say, they don't really work for people who are stable and that most of the people who get angioplasties and stents were stable. Bypass surgery if it's effective at all is only in a fairly small group of people who have left main disease or equivalent and left ventricular dysfunction, it's about 2% or 3% of the people who get operated on, getting your blood sugar down with drugs then the ACCORD study, the NAVIGATOR study and others that were in New England Journal of Medicine didn't really reduce the horrible complications of the diabetes you know the blindness and amputations, and kidney failure, and impotence, and heart attacks and strokes and so on. But there is evidence of getting your blood sugar down with lifestyle works even better than getting it down with drugs. Maybe 1 out of 49 men with early stage prostate cancer benefits from surgery or radiation or chemo, the others get maimed in a most personal ways because they are often either wearing diapers because of incontinent or they can't have sex because they are impotent. And so at the same time the limitations are becoming clear for the most common chronic diseases the power of these lifestyle changes that not only prevent but actually reverse these conditions we are showing is becoming more well-documented.

And now that Medicare is covering my program the last couple of years, 3 or 4 years, most of the other insurance companies are doing that, so we are really creating a new paradigm with healthcare that's sustainable because it is reimbursable than a sustainable and if we change reimbursing we change even medical practice and even medical education.

The skepticism among a lot of doctors has been, oh you know my patients will take their Statins, their Lipitor but there is no way they are going to change their lifestyle, it's too hard or why would I want to do that you know am I going to live longer or just going to seem longer if I even just have this idea that, this is what, what's really a false choice you know is it good for me or is it fun for me. But it turns out that, first of all, the adherence to stand drug is really terrible, half to two-thirds of people who are prescribed them are not taking them after just 4 to 6 months. And although we don't usually think of it this way they are fear based, take this pill, the doctor tells the patient, it's not going to make you feel better, hopefully it won't make you feel worse to prevent something really awful like a heart attack or stroke from happening years down the road that you don't want to think about.

So when we are getting 85% to 90% adherence to our program in all of the various sites we trained around the country even though it's a lot harder to change your lifestyle than to take a pill, and the reason is is that there is not point of giving up something that you

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enjoy unless you get something back that's better and quickly. And when people make these lifestyle changes because these underlying biological mechanisms that we have been talking about are more dynamic than we have once realized, most people find that they feel so much better so quickly, it reframes the reason for making these changes from fear of dying or fear of something bad happening which is not sustainable, to joy and pleasure and freedom and love which are.

Most people we found that 96% reduction in the frequency and severity of chest pain in the first few weeks for someone who can't work or walk across the street before the life changes or play with their kids without getting pain and within a few weeks they are essentially pain free, they say, oh I like eating cheeseburgers but not that much because I like some of these other things even more. And as you put it they connect the dots as what they do and how they feel, it's like, oh when I eat these foods, when I don't do these things, I don't feel so good, when I do this, I feel really good so then they get into a virtuous cycle where they start to make changes they feel better which makes them want to do even more which makes them feel even better. And what we have learned in all of our studies is that the more you change the more you improve at any age both in how you feel and in the underlying matrix that we look at.

Margaret Flinter: Well Dr. Ornish I think it's also safe to say that both providers and just people have a little bit of fatigue maybe from the constant input about nutritional diets or changes that they should follow from fat free to sugar free to the low carb, Atkins, Paleo, what is the most effective way to help patients make these changes, can a provider one-on-one with a patient communicate this effectively? Do they need to enroll in some kind of a program, what's your experience around the best way to help people make the changes?

Dr. Dean Ornish: That's why I spent 16 years to work with Medicare to get Medicare coverage of our program because I realized that you know we don't learn about these things in medical school as physicians. And we don't really have much time to teach our patients I mean if you have to see a new patient every 8 or 10 minutes like most doctors do, so we are really trying to create, and we are creating a new paradigm of healthcare, rather than sick care that now Medicare will pay for 72 hours of training. So in our approach for doctor is the quarterback but there is also a nurse, a yoga teacher, and exercise physiologist, the dietician and the psychologist all of them work together, people come for four hours at a time, not for 10 minutes and they get an hour of supervised exercise, an hour of stress management which includes yoga and meditation and now our support group where people can really talk authentically and openly with each other which is so powerful. But you know it's hard to create something that's never done before and yet it's incredibly meaningful, and so I feel very grateful to be a part of that.

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Mark Masselli: We are speaking today with Dr. Dean Ornish, Founder and President of the nonprofit Preventive Medicine Research Institute and a Clinical Professor of Medicine at UC San Francisco a proponent of nutrition and integrative medicine you know this whole concept of integrative care is so important, how did you get to that side of the equation? What was the sort of pathway for yourself to come on over and look at all of the other elements that are really key to successful rehabilitation for folks?

Dr. Dean Ornish: I got interested in doing has had my own pain when I was a freshman in college back in 1972 and was suicidally depressed and this approach has really helped bring me out of that. And later when I was in medical school and I was learning how to do bypass surgery with Michael DeBakey, a pioneering heart surgeon we cut people open, we bypass or clogged out and usually tell them they were cured and more often than not, they got home and do all the things that have caused the problem in the first place and their bypasses will often clog up, we would cut them open again and that for me became metaphor of an incomplete approach that we were literally bypassing the problem rather than treating the underlying cause.

And so we are trying to create a greater sense of awareness and empower people with the information that these simple choices that we make in our lives each day can make such a powerful difference in not only how long we live but also how well we live.

Margaret Flinter: When we think about this large scale change whether it's Medicare taking 16 years, we wonder what's your vision for how this really goes mainstream, large-scale in a way that really changes health outcomes in the future, what's your grand plan for how we do this on a very large-scale?

Dr. Dean Ornish: Well it's what we are doing now. I mean the fact that Medicare is paying for this they are paying for it at a rate of reimbursement that is sustainable and we are now finding that you know the big question was, oh you know you live in California it's an altered state they will do anything **[Inaudible 00:17:24]** that we are getting the same outcomes from you know Jackson, Mississippi or California, UCLA. So if you actually look at the data of what people are actually eating, not what they say they are eating but what they are actually eating and what I learned is that, every decades since 1950 we are eating more fat, more sugar, more calories and more meat so not surprisingly we are fatter not because we are eating too little fat but because we are eating too much of everything. An optimal diet is low in fat but it has enough of the good fats C Omega 3 fatty acids for example that you find in fish oil or the flaxseed oil or plankton-based Omega 3s.

And the other thing is that weight is not really the whole issue. We need to also look at what enhances our health as well as helps us to lose weight. You can lose weight on lots of things that are not very good for your health. Smoking cigarettes is a good way

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to lose weight, chemotherapy you know taking amphetamines those kinds of help you lose weight but you mortgage your health. And there was an article by Steven Smith in the New England Journal of Medicine, what happens in arteries on different diets and they found that on whole food plant-based diet like I recommend, the arteries were healthy and clean, on a standard American diet they were partially clogged and on a high protein low carb, Atkins, Paleo whatever type diet they were severely clogged even though the weight and blood pressure and cholesterol levels weren't necessarily all that different from each other.

And so the bottom line is really what's happening in your arteries. And we have shown in randomized trials that the arteries become less clogged, no other diet has been shown to do that in randomized trials. So if you have a life threatening condition you are trying to reverse it, that's what it takes sets a pound of cure that's why we were the first to approve that is because people didn't go far enough. But if you are just trying to stay healthy, lose a few pounds, it's not all or nothing, the more you change, the more you improve. So you decide how much you want to change, how quickly, how many things. Now I was encouraged that US News and World Report which has been rating diets since 2011, last six years, every year since then has rated our diet number one for heart health including 2016.

Mark Masselli: We have been speaking today with Dr. Dean Ornish, Founder and Director of the nonprofit Preventive Medicine Research Institute and a Clinical Professor of Medicine at UC San Francisco School of Medicine. You can learn more about his work by going to his website [ornish.com](http://ornish.com). Dr. Ornish, thank you for joining us on Conversations on Healthcare today.

Dr. Dean Ornish: Great pleasure thanks for having me on the show.

Margaret Flinter: Thank you great.

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Mark Masselli: At Conversations on Healthcare, we want our audience to be truly in the know when it comes to the facts about healthcare reform and policy. Lori Robertson is an award-winning journalist and managing editor of FactCheck.org, a nonpartisan, nonprofit consumer advocate for voters that aim to reduce the level of deception in US politics. Lori what have you got for us this week?

Lori Robertson: Senator Ted Cruz is in the last GOP debate before winning the Iowa caucus claims that the Affordable Care Act had forced millions into unemployment and part time work. He repeated the old claim that the law was the "biggest job killer in this country". We have noted several times over the years that the facts show otherwise. And the latest jobs statistics make it more clear that Cruz's claims is a partisan

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falsehood. The economy has added millions of jobs since the ACA and fewer people are being forced to work part time, not more.

It is true that independent nonpartisan experts projected some negative effect on employment with some small employers potentially resisting hiring new workers or cutting back the hours of current employees to keep their total payroll under 50 full time equivalents, that's the point at which the law would require employers to provide insurance or pay a penalty. But those projections were that the effect would be small or a minimal, the employer mandate for businesses with a 100 or more employees, went into effect on January 1, 2015. Since then the economy has added more than 2.4 million new jobs. As for part time workers the Bureau of Labor Statistics measures the number of people working part time for economic reasons either because an employer had cut hours or full time work wasn't available. That number has gone down by 762,000, and that's my fact check for this week, I am Lori Robertson, Managing Editor of FactCheck.org.

Margaret Flinter: FactCheck.org is committed to factual accuracy from the country's major political players and is a project of the Annenberg Public Policy Center at the University of Pennsylvania. If you have a fact, that you would like checked, email us at [www.chcradio.com](http://www.chcradio.com). We will have FactCheck.org's Lori Robertson check it out for you here on Conversations on Healthcare.

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Mark Masselli: Each week Conversations highlights a bright idea about how to make wellness a part of our communities and everyday lives. Falling is a common experience among the elderly and that is not good news.

Drew Lakatos: Hip fractures in the elderly are an enormous devastating expensive, death sentence of an injury. If you are over 65 and you have fallen and broken your hip, 25% of them will die within 12 months, another 25% will never be able to live independently and a full 75% will never regain full mobility.

Mark Masselli: That statistics got former airbag executive Drew Lakatos thinking, what if you could apply the technology used in airbags to create wearable devices that protect a person from the impact of falling?

Drew Lakatos: So similar to the auto industry our government has spent billions in about two decades on fall prevention programs for the elderly. What I am suggesting is we make that same strategic shift that the auto industry did and we begin focusing on intelligent protection of our elderly.

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Mark Masselli: So they did their research and found a combination of accelerometers and other sensors on the band worn around the waist could deploy within 6 milliseconds of sensing an imminent fall, and protective bags unfurl around the hip joints, before impact with the floor, significantly reducing the blow to the joint.

Drew Lakatos: Physics has taught us that bodies in motions stay in motion until they meet in an immovable object, right. In this case the immovable object is the living room floor. With the right technology we can ensure that these people that meet that inevitable immovable object which is the floor can not only survive that accident, they can walk away.

Mark Masselli: He founded ActiveProtective Technologies and while his initial focus was providing the significant barrier to devastating injury in adults he has additional potential markets as well.

Drew Lakatos: With this type of technology we can protect against concussions; we can now protect Coumadin patients. We can protect postal workers when it's icy hot. We can protect our military soldiers from IEDs.

Mark Masselli: A simple retooling of airbag technology in a wearable device that could greatly reduce the devastation of hip fractures, leading to better health outcomes, lower health cost, and better quality of life, now that's a bright idea.

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Margaret Flinter: This is Conversations on Healthcare, I am Margaret Flinter.

Mark Masselli: And I am Mark Masselli, peace and health.

Conversations on Healthcare, broadcast from the campus of WESU at Wesleyan University, streaming live at [www.wesufm.org](http://www.wesufm.org) and brought to you by the Community Health Center.