

THE FUTURE OF HEALTH | NOW 2012

Dr. Mark Hyman Overcoming Diabesity to Achieve UltraWellness

*The following is taken from **The Future of Health Now** interview conducted by Ann Wixon with four-time New York Times best-selling author, Dr. Mark Hyman.*

We have compiled the best, most valuable and easily applicable content from this amazing interview so you can begin to implement positive changes today, as you strive to live a happier and healthier life now and in the future.

Who is Dr. Mark Hyman?



I am a family doctor and have dedicated my career to identifying and addressing the root causes of chronic illness through a groundbreaking medicine approach known as “functional medicine.” I am chairman of the Institute for Functional Medicine, and was awarded its 2009 Linus Pauling Award for Leadership in Functional Medicine.

I am on the board of directors of the Center for Mind-Body Medicine, and a faculty member of its Food as Medicine training program. I am also on the Board of Advisors of Dr. Memhet Oz’s HealthCorps, which tackles the obesity epidemic by educating the student body in American high schools about nutrition, fitness, and mental resilience.

As a volunteer for Partners in Health, I worked on the ground immediately after the Haiti earthquake and was featured on *60 Minutes* for that work there.

I have testified before the White House Commission on Complimentary and Alternative Medicine, and have consulted with the Surgeon General on diabetes prevention. I have testified before the Senate Working Group on healthcare reform on functional medicine, and participated in the White House Forum on Prevention and Wellness in June 2009.

In June 2010, I was nominated by Senator Tom Harkin for the President’s Advisory Group on Prevention, Health Promotion and Integrative and Public Health, a 25-person group to advise the administration and the new National Council on Prevention, Health Promotion, and Public Health.

I am the founder and medical director of the UltraWellness Center in Lenox, Massachusetts.

What is Diabetes?

Diabetes affects one out of two Americans, 90% of whom don't know it, and will cost our country \$3.5 trillion over the next 10 years.

It's the single biggest cause of heart disease, cancer, diabetes, and even things like dementia and other inflammatory diseases of aging. It's the most underdiagnosed, most serious chronic disease that we have today. No doctors are really trained to diagnose it effectively and very few are trained to treat it effectively.

In conventional medicine, things are thought of as on or off: you have diabetes or you don't. If your blood sugar is 123, you don't have diabetes. If it's 126, you do have diabetes.

That's a bunch of nonsense, because **disease occurs across a continuum from fully optimal function to full-blown end-stage disease**, and anywhere along that continuum, there are risks.

If you are having any problems managing your blood sugar, any problems with any little belly fat that's causing you to have swings in insulin and blood sugar, you're at risk for the complications of diabetes.

The concept of diabetes is that there's a continuum from optimal blood sugar balance to full-blown diabetes, and that anywhere along it, you're at risk.

It can show up in all sorts of ways such as depression, as mental problems, cognitive issues, as heart attacks, as fatigue, as cancer, and you might not think you really have this problem, but it shows up as some other disease. But it's really rooted in this one single problem.

Diabetes Causes

We are genetically predisposed to diabetes because many of us evolved in areas where we needed to store fat to survive. So, it's a good thing to be able to go out and find extra food and put the fat away for a winter or for a period of famine or a scarcity in food. So it's an adaptive gene that helps us to store fat, particularly around the middle, and save it for later.

In today's world, we all have abundant and unfettered access to all the food we want and all the sugar and processed foods we want. **We went from 10 pounds of sugar a year consumed by each person in America in 1800 to today's nearly 180 pounds per person per year.**

That's a whole person in sugar, every year. That takes our genetic predisposition and creates a whole series of problems that we call diabetes.

You don't really have to get diabetes to have all the problems, and you don't just have to worry about it if you have a family history, because although it may give you a clue that you have a risk for this problem, even without a family history, you can still have issues.

- It's also a lack of exercise and being sedentary, which makes us more insulin resistant.

- It's environmental toxins, which actually have been linked to creating weight gain and diabetes and diabetes.
- It's linked to what's going on in our digestive tracts, our gut flora, which is very important in regulating inflammation in the body, which can control weight and diabetes.
- So it can be anything from your diet, to stress, to toxins, to gut flora, and many other things that can actually lead to this problem.

Diagnosing Diabetes

- The biggest clue is your waist size. You may not be overweight but you may be *overwaist*.
- As your waist size goes up, your risk of death and heart disease, cancer, and everything goes up.
- The belly fat is a clue for diabetes.
- Look at your waist size in relation to your height or waistline or hips.
- If you're a woman and you measure on your bellybutton and around your widest part of your hips, and if it's greater than 0.8, you have a risk for diabetes.
- If you're a man, it's greater than 0.9. If your waist is bigger than your hips, you've got a problem.
- You can also be a "skinny fat" person. You can look skinny but you're metabolically fat.
- When you have more fat and less muscle, you're more insulin resistant, so you can have prediabetes without even being overweight.
- The best test is an insulin challenge test.
- We need to do the right testing to find out if you have this problem, and most doctors can do it. Ask for a hemoglobin A1C test.
- Test of your cholesterol, specifically looking at triglycerides and HDL and how those are.
- If your triglycerides are high and your HDL or good cholesterol is low, it's a clue that you have diabetes.
- If you really want to be sophisticated, you can look at the particle size of your cholesterol. Is it light, fatty cholesterol? Is it small, hard, dense cholesterol?
- The small, hard, dense cholesterol is more of a risk for heart disease and an indicator of diabetes.
- Test your blood sugar and insulin levels after taking a sugar drink, fasting and after taking a sugar drink, more than two hours after or you can do 30 minutes after.

Diabetes and Children

- We're seeing a 1,000 percent increase risk in diabetes in children in the last generation.
- We're seeing tripling of the obesity rates.
- Testing on kids can depend on each child and what their family history is, their body type, their weight, and so on.
- In children who are at risk, overweight, or who have extra body fat, who have family members who have diabetes, I think there's a reason for testing early.

Diabetes Health Myths

“Diabetes is genetic.” I can tell you that just because you're predisposed to it doesn't mean you're going to get it or that you have to get it.

“Diabetes is not reversible.” That's absolutely not true. What's true is that with medication, you can't reverse it. But with aggressive lifestyle therapy, we can actually reverse diabetes.

“you don't really have to worry about prediabetes until you have full-blown diabetes.” The whole term “prediabetes” is really a false term. You can have all the complications like heart attacks, strokes, cancer, dementia, and depression from having prediabetes. The things you won't get are the blindness and the kidney damage and some of the nerve damage, but everything else, you'll get.

“Once you go on insulin, you can't get off.” I've had many patients get off insulin if they change their diets and exercise and correct all the causes.

“Lowering your blood sugar with medication prevents death and heart attacks in diabetes.” There have been some interesting and shocking studies that show that if you lower your blood sugar using insulin and certain drugs, you're actually raising your risk of heart attacks.

“Surgery and angioplasty are good treatments.” They're not. They actually have been shown to not to be that effective in people with diabetes for treating heart disease, which is common, and that lifestyle works better than surgery and medication. That's well studied.

“Weight loss is necessary for reversing diabetes.” If we change the information going into your body in terms of food, within literally weeks, you will reverse all these signals that are causing this, even without dramatic weight loss.

We're ignoring the real links between diabetes and disease that are real. Two-thirds of people who walk in the ER with a heart attack have diabetes, and almost all of them are not diagnosed with it.

If you don't look for something, you're not going to find it.

What Causes Weight Gain?

- Food is information.
- Calories have energy and they're providing fuel for your body, but they also have other instructions for your body to tell it what to do.
- If you're eating poor quality calories and liquid calories in sugar and sodas, you're actually telling your body to gain weight.
- You're turning on hormones and signals and information that lead to obesity and disease.

- If you eat real whole fresh food, you change the information going in.
- Foods may have the same energy and same weight, but when they go through your metabolism, the way they interact with your metabolism is very, very different.
- Not all carbs make us fat.
- We need to be eating a lot of carbs in the form of vegetables, fruit, and beans.
- We need to be eating whole fresh real food and not processed carbs that are white flour and white sugar.
- We need good fats, omega-3 fats, anti-inflammatory fats, olive oil, nuts, seeds, and avocados. These are all healthy fats that are needed.
- If we skip meals, we'll slow our metabolism down and trigger hunger that we can't control.
- We get into a very difficult state where our bodies are actually slowing metabolism and gaining weight despite restricting calories.
- You have to eat enough calories so your body doesn't starve, and then you can slowly lose weight by eating less than you need, but more than your minimal metabolic rate.
- What company the calories keep is more important than the calories themselves.
- Fiber is key.
- If you have healthy bacteria in your gut, they don't extract all the energy from the food, and then you don't gain weight. But if you have bad bacteria in your gut, you extract more energy from the food and you actually gain more weight, even if it's the same caloric content of the food.

Danger Foods

- Inflammatory foods.
- Inflammatory fats.
- Inflammatory sugars.
- High fructose corn syrup.
- Trans fats.
- Hydrogenated fats.

What is Functional Medicine?

Conventional medicine waits until you have a problem to do something about it. They deal with the downstream effects of upstream causes. They deal with symptoms not the system.

Functional medicine deals with the underlying mechanisms and the causes of disease and doesn't just try to suppress symptoms with medications.

Functional medicine deals with the body's whole systems in an individualized way that addresses the underlying causes of disease. I'll give you an example. Let's say you have a diagnosis of depression. Your doctor will diagnose it after you have certain symptoms, like you

feel sad or hopeless or helpless or don't have interest in your normal activities or food or you can't sleep.

But in fact, depression is just the name we give to groups of people who have those same symptoms, and yet the causes maybe quite different depending on the individual.

We could have depression from having not enough vitamin B or because we eat too much sushi and have mercury in our body. Or maybe we eat too much sugar and have prediabetes and don't know it and that causes depression.

Each one of those had a different method of diagnosis and a different treatment. If you treat the cause rather than just the symptom, which is depression, then you'll be much more successful in getting results.

So functional medicine is an approach that you view the whole system as opposed to just the symptoms. It's medicine by mechanism and pathway rather than by location and geography.

We group people in the wrong categories based on symptoms instead of based on causes or ideology. So, our whole way of classifying, organizing, and naming disease is based on a very outdated idea.

Functional medicine is focused on diagnosing and grouping people by causes rather than by symptoms.

For example, let's say one patient has rheumatoid arthritis, another has osteoporosis, another has autism, another has irritable bowel, another has a heart attack, another has cancer and another has dementia.

We see these all as separate problems, but in fact, every single one of those diseases maybe caused by eating gluten. That's not to say that everybody who's got those diagnoses has it caused by gluten. But, we have to sort of tease apart these ways of organizing diseases that don't make any sense anymore in the 21st century. They're completely outdated and relatively meaningless. We have to reorganize our specialties into specialties of causes.

What is Nutrigenomics?

It's a science of understanding how food talks to your DNA and turns on or off messages that help the disease.

The instructions your food contains for your genes determine your health and determines whether you're going to gain or lose weight, whether you're going to get diabetes or not.

Reversing Disease

I'm agnostic when it comes to medication and surgery. I want to know what is the best, most effective, most powerful therapy I can give someone to heal their suffering and reverse and treat their disease.

We know, through unequivocal science, that changing your diet, exercising, and taking certain supplements, and dealing with environmental toxins works much better than medications and surgery.

The Diabetes Prevention Trials show that you would dramatically reduce the progression to diabetes with lifestyle, which works way better than medication.

Using Supplements

If you eat only wild food that you hunt and forage yourself in a pristine environment, if you drink only pure clean water, sleep 9 hours a night, have no chronic stress, and exposed to no environmental toxins and no electromagnetic frequencies, then you don't need any vitamins.

I think the rest of us do need something. The reason is we've depleted our environment and depleted our soils and live stressed lives and are exposed to toxins and all sorts of other things that require us to get a little extra help.

Nutritional supplements can make a difference for our health. If you take a good look at the literature, there's a lot of data on fish oil, vitamin D, certain nutrients like B vitamins - B6, folate, B12 and methylation. Also correcting nutritional deficiencies like iron, zinc, and magnesium can have dramatic impact, not just in preventing disease later on, but in dealing with chronic symptoms that people have every day.

There's four things everybody should take:

- A broad-spectrum multivitamin,
- fish oil that contains EPA and DHA (not omega-3, but fish oil),
- vitamin D, and
- probiotics.

Future of Diabetes Prevention

- Creating a new model of health care that includes groups and community support for transforming lifestyle, for creating sustainable behavior change.
- There's a large trial, a \$100 million plus trial going on by the National Institute of Health called the "Look AHEAD Trial," which is showing that using groups to treat people with diabetes is much more effective than conventional care of seeing a diabetic educator, of seeing a nutritionist, of getting some exercise counseling, and getting your doctor to prescribe medications.

- I think the future will be reimbursement for group model care that's going to be a comprehensive approach to lifestyle medicine.
- Gives people the skills for self-care and teaches doctors how to actually manage and be part of the team that will deliver this kind of care.
- It includes a multidisciplinary team of experts and community health workers that will transform the landscape here.

Final Thoughts

- We all have bodies, and we need to learn how to take care of them.
- Basic self-care is something you don't need a physician for.
- We have to dramatically change nutrition in medical education.
- Less than a quarter of medical schools have any nutrition education that meets minimum standards.

Easily Applicable To-Dos

- One in two Americans have diabetes problem and 90% don't know.
- Try to learn about this so that you can become informed and ask your doctor or a nutritionist to do what he or she can do to help you take control of this early.
- Never touch anything with high fructose corn or hydrogenated fats.
- If a label has more than five ingredients or if it has any ingredient you can't pronounce or you don't know what they are, just put it back on the shelf.
- Eating real, whole, fresh foods.
- We should be eating real foods in their natural forms as close as they were when they came from nature. If your grandmother or great grandmother wouldn't recognize it as food, you probably shouldn't eat it!

Resources

- Dr. Jonny Bowden interview
- Tim Ferriss interview
- Daphne Oz interview

This Action Guide has been brought to you by The Future of Health Now © 2012