

# Whole Psychiatry



**A David Van Nuys interview  
with Robert Hedaya**

**MY GUEST TODAY IS ROBERT HEDAYA, M.D.**, whom I last interviewed two years ago on Shrink Rap Radio #260. Today we will be discussing the role of nutrition in mental health. Robert J. Hedaya, M.D., DFAPA is the founder of the National Center for Whole Psychiatry in Chevy Chase, Maryland. Dr. Hedaya believes that better mental and physical health can be achieved with less medication by correcting bodily systems and getting to the roots of ill health. Using traditional and integrative approaches, Dr. Hedaya assesses digestion, nutrition, immune function, inflammation, detoxification, oxidative stress, hormones and genetics in every person he evaluates. Although he is a certified psychopharmacologist, through this method Dr. Hedaya has found that his patients can achieve better physical and mental health with less medication.

Dr. Hedaya is an active member of the Endocrine Society, a distinguished fellow of the American Psychiatric Association, a former board member of the Suburban Maryland Psychiatric Society, and board certified by the American Boards of Psychiatry and Neurology, Adolescent Psychiatry, and Clinical Psychopharmacology. He has been a consultant to the National Institute of Mental Health, and is a clinical professor of psychiatry at Georgetown University Medical Center, where he teaches courses on psychoendocrinology, affective disorders, and cognitive behavioral therapy. He has received the Outstanding Teacher of the Year award on three occasions from Georgetown University Medical Center. He is the author of three books:

- Depression: Advancing the Treatment Paradigm
- The Antidepressant Treatment Program
- Understanding Biological Psychiatry

Dr. Hedaya has been featured in local and national media such as 20/20, 60 Minutes, The New York Times and The Washington Post on multiple occasions, and is a nationally and internationally recognized speaker. He has an active blog on WholePsychiatry.com as well as PsychologyToday.com. Now, here is the interview:

**Dr. Dave:** Dr. Robert Hedaya, welcome back to Shrink Rap Radio.

**Dr. Hedaya:** Thank you. Glad to be with you.

**Dr. Dave:** Well, I'm really glad to have you back, and to discuss your work from the angle of nutrition and mental health. If I recall correctly, your wife is a psychologist and a listener to Shrink Rap Radio—at least, two years ago she was, and she wrote suggesting that you would make an excellent guest, and she was right—so I'm glad to have you back. And I hope she's still a listener.

**Dr. Hedaya:** She is—avid.

**Dr. Dave:** Okay, not to put you on the spot too much...I'm not sure that all of my listeners will have heard our interview from two years ago, or if they still recall it at all. So, perhaps you can give us a bit of a recap of what you mean by holistic psychiatry.

**Dr. Hedaya:** Well, I think the first thing I would say is I refer to "whole psychiatry", which is what I do, as opposed...contrasted to *holistic* psychiatry.

**Dr. Dave:** Oh, okay.

**Dr. Hedaya:** And I think that the difference, in my mind, is that the whole psychiatry approach en-

compasses traditional psychiatry, and the nutrition and hormones, and system—liver and gut, genetics and methylation, etc. But it leaves a big space for the things we don't know. And it's important that the practitioner keep an open mind and always remember that and be continuously aware of the fact that we don't know, that there is much we don't know and we will always not know. When people talk about holistic, they are talking about treating the whole person, which I think is very much what I do. And I look at the system, and community, etc. And I think that fits with holistic, but what holistic doesn't include is the recognition that there is a lot that we don't know. The knowledge base changes. And the things we think we know turn out to be things that we are wrong about, you know?

**Dr. Dave:** Yeah, we are constantly hearing in the news about things that we thought we knew, and [*Dr. Hedaya: Right...*] they've changed.

**Dr. Hedaya:** Right, and in psychiatry, there is a book and it's called "Mad in America": it's Robert Whitaker, and it's fascinating because he documents...it's about a fifty- or sixty-year cycle over the last two or three hundred years in psychiatry and mental health where there are fads. And, in comes

the fad and everything is wonderful and we've got the answers and people make a lot of money on it, and then the data looks really good. And then, you know, within twenty years it's not looking so good, and after thirty or forty years, people start to get disappointed in it. And then, in another ten or fifteen years, along comes another fad.

so I spoke to her and she says, "I'm having a panic attack." So Monday morning, I went into the office and I looked at her chart, and I saw that the size of her red blood cells was a little bit large, larger than the upper limit of normal. I had been trained to not give that too much attention, since it was just a little bit out of the range, and so I hadn't. And so now I

## I gave her a B12 injection, and with that, her panic attacks were gone.

**Dr. Dave:** Hmm.

**Dr. Hedaya:** And this is a, like, undulating pattern in mental health, and maybe in medicine, I don't know. But certainly in mental health, so let's not be so sure that we know what we're talking about.

**Dr. Dave:** Exactly. Now am I correct that nutrition is one component of your multi-pronged approach?

**Dr. Hedaya:** Yes, yes.

**Dr. Dave:** And are there ways in which poor nutrition can lead to problems in mental health?

**Dr. Hedaya:** Without question, without question. If I could tell you, the first time that became apparent to me was a case back in 1983, where I was treating a woman who was about fifty years old at the time. And she came to me, and she had no previous history of psychiatric problems. She had a daughter who was going off to college. And she was in a marriage that really wasn't so good. And her daughter went off to college, and my patient started having panic attacks. And so I thought that, well, okay, this is pretty easy to deal with; I'll just do some cognitive behavioral therapy. And I did that, and that didn't work. And then I said, "Well, okay, I guess I'll have to use medications." And so I tried Imipramine—that was the standard at the time. That didn't really work. So then I said, "Well, let's try some Nardil, which is an MAO inhibitor. That didn't really work. So okay, well, Xanax was pretty new at the time; I guess I'll have to try that. We tried that and that didn't work. So this whole process took about a year.

**Dr. Dave:** Wow.

**Dr. Hedaya:** She's still having panic attacks. She pages me one Saturday night; she was at a wedding,

looked into it in more detail and worked her up, and she had a B12 deficiency. I gave her a B12 injection, and with that, her panic attacks were gone.

**Dr. Dave:** Wow.

**Dr. Hedaya:** It was gone. I said, "I don't need to see you again. Take your B12 injections.

Three years later, she came having panic attacks. I said, "Are you taking your B12 injections?" She said, "No." I said, "I told you you have to keep taking your B12 injections. And keep taking them." And she did. And then a couple of years later, her daughter came to me with hallucinations. Visual hallucinations. Found out she had the same problem. Gave her B12, that went away. So, that was the first inkling that I had that nutritional factors could affect mental health. And it kind of blew my mind, and I realized that I must be missing—that's only one thing—I must be missing a lot because that can't be the only thing. The head is connected to the body by this thing called the neck, and there's a lot of things going on. There's a big highway there, between the head and the body, and in fact they're not separate. So, clearly there's got to be more, and so then I started to learn more about nutrition and mental health.

**Dr. Dave:** Well, it occurs to me that that daughter had a narrow escape from the mental hospital. I think that if she had seen somebody else, they would not have picked up on the same thing, and she could have found herself committed, or something like that.

**Dr. Hedaya:** She would have ended up on medication without question.

**Dr. Dave:** Yeah.

**Dr. Hedaya:** Without question. And it would have been completely inappropriate, and it would not have really controlled her symptoms, either.

**Dr. Dave:** Now I'm struck by the fact that they had to have injections, rather than taking B12 orally. Why is that?

**Dr. Hedaya:** Well, they had pernicious anemias, so that they had trouble absorbing the B12 in their diet. So the first thing is, you couldn't swallow the pill, because you probably wouldn't absorb it, or if you did, you probably wouldn't absorb that much. The second thing is, in a case like that, because B12 is so important to the nervous system, and the blood-forming elements, the red blood cells—so, so, critical—you don't really want to, in a situation like that, you don't want to take the chance of trying to use sublingual, you know, under-the-tongue B12. You just want to make sure the body gets it right away, so I gave her the injection. My experience later turned out to show that under the tongue B12 can be absorbed, but you really only reach normal functional levels about fifty percent of the time. With an injection, there's no question. You get it.

**Dr. Dave:** You're triggering a memory for me of something I read in the paper recently, which referred to the...I think it's called the Nurses Study, a very large-scale study. And they were commenting on vitamins and supplement use, and the conclusion seemed to be that in most cases, supplementation was not necessary and in fact vitamins and supplements led to earlier deaths—with the exception being B vitamins, that was one, and I think there was one other one that I'm not remembering. Does that ring a bell at all for you?

**Dr. Hedaya:** Recently I heard something about that. I think there are two issues: one is, that's a

doesn't really matter what the study shows.

**Dr. Dave:** Okay.

**Dr. Hedaya:** So, in an era when we have six-minute doctor visits, you know, the doctor makes the best guess and says you don't need magnesium. In another sector of our world, where personalized medicine is gaining ground—but it's unfortunately not available to most people—in personalized medicine, you don't say, "Here are the odds." You say, "Let's see where your magnesium is."

**Dr. Dave:** Yeah.

**Dr. Hedaya:** And then if you need it, you take it. So there are two types of nutritional supplements. There are essential vitamins, minerals, fatty acids, amino acids. These are just the things we know your body needs normal levels of. Those are things that, if you need them, you take them. Measure—this is what I do—measure; if you need it, you take it and you fill the bucket, and then we can lower the dose. Then you don't need it, or you need much less. But then there are supplements that are more functional, let's say. For example, I can give somebody Acetyl-L-Carnitine. This is a chemical, a molecule that's in the body, and it has a function, but it's not a vitamin, not something that your body can manufacture. So if I were to give that to somebody, I would give it because it helps the energy factories; the mitochondria in the cells absorb fatty acids, so that these energy factories can make more energy. So, that's more functional. I'm trying to improve the function of the mitochondria. So that's a tougher thing to measure. We don't really have a way of

## ..if I test your blood, and your magnesium is low, you need magnesium.

### It doesn't really matter what the study shows.

large population-based study, so population-based studies give us probabilities about populations. So, they don't tell us specifically about you. They tell us about populations.

**Dr. Dave:** Yes.

**Dr. Hedaya:** For example, if you come in and you say to me, "Well, do I need magnesium?" I say, "Well, based on this large scale study, your odds are only one out of ten that you need magnesium. So don't take magnesium. But, if I test your blood, and your magnesium is low, you need magnesium. It

measuring it.

**Dr. Dave:** That sort of leads into one of my next questions, which is, you know, given that you like to do an individualized assessment, are there any rules of thumb, or nutritional advice for listeners who want to stay sharp and avoid mental problems—are there any kind of generalizations that you could make about that? Or not?

**Dr. Hedaya:** Well, yeah, there are some generalizations, I would say. First, I would say, eat a balanced diet, meaning balancing your protein,

# ...as a general principle, if it doesn't grow that way, don't eat it. The more processed something is, the worse it is for you.

fats, and carbohydrates. So, you want, if you have a plate of food, you want about a third of it to be protein—fish, chicken, lean meats. You want two thirds to be carbohydrates, so that would be grains, vegetables, maybe some fruit. Preferably, whole grains. And so, that's one thing. One third protein, two thirds complex carbohydrates. A second thing would be, if it doesn't grow that way, don't eat it. So, you know, you don't see a Twinkie tree, so you don't eat the Twinkies.

**Dr. Dave:** Right.

**Dr. Hedaya:** Right—eggs grow that way, so you can have eggs. Now obviously, if your cholesterol is off the charts, or something like that, that's different. But as a general principle, if it doesn't grow that way, don't eat it. The more processed something is, the worse it is for you.

**Dr. Dave:** Yeah.

**Dr. Hedaya:** The other thing I would say is, if you love a food, love bread [for example], it's bad for you. The foods we love most are usually the ones—and I mean love—those are usually the ones that are causing us trouble.

**Dr. Dave:** Yeah, somebody in my family, I think, just recently said to me that the foods that we crave we may actually be allergic to, is that what you're getting at?

**Dr. Hedaya:** That's exactly it. It's not the allergy that people think of when they think of, "Oh I ate shellfish, and then I broke out in hives and I couldn't breathe." That's an immediate allergy, the allergy that you're talking about; the food allergies are actually delayed reactions. So you eat a food, and anywhere from two to seventy-two hours later, you might not feel good in some way. It's hard to say in what way. So the foods we crave are the foods that usually cause us an immune reaction.

**Dr. Dave:** Okay, this is probably a good place to ask you about gluten, because suddenly everybody seems to think that they have a gluten allergy, and the various food processor companies are now

advertising "gluten free" in just all sorts of products. What's your take on the whole gluten thing?

**Dr. Hedaya:** Well, I guess the first thing is there's no perfect test for it. So when I test someone, I'll do four different types of tests. So it might be the stool, saliva, blood, and a genetic test. But, you combine them, you have a much greater chance of not missing a positive, but it's not absolute. Why so many people are having it now, I think, may be because we have testing—hard to say. I'm not really sure. I don't know if it has anything to do with the GMO—the genetically modified crops. Maybe the stress in our environment, the food we're eating, and we get the leaky gut, and we get the reactions to food. I don't really know why.

**Dr. Dave:** Do you find that it's a big thing in your own practice—that you're testing people?

**Dr. Hedaya:** Yeah, I would say that generally, I would say that of the people that I test who are coming out positive as being gluten sensitive, when they clear off the gluten, they feel better. And I would say seventy percent to eighty percent, something like that, feel a significant difference. But it's not easy to do. Although it is easier now than it used to be.

**Dr. Dave:** Yeah, and going back to the protein, I recently, on the advice of an acupuncturist/herbalist, have gone sort of vegan. And, part of the rap around that is that there's a lot more protein in vegetables than has been given credit in the past. And, so I was just kind of...have not been eating meat very often. Am I putting myself at risk?

**Dr. Hedaya:** You know, I think so.

**Dr. Dave:** Okay.

**Dr. Hedaya:** I think so. The problem is that people who go for long periods of time without having meat, fish, poultry, animal products, they come into my office. Now, I have a select population, so people come to me and they're having trouble, otherwise they wouldn't want to see me. But, almost across the board they are B12 deficient. So that's probably

my biggest concern. There may be other issues, but that's what I really worry about the most. And the B12 issue is a big issue because B12 is necessary to make the myelin sheaths—you know, the wrapping around the nerves. And so, if you don't make those properly and maintain them then your nervous system coordination and production is affected. And almost any function of the nervous system can be affected. So if you are committed to that, the ideal thing would be for you to have a B12 injection once a month. And then you don't have to worry about it.

**Dr. Dave:** That's interesting. I don't know if I could persuade my physician to do that or not.

**Dr. Hedaya:** Well, what I would tell you is, do a PubMed search, do some literature, and carry the literature and say, "I'd like to just make sure this doesn't happen to me."

**Dr. Dave:** Yeah.

**Dr. Hedaya:** And then he might say to you, "Well, listen, you know what? You don't have to do that. Let's just check the size of your red blood cells—let's get a blood level of B12 and see if you need it." The problem with that is blood levels don't tell you need, they tell you, you know, how much storage there is, but they don't tell you the function of the system. And so, blood levels are not really useful; the B12 blood levels are not really useful. And the size of the red blood cells can be useful, but that can be masked by other factors. So for me, B12 injection is cheap. It's easy, and that would be the way I would go.

**Dr. Dave:** Well, coming back to the psychiatric side of things, are there instances or situations where diet can aid the recovery from psychiatric conditions?

**Dr. Hedaya:** Yeah, I think so. I think, as an example, I can tell you about a patient who I saw maybe six years ago, and he had severe OCD. And his OCD was so severe that he had a contracture of one of his fingers. He hadn't straightened it for years—two, three, four years. So it was bent, and he couldn't straighten it out any more because the tendons had tightened. And he came to me because he had such severe OCD that he was afraid that he wouldn't be able to function in college. He was about to go to an Ivy League school. And he was eighteen, and

he didn't want to take medication. So it turned out that he had had a couple of infections in his gut: Salmonella, and one other infection. And then he had two—oh, he had a parasite—and he had salmonella, and then he had yeast. So, there were three. And then he had a couple of other infections going on. And so, there were five infections. So part of treating the gut problem was cleaning up his diet, giving him a good diet. Getting rid of the food allergies, and putting him on a good diet. The reason that's important for OCD is that the inflammation in the gut, in part caused by the infections, but in part caused by foods that were bad for him, was causing a reaction in his system. That inflammation is signaled to the brain. And the brain says, "Oh, inflammation." And it activates an enzyme that basically reduces the amount of serotonin that you have, so you have more anxiety and OCD. And, it increases the amount of dopamine that you have, so you have more OCD, and more anxiety. And then there are a few other things.

So, the gut changes the chemistry in the brain. And infection or inflammation anywhere in the body will change the neurochemistry of the brain. So, your diet is a big part of that.

**Dr. Dave:** Yeah, I recall from our previous interview that inflammation can play a role in many conditions. I've read and heard elsewhere that the level of inflammation in the body is kind of a critical variable. And so I guess you're saying that that's the case for psychiatric conditions as well.

**Dr. Hedaya:** Oh, without question. Without question, the cutting edge research in psychiatry, well, certainly one wave of cutting edge, is inflammation and its role in psychiatric conditions, from schizophrenia to OCD and depression.

**Dr. Dave:** Before I follow up on that, and before I forget it, I was a little struck by the pairing of OCD with this clenched hand, or whatever it was, and the atrophied muscles. I've never heard anything like that associated with OCD. Can you clarify that a little bit?

**Dr. Hedaya:** Well, he had a superstition that if he straightened his finger, something bad would happen. So, because of that, he was too anxious to test it out, so he'd keep his finger bent and he kept

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it bent for a few years. So by the time he came to see me I couldn't straighten it out. He had to have physical therapy, which recovered his function.

**Dr. Dave:** Wow...now, given how important you said the level of inflammation is, in terms of mental health, what are your general suggestions for keeping inflammation low, in the body?

it's tough to say. I do think...what I've seen is that when people follow what they need to do, there's a vast improvement in how they do. The problem is maintenance. I had one guy I treated who was very fortunate. He had two parents who were very devoted. And they would bring him here regularly, and I worked him up, and made a program for him, and a plan that was personalized and he instituted.

## I often say that if you don't get hit by a truck, inflammation is probably what's going to kill you.

**Dr. Hedaya:** Okay, so, we have so many things in our environment that cause inflammation. Just, as we get older, we have more and more inflammation. I often say that if you don't get hit by a truck, inflammation is probably what's going to kill you. It's just slow. It's very slow. But that's probably what's going to do it. So what can you do? Food—good food is critical: adequate amounts of essential fatty acids—the fish oils—in a good balance is critical. Clean air. Clean water. Reducing exposure to toxins, which you can only reduce to a certain degree. And then the other thing, I would say, is the input into your mind, your senses. So, healthy relationships, good thoughts, good thinking, good community connection. These things actually calm your immune system.

**Dr. Dave:** So it's a two-way street: your body affecting your mind, your mind affecting your body.

**Dr. Hedaya:** Right. Right, exactly.

**Dr. Dave:** Well, let's look at some specific conditions and how nutrition, and/or supplementation might have important implications. For example, what about schizophrenia? I know you gave us an example of someone who was presenting with hallucinations. What would you say about schizophrenia?

**Dr. Hedaya:** So, schizophrenia's tough, you know; I have to say, I haven't treated that much of schizophrenia, because my approach is comprehensive and detailed, and requires cooperation of the patient. And so I've had, over the years, I've had a few patients who have cooperated, and done very, very well. But, most patients with schizophrenia don't really—forget schizophrenia; most patients in general don't even want to change their lifestyle. You know, it's hard enough for any of us to do that. When you have schizophrenia, you have to be really vigilant. And so I've had some good successes, but

Now, when he first came to me—had just gotten out of the hospital—he was so psychotic that he had climbed an electric pole, and burnt his hands, and he thought he was talking to Einstein, and he was really in very bad shape. He followed the program, because his parents were really very intent on helping him. It was remarkable...remarkable...I was able to get him off his medication. He started going back to school, taking tennis lessons, lost weight. His clarity of mind improved. And he was doing great for about nine months. And then he got tired of it and started going out with friends, and drinking, and drugs. And then he relapsed. And his parents said, "Look, if you're not gonna do this, then we're not gonna put in the energy and the time and the money. So that was it. When he was doing it, he did really well.

**Dr. Dave:** And the "it" was what? What was the treatment?

**Dr. Hedaya:** The "it" was changing his diet, exercise. I may have had him on some kind of relaxation training, supplements for his adrenals, vitamins. I don't remember the specifics, but it was a comprehensive approach, and clearly not taking any drugs or alcohol. Staying off caffeine, getting regular sleep for hours. It was really remarkable. I had another woman who I had been treating since, I think, '87, who was hospitalized several times, and was psychotic, manic, and also schizoaffective. Having both schizophrenia and a mood disorder, and a severe OCD. And she's been very, very good about doing what she needs to do. And so I've been treating her for, how many...a long time—twenty-five years or so. And I went to her wedding a few years ago, and she kept her job and retired and married and is enjoying her life and, you know, doing very well.

**Dr. Dave:** How gratifying. Now what about bi-

polar disorder?

**Dr. Hedaya:** Bipolar disorder I really have good success with. I really feel...let's divide it into two categories: bipolar *one*, which is severe, where people end up in the hospital, frequently, and bipolar *two*, which is more mild. The bipolar two I have a very high success rate with in terms of treating them effectively and getting them off of medication. High—in the nineties, I would say. In terms of bipolar one, the more severe type, usually they have to remain on medication, but less medication. Medication works better. Their health improves. There's much more mood stability. But I can't really get them off of the medication. I would like to, but the quality of their life is good, and rarely, rarely do I have people go back to the hospital.

**Dr. Dave:** And the intervention is primarily getting them to eat a balanced diet and testing their stool and so on for what sort of supplementation they might need?

**Dr. Hedaya:** Let me tell you what the process is. So, I think about the systems that affect the brain. That's my question. What are the systems that affect brain function? And there's the standard stuff, the psychosocial that we know about. And, then we have digestion. We have nutrition. We have immune function, which includes inflammation and infection. We have detoxification, the ability to get rid of chemicals. We have methylation. We have oxidative stress—free radicals, that's what that's about. And we have hormones. And we have genetics. And we have epigenetics. Those are the systems that I'm looking at.

**Dr. Dave:** Those are a lot of things to pay attention to.

**Dr. Hedaya:** Yeah! Yeah, I'm juggling; sometimes I feel like I'm landing planes at Kennedy Airport. I feel like I've got all these planes circling, and

tient with bipolar disorder, what I'm talking about is someone who I've seen thoroughly in evaluation, and I've tested them, and I know what their system needs, what their genetic requirements are. And then I tailor a plan for them, whether it's hormones or vitamins, or whatever it is. And then they stay on that plan. And then slowly, over time, I can reduce medicine. Sometimes, sometimes you can reduce the medicine because their psychosocial situation changes. So, I had a woman who was on...she was on four or five medications. And then we worked intensely in therapy. And then after, I think, about five years or so, eventually she asked her husband for a divorce. And, she divorced him, and gradually, over the years, she's come off all of her medications, except one. She's doing great.

**Dr. Dave:** Interesting. Now, what about ADHD? What kind of success have you had there?

**Dr. Hedaya:** So, ADHD...I would say, if I feel like I do really well with bipolar two, and have good success with bipolar one, then with ADHD, I would say I have a moderate fifty to sixty percent success rate. The issue there is, more and more, what I see... there were a few issues. One is confusing it with anxiety; because, when you have anxiety, you can look like you have ADHD, because the anxiety shuts down the prefrontal cortex, the part of the brain that helps you do all the things—the executive functions, so, planning and organizing, and short-term memory. Those are prefrontal cortex, the front of the brain. Those are the functions that people have trouble with with ADD/ADHD. But people with anxiety have those problems, too.

**Dr. Dave:** Yes.

**Dr. Hedaya:** So, the first thing you want to get clear is how much is anxiety and how much is ADD/ADHD. Second thing is, you want to look at genetics. So there's a particular gene, it's called COMT,

## I think about the systems that affect the brain. That's my question. What are the systems that affect brain function?

I've got to keep my eyes on the ball, so...my eye on the ball, I should say. So, that's what I do, that's what I'm assessing when I see somebody, when I evaluate them. And I try to be as data-driven as I can be. And so when I talk about having success with a pa-

and there's another gene called MTHFR, and these genes are relevant to ADHD. And we want to see, where are those genes? Because those genes tell us about certain nutritional requirements and, if you need medication, which medications would be best. Sometimes what looks like ADHD, you can

tell by the genes is really anxiety. So the genetics are important. The other thing that I would say is important, though, is fatty acids, and amino acids, and probably zinc, for sure. Zinc is important. And, B6 is important. And the last thing I would probably mention there would be thyroid hormone, because I have had a couple of cases of people who looked like they had ADHD, and it turned out that they needed very, very high doses of thyroid hormone—which, for them, seemed like nothing. They didn't have any side effects, or anything. And with that, they were completely fine and able to not take any

from dementia at a very young age.

**Dr. Dave:** Oh.

**Dr. Hedaya:** And, so I saw... and actually my mother-in-law, also—it turns out she had...she looked like she had Alzheimer's. I can tell you now, knowing what I know now, that she was actually severely hypothyroid. Doctors wouldn't treat it. So, that was a big part of it. So Alzheimer's is important, because it's really a disease, a combination of genetic vulnerability and inflammation—those are the primary factors. So, to take care of Alzheimer's,

## ...to take care of Alzheimer's, you have to do prevention. It's a disease of prevention, really.

ADHD medicine. And I think the issue there is that the receptors in the brain were probably not sensitive enough, or the brain wasn't making enough thyroid hormone. Alan Zametkin, from NIH, wrote articles on this years ago. So I think that's another factor. I also think that ADHD is tremendously over-diagnosed in our culture, in the Western world.

**Dr. Dave:** Yes, yes.

**Dr. Hedaya:** It's a big problem.

**Dr. Dave:** Right. And you mentioned the difficulty in distinguishing sometimes between ADHD and anxiety disorders. What about anxiety disorders themselves?

**Dr. Hedaya:** Anxiety is pretty prevalent. I have a lot of success with that. I saw someone this morning who...her goal in coming to me was to get off her medication, her anxiety medication. She was on three meds, and now she's down to one. And I asked her, "How's your anxiety?" She said, "I have no anxiety, absolutely none." So, I think we're going to make progress. It's gradual; I don't do it abruptly. Better to get things in order. So, she's had a slip-up, so she's slipping back in terms of adhering to her program, so we're going to have to get her back on the horse before we continue to get rid of the meds.

**Dr. Dave:** Now, Alzheimer's is known to be pretty intractable. Have you had any success at all with Alzheimer's, or found anything that kind of helps ameliorate it, slow it down, et cetera?

**Dr. Hedaya:** Alzheimer's—I have a special place in my heart for it, because I had a brother who died

you have to do prevention. It's a disease of prevention, really. Now, if someone comes in to me, which happens often, he will come in to me with beginning memory problems. I have a lot of success with that. I had one woman who came in—it was about three years ago—and she was so bad off that she would get dressed in the morning, and her husband told me that she would put her shirt on, and then her bra over her shirt, and she didn't really know the difference.

**Dr. Dave:** Wow.

**Dr. Hedaya:** So, that's pretty severe.

**Dr. Dave:** Yes.

**Dr. Hedaya:** And I did a baseline test: it's called a mini mental status exam. The normal score is 30, and she scored a 14. So that was pretty severe.

**Dr. Dave:** Yes.

**Dr. Hedaya:** And I treated her, evaluated her, made a program for her, worked her up. And her program included brain exercises, as well as nutrients, and hormones, and diet. And her mini mental status exam went from 14 to 28.

**Dr. Dave:** Wow.

**Dr. Hedaya:** And she was much, much, much better—much better. So there are things that can be done, but the sooner you get to it, the better. And in a situation like that, you need someone to help administer the program.

**Dr. Dave:** Yeah. What are the things that can be done, by way of prevention? You said it's mostly

a disease of prevention.

**Dr. Hedaya:** Yeah, so the things that can be done are the things we talked about with inflammation—very important. Good nutrition, in particular the things like the B vitamins, is very, very, very important. And I'd say keeping an eye on your cholesterol is important. Lowering mercury—if you have mercury, getting it out of your system. I use some testing for that, in getting it out of your system. And then, of course, good, robust physical exercise and mental stimulation. I'll tell you, this is a clinical example I have: a patient, she's seventy five, and she has an identical twin, they both have...it's called the APOE e<sub>4</sub> gene, which puts you at higher risk for Alzheimer's disease. They have two APOE e<sub>4</sub>s, and they are identical. One twin got Alzheimer's at age 60. And my patient was 75 and didn't have it. So, there's a strong genetic vulnerability, but one had a really good lifestyle, and one didn't. And I think that's the deal.

**Dr. Dave:** I'm surprised to hear you talk about genetic testing. I didn't realize it was so readily available. It sounds like you're able to get genetic profiles like that on your patients?

**Dr. Hedaya:** Yeah, you can get genetic profiles. I'm going to put a caveat here, because lab testing is not gold. Labs make errors.

**Dr. Dave:** Yeah.

**Dr. Hedaya:** And I actually recently had a patient who had one particular gene tested at three different labs, because she had three panels done. And it happened to be that this particular gene was included in all of the panels. And two of the labs had the same result, and one of the labs didn't. And, so, I've been in conversation with the labs. I finally got them to agree to be on a conference call, and I've got a former NIH genetic researcher, very high up, a high level guy—actually I've known him a long time, he's brilliant—he's going to be on the call with the labs. And we're going to talk about the different methodologies they use and where the error might be. It's just not as straightforward as we would like it to be, and think of it.

**Dr. Dave:** I think that's great, the way you're bringing them together and kind of challenging them to figure it out and operate at a higher level; that's really great. I would think it would be, you know...they only just recently worked out the genome, so I'm surprised that you can get this kind of detail. Is it terribly expensive?

**Dr. Hedaya:** Yeah, they're not inexpensive. So,

if you were to go to, say, Quest or LabCorp, and your insurance didn't cover it, it could cost you a thousand dollars, twelve hundred dollars.

**Dr. Dave:** Yeah, kind of like an MRI, or something like that, right?

**Dr. Hedaya:** Yeah, yeah, MRI might even be more, but it's costly.

**Dr. Dave:** Okay. What about eating disorders—anorexia, bulimia?

**Dr. Hedaya:** I think that's a tough one, because with the eating disorders I can't really do much.

First of all, I have to be very careful about suggesting that there are certain foods they can't eat, because they already don't want to eat anything. So, I can't really do that. And so the things that I might do there would be, try to boost serotonin function, giving them some B6, some tryptophan, or 5-hydroxytryptophan, making sure there is no infection or inflammation in the gut or in the body in general, because the eating disorders are associated with OCD—and also associated with the bipolar, mild form of bipolar disorder.

**Dr. Dave:** I didn't know that.

**Dr. Hedaya:** Yeah, so you want to see what there is under there, in those areas, so that you can support normal neurochemistry. But there's a lot of psychological work that has to be done also, in that situation. Often there are family dynamics that are important. So, I have to be very careful when I work with people with eating disorders, not to make them more obsessed with their health.

**Dr. Dave:** Yeah.

**Dr. Hedaya:** Really, excessively focused, you know.

**Dr. Dave:** Yeah, that's a good point. Are there other psychiatric conditions that I've left off this list that we should be discussing?

**Dr. Hedaya:** I think those are the major conditions. Then there's depression, of course.

**Dr. Dave:** Oh yeah.

**Dr. Hedaya:** Depression is going to be the leading cause of disability in the Western world by 2020, according to the World Health Organization. Depression is interesting because it's a syndrome. It's like you say, "I have pneumonia." And, well, you have pneumonia from pneumococcal pneumonia? Or is it a fungal pneumonia? Or is it tuberculosis? Or is it from AIDS? The cause of the pneumonia is

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really important. You don't just say, "Oh, you have pneumonia; take two aspirin, call me in the morning." You have to know what's the down-the-line cause. And the same thing with all these disorders we're talking about; and in depression, it's the same thing: we have to know what are the sources, what are the antecedents, and the triggers, and the mediators of depression. And so we look at all of those systems that we were talking about. But again, it's very important in all of what we are talking about today...we were talking about nutrition and hormones and all of these things, but we really want to make sure we remember to include the psychosocial, the cultural, the economic situations. These things have major power, in terms of how our lives are, and how our physiology is. Same thing with depression. I don't know if you've read Malcolm Gladwell's book, I think it's either "Blink" or "Tipping Point."

**Dr. Dave:** Yeah, I read both of those. He's one of my favorite authors.

**Dr. Hedaya:** He's very good, and maybe...you may remember there was a study of a group of people in Pennsylvania who had a community that was very stable, had been in place since maybe the 1930s or so. And they had high levels of obesity and high cholesterol, and hypertension. Yet despite all of these risk factors that we think are very important, they had a higher longevity—they lived significantly longer than the average American in spite of all this. And it turned out that it was because of community. Because they lived in a neighborhood where "Joe" walked down the street in front and you said, "Hey Joe, come on up and let's have a beer." And you sit and talk with Joe, and you go to church with Joe. And the families knew each other. And they had their conflicts, but everyone had everyone's back, and they were well connected. It's the same thing in the brain: if a nerve cell is well connected to other neurons, it thrives. If you break the connection, the

nerve cell dies. And, we are, in that sense, like giant neurons. And we need connection. And that has a huge impact on our physical health and our mental health.

**Dr. Dave:** Wow, what an interesting way of putting it. I've never heard it put that way. Is there any research on the scientific frontier that you are currently tracking, that's relevant to our discussion today?

**Dr. Hedaya:** Well, let's see, the epigenetics is very big. Epigenetics is fascinating, really. It links the environment to your genes, and so, for example, you can have a gene...maybe I can explain this best if I give a case. I had a woman who came to me—this is an African American woman who was studying architecture, and she came to me because she was barely passing. Barely passing. And, I'm doing the evaluation, and we're talking about her diet, and I said, "How's your diet?" And she said, "Oh, my diet is very good." "What do you eat?" Chicken, fried chicken, and chit'lins, and this and that. All this fried fat food.

**Dr. Dave:** Fried, fried, fried.

**Dr. Hedaya:** Fried, fried, high fat food, right? And she's somewhat overweight, and she's not really functioning. It took me about a year or two; it's hard to give a delineation point. But over a period of two years, we changed her diet and nutrients. And she lost weight, and she became an "A" student. I didn't give her any medication, nothing. And what was going on there, I believe, is that because her ancestors worked in the fields—hot, working ten, twelve, fourteen hours a day, sweating—they needed high fat, high salt foods to maintain. And so that, culturally and physiologically, was determined. So here she is, living and eating as if she is working on the plantation, right? But she's not. So, certain genes are turned on or turned off to allow her to function as if she's living fifty, well, a hundred

years ago.

**Dr. Dave:** Yeah, fascinating.

**Dr. Hedaya:** So, your environment, yeah, your environment turns your genes on and turns them off. And then when the sperm and egg come together, what you're inheriting as a child, as this new being, is not just the genes, but the code of which genes are turned off and which genes are turned on. So those are determined by the environment. What gets turned on and turned off is determined by the environment. The nutrition, the stress, the toxins—those things turn off and on our genes. When those things are passed on, in sperm and eggs, you may have a perfectly fine gene for something, but it's turned off. So, by manipulating your nutrition, and your environment, you can actually—this is the hope, and I think there's truth to it—you can actually turn the gene back on, or turn the gene off. So that's called epigenetics. It's really the linkage between genes and the environment.

**Dr. Dave:** Yeah.

**Dr. Hedaya:** And it's inherited.

**Dr. Dave:** Now, it seems like, based on what you've just said and the example you gave us, maybe we should be cautious about some of these diets that are being advocated, like, I think there's one called the "caveman diet", or the "Mediterranean diet", because they were trying to go back to a dif-

dren. Well, certain genes are going to be turned on or turned off that shouldn't be turned on or turned off because you're deficient in B12. You don't have adequate methyl groups to turn the genes on or off. So then, this altered genetic look is being passed on to your child. And your child will then grow with these genes turned on or off, as if they were a vegan themselves. See?

**Dr. Dave:** Yeah, I do. I'm always so impressed by what you have to say and the care that you take in delivering the care that you do. Do you have any final thoughts that you would like to leave our listeners with?

**Dr. Hedaya:** I guess the main thing is that personalized medicine is the best, but if you can't do it—and it can very expensive—there are major things you can do on your own. It's really an issue of taking responsibility for your health, and I don't think it's an on/off switch. You don't say, "Okay, today I'm taking responsibility for my health. You have to think of it as a long-term process. You're going to try it, you're going to do great, you're going to fall off the horse. Know that you're going to fall off the horse. Be sure that you recognize that you're going to fall off the horse. And, then you're going to learn how to get back on. And you're going to fall off again. And gradually, you will, over time—years—you will slowly shape your behavior, so that you're doing better and better and better.

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ferent time and a different environment and circumstance, and geographical region, etc. So, maybe we need to be a little bit cautious about that.

**Dr. Hedaya:** I think, generally speaking, I think that balance, moderation are the most important things. If you were to do the paleo diet and say, "Wow, I feel great!" Okay, that's good. Now, if you haven't had kids yet, and you're male, you are affecting your genetic expression over the time. Not in a month. But, if you were to eat this diet over a period of years, it could improve things, but let's say you went vegan for ten years, and then you had chil-

**Dr. Dave:** Okay, well, that sounds like great advice. Dr. Robert Hedaya, thanks for being my guest again, on Shrink Rap Radio.

**Dr. Hedaya:** My pleasure. I appreciate the opportunity.

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