A Special Interview with Andrew W. Saul

By Dr. Joseph Mercola

DM: Dr. Joseph Mercola

AS: Dr. Andrew Saul

Introduction:

DM: Welcome, everyone. This is Dr. Mercola, and today I'm here with Dr. Andrew Saul, who we've had the pleasure of interviewing before. He's had over 35 years of experience in natural health education and is currently serving as editor-in-chief of the *Orthomolecular Medicine News Service*. He's authored over 175 publications and 11 books. He's been named as one of the seven health pioneers by *Psychology Today* and is featured in the movie *Food Matters*, which I'm sure many of you have seen.

Welcome and thank you for joining us today, Dr. Saul.

AS: Well, thank you for having me on your program to talk to your readers and your listeners.

DM: Yes. Today we're going to be exploring the topic of niacin. It is an interesting one. Well, it's a natural product, obviously. It's a vitamin supplement. As a result, it's relatively inexpensive and has relatively few side effects – certainly no lethal ones, as far as we know, which cannot be said, of course, for many of the drug approaches to our healthcare problems.

But it's one also that I had avoided for a while (and I think we'll get into that in a bit), because I thought there might have been better approaches. But I re-explored this when you wrote your recent book on niacin, which is really an excellent read. So, that's why we're having you on the program today to expand on that in more detail.

If you can tell us how you first came to embrace natural health education, and maybe share a highlight or two with us about how your colleagues and peers have responded to your approach to good health. Then we'll start to explore the use of niacin.

AS: Well, I would say that I started to have an interest in natural healing when I was an undergraduate. The more I looked into the possibility of a medical education, the less it appealed to me. And I wasn't sure exactly why at the time. But I started reading books, especially those recommended by some faculty who perhaps sensed that I was not quite sure what I wanted to do when I grew up. [Laughs] I read a number of books. I suppose it's almost like the index of books you really aren't supposed to read.

What made these books and research papers interesting is that they were authored by physicians and researchers with really good credentials and a lot of experience. They were all about high-dose nutrition therapy – all about high-dose vitamin therapy.

Now, I didn't understand why a person would go to medical school, or go through a traditional PhD program in one of the hard sciences, and then make such a sharp right-turn approach to a totally different field. Why would doctors do that? Why would doctors who put on all that time in training to learn about drugs and surgery more or less drop that in favor of nutrition? The only

answer I could come up with was: it had to be effective. It must be working for them, their families, and their patients.

Having read enough and then crowning this with reading Linus Pauling and Dr. Abram Hoffer, there was just no turning back.

When I had children, it immediately verified the truth to what Dr. Pauling and Dr. Hoffer had said in their books, that high-dosed nutrient therapy is safe and effective. When you have children, safe comes first. When we look into vitamin safety, we find out according to the American Association of Poison Control Centers, who collects data every year from 59 poison control centers coast to coast, that there have been 11 alleged deaths in the last 28 years. However, none of them have been documented. There hasn't been a death from a vitamin, including niacin, in 28 years.

Now, when I eventually became a college faculty member (I taught for the State University of New York and also at New York Chiropractic College), I noticed that you could get into trouble for talking about high-dose nutrition therapy. It seemed odd to me. I thought academic freedom, exploration of new ideas, and bringing up unusual research and discussing it was all part and parcel of that life. Well, you just see what happens when you bring this up at your next faculty meeting.

Did you know, you might say, that in 1935, professor of biochemistry Claus Jungeblut at Columbia University showed that vitamin C destroys polioviruses? Then he went on to show in a series of experiments – all in the late 1930s – that vitamin C reduced the symptoms of polio, prevented polio, and even giardia. Now that is a [inaudible 05:14] a statement. [Laughs]

DM: Uh-huh, true.

AS: This got me into trouble. You can understand that it's so serious that my students were talking to their instructors about the things I was saying, which got me in trouble with the colleges.

An example of this would be: there was a young woman – a junior – and she wanted to do a paper on vitamin C and polio. She thought it was pretty interesting. I said, "Well, it's extremely controversial. You're going to have to really back this up with references." And since I had access to about 25 references about Jungeblut and others using vitamin C against polio... This includes Dr. Frederick Robert Klenner, who in the 1940s actually presented at an American Association meeting his cases on curing polio with vitamin C. They asked him a few questions for 10 minutes, and then he was ignored. So, this young woman decided to pursue these references, read these papers, and she thought it was worth putting together a paper.

A faculty person who had her in one his classes got wind of this and said to me – not knowing that I was assisting and providing her at least with some jumping off points, some references to read – that this was absurd that she was doing this paper and what only described the student as a dial tone. This is the kind of hostility that you run into. I've talked to services and hospitals, and everything's going fine when I talk about nutrition and vitamins in general. But as soon as I mention niacin for schizophrenia, vitamin C for hepatitis, or vitamin E (as in Eddie) for heart disease, all hell breaks loose. This is what happens.

Dr. Hoffer had this for 55 years in medical practice. Linus Pauling got this. Dr. Pauling is the only person I know that has ever received two unshared Nobel prizes. I think he's the only one who's ever had in history. Now, Pauling took 18,000 milligrams of vitamin C a day. Abram Hoffer took 3,000 or 4,000 milligrams of niacin every day. It's good enough for them; it's good enough for me.

When I applied vitamin therapy to my children, it was so effective preventively and therapeutically that I raised my kids all the way into college, and they never had a single dose of any antibiotic. Not one, not ever.

DM: It's certainly a good and ideal testimony to the effectiveness of the approach. You had mentioned Dr. Hoffer. He's since passed away a few years ago or a while ago, and maybe you can go in details with that, as to what exactly he's well-known for. But he's really a pioneer in orthomolecular medicine. His last book was actually co-written with you, and this is really what we're here to discuss today. It's the use of niacin.

Maybe you can discuss Dr. Hoffer a bit, and how you came about to collaborate with him and write this book. Then we'll go start discussing that topic.

AS: Dr. Hoffer is probably the world authority on therapeutic use of niacin. He started doing tests, studies, and research into niacin back in the early 1950s. And by 1954, Abram Hoffer had performed the first double-blind, placebo-controlled nutrition studies in the history of psychiatry. Now, the early 50s were an odd time. Drugs were on the move; more were coming along. But they hadn't developed to the point where they [Laughs] are today, to put it mildly.

DM: Uh-huh.

AS: There were drugs for psychiatric issues, but they were not the treatment of choice. There was still a lot of 'tox therapy. There were still a lot of other types of therapy going on then. Dr. Hoffer looked at psychiatric problems as a biochemic problem. He tried using niacin, simply because they didn't have anything that really worked for schizophrenia, and high doses of niacin worked.

Now Dr. Hoffer had a PhD in biochemistry, and he specialized in cereal biochemistry, which means the study of the vitamins and nutrients in grain. He was also a medical doctor.

He was also a board-certified psychiatrist, and he was also head of psychiatry for one of the provinces in Canada. This is a person with a lot under the hood. Dr. Hoffer reasoned that schizophrenia had symptoms that were very similar to those of pellagra. Pellagra is extreme or total niacin deficiency. Pellagrans also – in addition to skin problems and many other things – have mental illness symptoms.

When vitamin B3 or niacin was first added as an enrichment or as a fortification to flour, about half of the people in mental institutions went home. This is not a well-known fact. They were there not because they were mentally ill – because of genetic, environment, or social reasons – but because they were malnourished. Dr. Hoffer thought that was pretty important. He wondered

about the half that didn't go home. What about the people that had a little bit of niacin, but didn't get better?

Like Linus Pauling would decades later, Dr. Hoffer thought that maybe they just need more. So, he started giving what at the time were preposterously high doses of niacin: 3,000 milligrams a day. And he was curing schizophrenia in 80 percent of the cases. This is astonishing. The cure rate for schizophrenia with drug therapy is not particularly good. Dr. Hoffer saw again and again that niacin worked. Then he studied it, did the placebo-controlled, double-blind test, and started writing paper after paper on this.

At that point, the American Psychiatric Association literally blacklisted him. One of its officers (Dr. Hoffer said) told him back in the 60s that he would never be published in that journal again. Dr. Hoffer then formed, founded, and produced the *Journal of Orthomolecular Medicine*. The *Journal of Orthomolecular Medicine*'s archives, incidentally, are online and they're free access. People can go to my site, DoctorYourself.com, and there's a link right there, or they can find the *Journal of Orthomolecular Medicine* Archive on any Internet search engine.

Since Dr. Hoffer founded the *Journal of Orthomolecular Medicine* in 1968, there have been a very large number of studies that have confirmed niacin not only for treating schizophrenia, but also attention deficit disorder, psychosis in general, anxiety, depression, and obsessive-compulsive disorder. In addition to this, Dr. Hoffer's work early in the 50s showed as a side effect (I think "side benefit" might be a better phrase) that niacin lowered cholesterol – that is, it lowered the bad cholesterol – and actually raised HDL and dramatically lowered triglycerides.

This work was picked up by Dr. William Parsons Jr. at the Mayo Clinic. Dr. Parsons, America's number one niacin researcher, wrote a book on this a few years ago. Parsons mentioned that Hoffer was right, and then expanded it into a protocol that many physicians used to this day.

Niacin is so good for lowering cholesterol and preventing heart disease that the *New York Times* quoted the president of the American College of Cardiology saying, "Niacin is really it. Nothing else comes close." We can thank Dr. Hoffer and Dr. Parsons for this.

You can see why I wrote the book. This information is important. The number one killer of Americans is still cardiovascular disease. And it isn't just the number one killer of men; it's the number one killer of women, too. Women tend to get it later, but they still die from it. So, if niacin were not even used with psychiatry at all, it would still be valuable – and is valuable – for cardiovascular disease. But it's also very valuable in treating schizophrenia and other severe mental disease.

As if that's not enough, another friend of Dr. Hoffer's was Bill W. Bill W. was that Bill W, as in, "Hi, my name's Bill, and I'm an alcoholic," the co-founder of Alcoholics Anonymous. Bill W. became a patient of Dr. Hoffer in the early 1960s. Bill W. had severe depression. Abram Hoffer treated him with 3,000 milligrams of niacin a day. Bill W.'s depression was gone in a week. Bill W. was impressed, so he told his friends – about 30 of them – that they should try this. And they did. Ten of Bill W.'s friends got over their depression within a week just like he did. Another 10 got over their depression, but it took them about a month. And then another 10 – one-third – didn't seem to have any benefit.

Bill W. concluded that niacin helps about two-thirds of alcoholics using it and wrote two papers, which he circulated on his own, at his own expense, to physicians and the membership of AA.

In addition to this, another friend of Abram Hoffer's was William Kaufman. Dr. William Kaufman, back in the very late 1930s, was using niacin in a no-flush form, niacinamide, to treat common arthritis. Dr. Kaufman found that 250 milligram of niacinamide six to 10 times a day improved range of motion and improved joint function in people who had arthritis so bad that they couldn't bend their arm. Kaufman wrote a book in 1949 called *The Common Form of Joint Dysfunction* explaining all these.

Now, you put all these together and I think the reason I wrote the book pretty much stands right up. Niacin is too good for too many things. Niacin has a public relations problem. The public is being told not to take it. And yet it's good for all of these things. We needed a book that would once and for all clarify what people and the physicians need to know about the safety and the effectiveness of niacin.

DM: Well, thank you for that explanation.

As I mentioned earlier, I was not particularly intrigued with the use of niacin to treat, optimize, or lower cholesterol for a number of reasons. One is that high cholesterol – I think – values are really not a big, massive problem that is purported to be by the media and many physicians. Actually, it's a sign or indication that something else is going on. And that really, to address it with a pill – whether it's a statin or a supplement – may not be the wisest approach to treat the underlying cause, which is usually a disturbance of insulin physiology – it's insulin, leptin. And to address it at that level not only treats or optimizes the cholesterol level, but also treats other conditions that the dysfunctional insulin or leptin levels would create.

I wasn't that intrigued with it, because, you know, there are some very powerful strategies that normalize cholesterol in almost everyone. But I was really intrigued with the psychiatric components of it and the connection with that, especially because we don't really have any good models. I mean for cholesterol, we have a very effective non-toxic natural approach. But for psychiatric problems, other than these energy psychology techniques like EFT, there really isn't anything that works really well, consistently, and effectively.

But I think this is the aspect of the book that really most intrigued and appealed to me. It's the use of it in the psychiatric component.

AS: Let's talk about that some more then.

DM: Yeah. Because it's just... To me, it's fascinating. And really, it borders on criminal that this approach isn't being more widely utilized.

AS: Well, Dr. Hoffer would agree with you. And by the way, I also agree with you that focusing on lowering cholesterol is an inadequate way to approach cardiovascular disease. I'm not a believer in monotherapy. I think it requires a lifestyle to really get a healthy body. There's nothing profound in that. Everybody knows it. We're just not doing it.

DM: Yeah, let me... I know you're going to talk of it. I just wanted to interject and add one point to that. That is really an artifact of the typical approach in America, which is the "magic pill therapy."

AS: Yeah.

DM: They wanted one pill of statin to solve their problem, using simple no-responsibility on their part. Then they tend to transfer this approach to natural approaches.

AS: That's right. To substitute niacin for statin or statin for niacin is missing the point entirely. People ask me all the time for courtside advice and I tell them this: "You have to change your life."

DM: Uh-huh.

AS: You're going to have to make lifestyle changes, which include [Laughs] proper diet, whole foods, unprocessed foods, exercise, stress reduction, vitamin supplements, possibly medication, and definitely, learning.

The only way we're going to get out of this is when people realize that there is no magic bullet, and just because it's not in the pharmacy, doesn't mean it's in the health food store either. What they're really going to have to do is take a good, hard look at the whole package of everything their doing. Now with psychiatric cases, you can't really get people to do that. You can't say to somebody who's dreadfully depressed, "Cheer up!" or, you know, "Make lifestyle changes." This is an emergency situation.

I worked with a fellow once, who was about 22. He was so violent. He had been kicked out of the New York State Hospital for the Insane. (I have to think that one over.)

DM: [Laughs]

AS: They sent him home. (And you have to think about that for a minute.) So, here's this kid home with his parents, and he's absolutely terrorizing them. He's punching holes in the living room wall. On a good day, his parents, he, and I got together, and they were understandably interested – desperate would be more accurate. We talked about Dr. Hoffer's protocol, which was about using 3,000 milligrams of niacin a day, along with at least 3,000 and preferably 10,000 milligrams of vitamin C. The fellow on this good day agreed to try it, and he actually did.

Now, the niacin was so effective that he saw the difference. He used to sleep one hour a night, and he'd wander the city streets the other eight. The first day he took niacin, he slept for 18 hours that night. After that, he slept seven hours a night like clockwork. The following Friday, I got a call from his father, who said this morning his son came down and for the first time said, "Good morning, dad." So, here's the young fellow who saw crystal clear; it couldn't have been more plain. The niacin worked pretty much more accurately.

This is also the case with ADHD kids. I knew a neighbor who had a boy who was really, really in trouble – constantly in trouble at school, constantly in trouble at home. He was violent. This was really serious. This was more than ADHD. I'm calling it ADHD, because that's what the

boy's doctors called it. But the fact is it was far beyond that. Nevertheless, they gave him one of the usual drugs for attention deficit disorder, and it made him worse. So now he was even more violent and even more psychotic. The parents were in a state as you can imagine; the kid's only 13, everything's falling apart at home.

They learned about Dr. Hoffer's niacin approach. And because it was a child, they figured, "Well, we'll start him at a lower level." They gave him 1,500 milligrams a day of niacinamide.

Now, niacinamide and niacin have the same psychiatric benefits. They both work. The difference is niacin will cause a flush in almost everyone who takes it in quantity, especially for the first couple of weeks. Niacinamide is the type of niacin used in almost every multivitamin preparation, because the manufacturers don't want people bringing the product back to the store where they bought it, saying, "This made my skin hot." Niacinamide works as well as niacin for mental illness.

The boy, who wasn't about to tolerate the flush, started taking 1,500 milligrams a day of niacinamide. The parents noticed an immediate improvement. Within days, the child was less angry. He was less troubled at school. He was less oppositional. He was less violent. They immediately figured that if a little helped, maybe more would help more. They wouldn't know unless they tried, and they had no other options. Again, medication was making him worse not better.

They took him totally off of his medication, and they increased his niacin to ultimately about 5,000 milligrams a day. They even got the boy's psychiatrist to prescribe niacin, so he could take it at school.

DM: Well, this is niacinamide, right?

AS: Niacinamide, correct. The school nurse was giving the boy niacinamide twice a day at school, as well as at home. All of a sudden, calls were coming from the teachers, saying, "The kid was just transformed. He was doing great. He was doing great." At home, everything was better.

This young teenager was taking nearly 5,000 milligrams a day of niacinamide. Now, this is an important caution for people thinking of doing this. Niacinamide has a disadvantage, and that is it's more likely to cause nausea at very high doses. And the boy did start getting nausea at around 5,000 milligrams a day. So, what they did was they cut back the niacinamide quantity and started giving him more niacin. He got used to the flush. Then he was able to take the full high dose.

There is yet another form of niacin called inositol hexaniacinate. This is the most popular noflush niacin. Inositol hexaniacinate works almost as well as niacin or niacinamide. It has the advantage of not causing a flush, except with very rare exceptions. It's only slightly more expensive than niacin or niacinamide, which are both very cheap. And inositol hexaniacinate will still help with cholesterol, whereas niacinamide will not. Again, all three of them have psychiatric benefits. **DM:** Yeah, it's just fascinating. You know, it seems to me it's almost an error in the diagnostic system that many of these people who have the diagnosis of schizophrenia or ADHD... really, the proper diagnosis should be niacin deficiency with schizophrenia or ADHD symptoms.

AS: Well, not only that. Dr. Hoffer took it one notch further. He said, "It is not a niacin deficiency. It is a niacin dependency." And I get more mail on this. People think, "There is a typo in your book. There is [Laughs] a typo on your website. [Laughs] You meant to say "niacin deficiency," and you said "niacin dependency." No it's not a typo. Niacin dependency means a person needs more, and they need more all the time. Some people are dependent on insulin. My mother was grand mal epileptic. She was dependent on Dilantin; she took it for half a century. Without it, she would have had seizures. With it, she did not. We all know about insulin, but we don't understand that orthomolecular medicine using niacin goes beyond near deficiency.

Dr. Hoffer worked with prisoners of war – Canadians who were captured by the Japanese during the Second World War. Those who survived were in poor shape. They were malnourished. They were sick. They were weak. They were thin. What Dr. Hoffer noticed was that as they started getting some vitamin supplements and proper diet, and they recovered, they didn't recover completely. They still had an unusual amount of mental and emotional problems. We can understand that brutal captivity would be enough to mess anybody else.

But Dr. Hoffer couldn't change the past. What he wanted to know is: could better nutrition help them over what they've been through? Part of what they've been through had been emotional trauma. But part of what they've been through was protracted, long-term vitamin B deficiency. He found that most of these prisoners did not respond to a low dose of niacin. The U.S. RDA is not even 20 milligrams of niacin a day. Dr. Hoffer was giving these men at least, 3,000, and in many cases 9,000 or 10,000 milligrams a day.

His cure rate was very high. Dr. Hoffer described and defined cure as "if the patient is paying taxes." How do you know if a mental patient is well? They're paying taxes. They're not in a mental hospital, or they're not in an assisted living facility on a pension. Rather, they're holding a job and paying taxes. Dr. Hoffer agrees with you that ignoring niacin therapy as thoroughly as it's been ignored by the American Psychiatric Association, other medical organizations, and our government is bordering on criminality.

DM: It really is. It's so tragic. Because these people, there's really not a lot of good options for them. And these drugs certainly don't treat or even control it in most of the cases.

AS: Well, Dr. Hoffer put it even further. He said literally, "The Quakers were getting a 50 percent cure rate with mental illness, simply by giving people with mental illness good food, compassionate care, a nice place to live, and being good to them." Fifty percent cure rate. Orthomolecular niacin treatment gets a cure rate of about 80 percent.

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Dr. Hoffer said that drug therapy alone has a cure rate of 10 percent. He added to that, "Drugs make a well person sick. How can drugs make a sick person well? "He saw this over and over and over again. He treated thousands of patients for a [Laughs] practice of 55 years. When he retired, he said, "I think everybody should have a career change every 55 years."

DM: [Laughs]

AS: Dr. Hoffer's experience was buttressed by Dr. Humphrey Osmond and a number of other researchers who have confirmed in practice that niacin is the best therapy for many forms of mental illness. And not only that, drug therapy is making people worse. It's not just a matter of perfection. The standard care is not perfection. The standard is the alternative. People would be better off – in many forms of mental illness – if they had no medication.

But with niacin, we're not just negating, we're affirming. Niacin is a way that the person can tell within a few hours if it's going to help. If someone has anxiety, depression, psychosis, or schizophrenia, if they take high doses of niacin, they'll notice two things right away. The first is: they're going to flush like crazy. And the second is: they're going to feel better. Now, as far as the "flush like crazy" thing goes, people are more concerned with the niacin flush than they need to be. But if you just can't contain the idea of having a niacin flush, take inositol hexaniacinate, and that will work just fine.

Dr. Hoffer said, "The best cure for the niacin flush is more niacin." If you keep taking the niacin, the histamine flushes out of the body and the vasodilation stops. It takes, perhaps, a couple of weeks. Quite frankly, I didn't believe Dr. Hoffer at first when he said that. I was very cautious. And I didn't like the flush. But I figured, "Well, this is the expert here. I've got the world authority telling me something, the least I can do is give it a whirl."

I started taking very high doses of niacin, and I flushed a great deal. I found that I kind of liked the feeling. Within a couple of weeks, I stopped flushing.

The second thing people worry about with niacin therapy is liver function tests. There's been a fair amount of literature saying that if you take a lot of niacin – specifically, a sustained-release niacin – you're going to have increases in liver function tests. Now common sense tells us that if you have unused high doses of niacin, we should be monitored.

DM: And this would be hepatitis, typically?

AS: It's a rattling of a hepatitis [inaudible 32:55].

DM: Uh-huh.

AS: But as Dr. William Parsons and Dr. Hoffer both emphasized – and we emphasized this in the book *Niacin: The Real Story* – elevated liver function tests are a sign of increased liver activity. They are not necessarily a sign of liver pathology.

DM: Okay, the distinction.

AS: We therefore suggest that people do have their liver function tests done periodically and work with their doctor. That's just common sense, but it needs to be said. But the doctor needs to know how to interpret it. Parsons actually had set out in his papers some guidelines. In other words, if the liver function tests are elevated to a small degree to this much, then there's no action necessary. Now, if they're substantially elevated, that's a whole different story.

People who get into the most trouble with niacin and liver function tests tend to be people who take the proprietary types of niacin that a doctor would prescribe. In fact, research that is done on

niacin usually uses one of those sustained-release forms of niacin. The other people that tend to have more trouble with liver function tests rising are folks that have a history of alcohol use. The liver, of course, is the detox gland, the big four-pound gland in the body. And that's the site where alcohol is detoxified, so we would expect activity.

Again, it's good to be tested. But interpretation of those tests is very, very important. How many people have gone to have their thyroid levels checked and been told they don't need thyroid, only to find out that they actually do, because the doctor didn't look at G3 and they spend all their time on the others?

DM: Yeah, I couldn't agree more. Thank you for explaining that important distinction. Now, these proprietary forms of niacin, would these be ones that have the inositol hexaniacinate? And another part of that question is, has niacin itself – without the sustained-release form – ever been documented to increase their enzymes?

AS: Dr. Hoffer said that plain old niacin has never killed anybody. We don't know how much it takes to kill a person. In dogs, it's 5,000 milligrams per kilogram body weight, which is actually quite a lot – kilogram being 2.2 pounds. That, of course, is a dog, and dogs are different. Cats, for instance, you can poison a cat on Tylenol at a very low level.

We know from Dr. Hoffer's experience, his many books (he wrote over 20) and his papers, which numbered into the hundreds, that he had two cases of jaundice in 55 years. And he treated thousands and thousands of patients. So, the risk is there. But everything carries a risk literally. We have to be sure that we understand what the true risk is.

You can do anything wrong. If a person were to go out and take a massive amount of niacin all of a sudden, they might have some strange findings. They might find their blood sugar going up. They might find that their blood pressure goes down. They might find that they'd throw up. They might find that they get beet red.

Well, this just means that people aren't informed. That's why we wrote the book. We don't want people going half-baked out taking huge amounts of niacin, just because somebody said it's the magic bullet, as you and I talked about earlier. There's no substitute for being informed. The more you know about niacin, the better it's going to work, and the healthier you're going to be.

Doctors are poorly informed about niacin therapy. In fact, as Dr. Hugh Riordan, out in Wichita, Kansas, says, "Orthomolecular is not the answer to any question asked at medical school."

The American Psychiatric Association has actively published, saying, "Do not take niacin. It's dangerous, and it won't work." Those statements are untrue. It is not dangerous, and it does work. You earlier asked how my colleagues responded to what I do, and I think I've given you a pretty good sense of that at this point. [Laughs]

DM: Yeah.

AS: But I don't care. The fact is that if we can help people by letting them know about Dr. Hoffer's work, that's the thing to do. And then folks are going to have to make up their own mind. But this is not about a belief. This is about observed clinical results. And nobody observed more clinical results in a lifetime with niacin and psychiatric problems than Abram Hoffer.

DM: There's great value to exploring other people's life's work, seeing what they've learned from that, and applying that to our own lives personally. But I'm still curious about the proprietary forms of niacin – the sustained-release niacin.

AS: Oh yes, I didn't really answer that.

DM: So, if you could...

AS: Okay. There are several ways you can package niacin. We've talked about three. There is plain old niacin that quickly dissolves and causes flush in most people for a while. There's niacinamide, which is used in most supplements and which never causes a flush, but has no lipid benefits. And then there's inositol hexaniacinate, which is the best of both worlds, slightly more expensive, not quite as effective.

There are also different types of niacin, such as sustained-release forms. A sustained-release tablet can be a matrix, kind of a concrete-like tablet that simply erodes gradually in the system. When people are told not to take sustained-release tablets because some plumber found vitamin tablets undissolved underneath the toilet in some house, it's usually this type of tablet. An eroding matrix sustained-release tablet will not dissolve in the elderly, for instance. And they do tend to pass right through some folks.

You can crush the tablet and improve absorption, but of course, it's no longer sustained release. The other way you can do it is to have a chemical form of release, whereby like those time cold medicines that are advertised so frequently. These little individual sub-capsules, their little particles have different chemical codings, and they break down at a different rate. This is a more reliable way to get the product absorbed.

I cannot explain why sustained-release niacin causes so much trouble. Dr. Hoffer seemed to feel very strongly that all you really have to do is to sidestep the problem by taking regular niacin, which is so safe, but take it more frequently. He had his patients take it at least three times a day.

Remember, I mentioned Dr. William Kaufman. He treated arthritis with high doses of niacinamide. He found that a divided dose of 500 milligrams each for a total of 3,000 to 5,000 milligrams a day was effective. But he found that if you divided the doses into 250 milligrams per dose, it was almost as effective at half the total. So, dividing the dose is a good idea. And sustained release sounds like a good idea. But it doesn't play out that way.

DM: That's good to know. So, a simple summary might be to avoid that for a number of reasons. One is it tends to be more pharmacologically approached in incorporating that system. It's also a lot more expensive, and there are unnecessary side effects that you can easily avoid.

I'm wondering also if there's any concern for using the niacin in high dose. How much higher dose would you expect to receive if you're eating an optimized natural food approach? Typically, the concern would be that you would create other nutrient deficiencies because of an imbalance in the ratios.

AS: Uh-huh.

DM: This could easily be other B-vitamins. You mentioned earlier the benefit of taking them with larger doses of vitamin C. Are there any concerns in this area that you're seeing or the literature has brought out that you're creating other micronutrient deficiencies?

AS: I cannot think of any specific ones pointing at niacin. But I agree with you right at the outset that, again, monotherapy is not the way to go. The B-complex is not called the B-complex for nothing.

DM: Uh-huh.

AS: These B-vitamins are related to each other and, like a World Series baseball team, they work best together. Nobody ever won the series simply because they had a good pitcher, and they had nobody else out there. So, we need the whole team.

One example we have that does stand out is pyridoxine or vitamin B6. It is well-known that really high doses of pyridoxine alone can cause an imbalance of other nutrients and some neurological side effects. For a while, vitamin B6 was the big thing for treating carpal tunnel syndrome – and by the way, it is very effective for that. It's also very effective at relieving premenstrual tension symptoms.

The amount of vitamin B6 is the issue. Some people were taking 2,000 to 4,000 milligrams a day of vitamin B6. A few of them developed problems, and most of them were taking only B6. But a much larger number of people were taking 500 milligrams a day of B6 alone, and only one or two reported side effects. There had been no vitamin B6 side effects documented below 200 milligrams. Now, 200 milligrams is 100 times the RDA for vitamin B6.

DM: Uh-huh.

AS: We simply have to remember that although I'm shifting the balance point, there's still a balance point. Not everybody needs massive amounts of niacin. My view is you should take enough vitamin C, take enough niacin, or take enough vitamin B6 – take enough of a nutrient to be symptom-free, whatever the amount might be.

Dr. Richard Passwater introduced that to me when I was a very young man. Try the vitamin, add a modest dose, and see if it works. If it helps you, take a little more. If you feel better still, then you need more. If you don't notice any difference, or if you noticed something negative, back off. It seemed like common sense to me.

DM: Uh-huh, sure.

AS: With niacin and all the B-vitamins, I think we should take them as a team. But you're going to need disproportionately more niacin. Oddly enough, if you look at the U.S. RDAs for the B-complex, niacin stands out. It's the highest – by weight – of any U.S. RDA. Thiamine is around a milligram and a half. Riboflavin is about the same. Pyridoxine is around two milligrams. Folate, B12, these are measured in micrograms. Biotin is measured in micrograms. And then there's niacin – 20 milligrams.

DM: Uh-huh.

AS: Now remembering that a milligram is 1,000 micrograms. [Laughs] That's expressed as the cake mix analogy. Let's say, your child is going to have a party, and you want to make a chocolate cake. Well, you don't have any mix, so you'll make it from scratch. You can't just take a pound of cocoa, put it in the oven, and call that a cake.

On the other hand, if you take all the ingredients but in the wrong quantity, that's not a cake either. Is a chocolate cake really a cup of sugar, a cup of salt, a cup of cocoa, a cup of flour, a cup of oil, and a cup of baking soda? It's not. There's a small amount of salt. There's a large amount of sugar. There's a medium amount of cocoa.

The RDAs basically indicate that niacin is needed out of proportion to all other vitamins in the body. The numbers themselves generated – and with the exception of vitamin C – RDAs are based on animal research.

Dr. Hoffer and I and others think that the niacin RDA is way too low. We think it should be at least 200 milligrams – 10 times than it is. And I think you could make a very strong argument for 500 milligrams of niacin a day. Now, the government doesn't like that idea.

DM: Can you get 500 milligrams in your diet?

AS: Couldn't possibly.

DM: Okay, so then it's...

AS: Do you see the problem?

DM: Yes, a different argument. Because, you know...

AS: Yeah, as soon as we raised the RDAs to where they make people healthy, it exposes that our diet is incapable of making us healthy.

DM: Yeah. But that's sort of an ancestral argument against the use of niacin. Because it would seem that if our ancestors didn't have access to this level of a nutrient, then why do we need so much?

AS: Well, there are several differences between modern life and ancestral life. I think that all ages at all times have always been under terrible stress. I'm not sure if the stress of being attacked by a tribe or eaten by a tiger is any lower than living in a noisy city with commutes every day to work. But I do think that we have several other factors that are unique.

First of all, our food has been heavily processed. If we get back to an ancestral type of eating, probably, our niacin intake would go up substantially. It would not get to 500 milligrams. But again, I'm not saying 500 is necessarily the number. I'd be very happy with 200.

DM: Uh-huh.

AS: If people ate a really good diet where they had a lot of whole unprocessed foods that haven't had the niacin taken out, I think we would be able to push our niacin intake around 100 milligrams a day, possibly more. The other thing to remember is that we eat minus foods. We eat

things that actually cause vitamin wash out or philosophically create the need for more niacin. If you want to make somebody crazy, give him a lot of artificial color, preservatives, and sugar.

DM: Oh.

AS: Now, Dr. Benjamin Feingold was saying this back in the 1970s. He was an allergist – board-certified allergist. Some people listened. A lot of people said he was nuts. The Feingold Association has been valiantly urging people to try his approach, since there's no downside to not eating "paint," which is what I call food colors. There's no downside to not eating sugar. [Laughs] You have nowhere to go but up. You save money, and you're going to feel better. The only question is: how much better are you going to feel?

The Feingold Program works on at least 50 percent of the children who do it. They avoid the colors and, of course, avoiding sugar is going to help, too. Anyone who's ever taught (and I'm one of these people, my background is in education, not medicine) we know that on the day after Halloween, you're going to have trouble. No matter if it's a six-year-old or a graduate student, they have all been eating the sugar and the artificial colors. These cause actual psychiatric changes in behavior.

You want to take a perfectly normal kid and make him crazy? Just feed him lots of artificial color and sugar, and you can do it. We know this, because if you do it to animals, they'll go nuts.

Dr. William Kaufman pointed this out in 1949. He noticed that if you give laboratory animals niacin, you'll get a phenomenon called "decreased running." When animals are upset, they don't just sit there and pout about it. They take action because they're desperate. When animals were troubled, they would be panicky.

When Kaufman looked at the research, he noticed that giving niacin cause them to calm down. I think that has a direct application to the classroom. It certainly [Laughs] wouldn't hurt to try. So, whether we add niacin or eliminate sugar, either way, we've effectively done the same thing. This is why, as you and I said earlier, it has to be a holistic approach.

[---- 50:00 ----]

Niacin is a big part of the solution. The best thing about niacin is that it is a fast-acting, safe, and inexpensive emergency measure. If someone is having a terrible day, if they take niacin, they will feel better in 20 minutes. If they chew the tablet and take it with hot tea, they'll feel better in five minutes.

DM: That's a great approach. Thank you for providing the insights that the Feingold approach or the avoidance of these artificial colors and sugars may actually have its mechanism of action that – not under direct toxicity, but indirect approach – would result in niacin deficiency or dependency, as you mentioned.

AS: Yeah, and there was a confirming research in the last 10 years or so, mostly in Britain. First, they did a study in prisons. They took away the junk foods, and the violence rate went down by about half. That sounds pretty promising.

Then there was another study, an actual very carefully controlled crossover study with kids. They gave one group a combination of preservatives, colorings, and sugars that extremely closely resembles a highly caffeinated, yellow-colored soft drink that's marketed in America. [Laughs] And these kids went ballistic behaviorally. They measured this scientifically. Then they gave them a good diet, gave the other group that, and you can see what happened.

There is no question any longer. The old thought that food additives and sugar don't affect your child has been put to rest – admittedly not until the 21st century. But Dr. Feingold was right. And with all due respect to his memory, Dr. Frederick Stare of Harvard was wrong.

DM: Interesting. Just finishing up on the nutrient requirements that might be considered useful with the use of niacin, would you recommend that if someone is taking therapeutic dose of niacin which can typically range up to 3,000 milligrams, that they also take a high-quality B-complex supplement?

AS: With each meal.

DM: With each meal?

AS: Yeah.

DM: What type of dosages? Because, you know, there's a large range.

AS: There's a very large range indeed. With vitamins, especially water-soluble vitamins, that means vitamin C and all the vitamin Bs, dividing the dose always works best. Remember, Dr. Kaufman found that 250 milligrams of niacinamide many times a day work as well as 500 milligrams of niacinamide many times a day. We often hear this: if you take vitamins, you'll just have expensive urine. Well, of course, if you take antibiotics, you will also have expensive urine. But that isn't much. [Laughs]

The trick here with vitamins is that you need to divide the dose with the water-soluble vitamins, no matter which ones they are.

I recommend that people take a B-complex for breakfast, lunch, and dinner. If you're too energized at night, cut out the dinner one. Some people actually notice when they take B-vitamins – and even though vitamins don't give you energy, they release energy. You need B-vitamins for the Krebs cycle to work. Without that the whole thing crashes down, and you're sitting down there with beri-beri or some similar disease with no energy and no strength.

Dividing the dose of B-complex means you really don't have to worry about how much you take. You could get a 25-milligram B-complex and take that breakfast, lunch, and dinner, and that's a total of 75 milligrams balanced. I don't like that word "balanced," because of the cake mix analogy we talked about.

DM: Uh-huh.

AS: Dr. Roger Williams sets out some very good, reasonably low supplemental goals in his books. Dr. Williams, who discovered pantothenic acid, was doing this before 1950. He estimates that people only need maybe three, four, or five times the RDA. In studies at Harvard on people with AIDS, they had a 27 percent reduction in deaths with AIDS patients who were taking about

five times the U.S. RDA. It doesn't have to be a huge dose. It just has to be substantially more than the RDA. For most people, doctors in particular, five times the RDA is a walk in the wild side.

With niacin, there is a so-called theoretical phase-off or limit. The government has actually issued statements that suggest that you really shouldn't take any more than about 35 or 40 milligrams of niacin a day. The RDA is only a little under 20. You may have seen a recent paper [Laughs] that was published, which suggested that Americans are obese because they get 30 milligrams a day of niacin instead of 18.

DM: [Laughs]

AS: This is how far the public is being hornswaggled. Common sense just goes right out the window when you talk about foods and supplements. It's time that we brought common sense back into it. My dad taught me when I was young, when you want to know something, go to the organ grinder, not the monkey.

I was very fortunate to have worked with Dr. Hoffer for the better part of a decade. I wish he was still with us, because I had a lot to learn and he had a lot to teach. *Niacin: The Real Story* is his final work. And I'd like to think it's a fitting tribute to the man that changed the treatment of psychiatry forever, even though the psychiatric profession doesn't realize it yet.

DM: Excellent. To the best of your knowledge – because I'd like to go into some of the practical details of how one would administer this if you're convinced or compelled to try for yourself or someone else – is there a company that produces supplement that has a balance of these high-quality accessory B-complex supplements in addition to the niacin? So maybe a 250-milligram dose of niacin with far smaller amounts of the B-complex?

AS: Well, I normally don't make any statement about particular brands, because I have no financial connection with the health products industry, and this is an important factor in my approach with the public. However, it is very, very easy for anyone to go to a health food store or via the Internet and get a 50-milligram balanced B-complex. I don't think you can go far wrong with that.

DM: Okay.

AS: And a 50-milligram balanced B-complex three times a day, you simply cannot make a case against that in terms of side effects or toxicity. In addition to that, you need additional niacin. The amount of niacin will vary from person to person. It will not only vary from person to person based on their height, weight, lifestyle, and gender, but it will also vary based on whether they're sick or not, or whether it's a weekend or whether you're in a high-pressure meeting. We know that we need more of the B-vitamins, more people at different times.

I think the 50-milligram B-complex three times a day plus extra niacin, in my opinion, an extra two to 500 milligrams three times a day, would be a good place for most people. However, if you're not going to be happy with the flush, you have to make sure it's inositol hexaniacinate or niacinamide.

We have a very large margin of safety with vitamins. Dr. Hoffer had a patient, a teenager who was mentally ill. She was taking niacin, one day got mad at her parents, and downed the whole bottle. Now that might have been just an adolescent gesture of defiance or might have been some sort of a suicide attempt, but it didn't work the way she planned it. She was schizophrenic. She'd been hearing voices. This girl was really sick. She was about 16. She took an entire bottle. Dr. Hoffer said it was around 60,000 milligrams of niacin at once.

DM: Wow.

AS: She had a side effect: the voices went away. After that, she just took normal amounts of niacin. You can do anything wrong. With niacin, the trick is to take enough to do the job for you. In *Niacin: The Real Story*, we tried to present as much information as we can to help people and their doctors arrive in a commonsense therapeutic trial way at what amount they need.

The first lesson in medical school I was taught a long, long time ago – before I had even considered going; I was still a boy – I heard it said that the first rule in medical school is, "Do no harm." But the second rule is, "Every case is different." One size doesn't fit all. One of the problems with the RDA is that it's nutritional communism. It's sort of like having a minimum wage and saying, "Everybody gets the minimum wage, but nobody can get any more than the minimum wage." [Laughs] It's really kind of silly.

We have doctors who have taken a stance like Dr. Hoffer, Dr. Kaufman, and Dr. Parsons. They have gone public, saying, "Niacin is a nutrient that some people are dependent on. And if they are dependent, they need thousands of milligrams a day."

[----- 1:00:00 -----]

In fact, Dr. Hoffer and Dr. Foster (Dr. Foster is my other co-author for *Niacin: The Real Story*) made a case that schizophrenia has genetic advantages. It has an evolutionary advantage. Dr. Hoffer noted that in all his thousands and thousands of patients that he treated for psychiatric problems with niacin, he had less than half a dozen that had cancer.

Well, he and Dr. Foster looked into this. They think that schizophrenia is a beneficial genetic trait. It makes people creative, and it also makes them more resistant to cancer. Whether this is true or not is a subject for smarter people than myself.

But there is a real possibility that today, we are living at the moment where for the first time ever, we cannot merely say, "The pharmaceutical industry is too powerful. Its products are too dangerous, and they're not working." Instead, we can say, "We have a readily available nutrient that causes six dollars a bottle at a Big Box discount store, and that will help you feel better in half an hour. It's safer, cheaper, and more effective than any drug." Of course, we've all been taught that that's impossible. But it is possible. Dr. Hoffer confirmed it decade after decade.

DM: Interesting. So, you've mentioned the 50-milligram B-complex, but earlier you said 25 might also work equally as well.

AS: Yes. If it came in a capsule, you better take the 50. If it comes in tablet, I'd get a pill cutter and cut in half.

DM: Okay, all right, great.

AS: Dividing the dose is very important. Dr. Steve Hickey talks about this with vitamin C. He calls it dynamic flow. It's basically very, very frequent oral doses can get you blood levels of vitamins that are approaching intravenous levels.

DM: Interesting. In many areas in life, I believe this one's true. The devil's in the details. The use of this therapy would seem to be... You'll be taking a large number of pills, especially, when you get the B-complex and the niacin. And you're going to be out long-term, perhaps the rest of your life. From our perspective, it would seem it might, you know.

When we look at supplements (like what we do as a company, we sell them) we have some concerns about using magnesium stearate, which for those who are not familiar with it, is a flow agent that is traditionally viewed as relatively benign or innocuous. But there's some concern that it may contribute to developing these intestinal dysfunctions, which impair other nutrient absorption.

You know, my only caution for people considering this is to find a company – not all supplements are created equal. Finding a company that would be providing a supplement that didn't have this magnesium stearate. Or titanium dioxide would be another one. But that's typically a coloring agent not typically used in this type of circumstance.

AS: Right. And very frequently, if people can find a capsule, they'll notice there are fewer excipients than a gelatin capsule, because you don't have to glue and stamp this thing together. Excipients are necessary to make a tablet – or so the general idea in the industry goes – so we have to allow them.

Linus Pauling actually said decades ago that when you take vitamin C, you're better off taking it in pure crystals. Not everybody likes the taste. Not everybody is going to do it. Tablets do have their advantages. Get the best ones you can. Capsules can have fewer excipients in them. You can also take powders. But believe me, B-complex powder tastes vile.

When you open a bottle of B-complex vitamins and smell it, you'll have the same experience I had when I was a boy, and my family doctor prescribed a B-complex vitamin pill for me. My father (I still remember this) said, "Here." They called it a tonic, but it was a B-complex vitamin. He handed me this oblong-shaped tablet, and I said, "Is it a chewable?" [Laughs] My father said, "I don't know, vitamin C!" [Laughs]

DM: [Laughs]

AS: I did that exactly once, and the taste was vile. There is something to be said for taking things in tablets and capsules. I want to emphasize that you don't have to become a chronic pill popper to do this right. You can get niacin in 500-milligram tablets; you quarter that thing. You have your dose four times a day, and that's just one tablet. If you take a B-complex capsule with each meal, that's only three more, so that's four. On top of that, you probably want to take some vitamin D. You can get that in capsules. I've seen vitamin D capsules that are really tiny. Not many excipients in there. It can be done. But once again, we don't want to throw the baby out with the bathwater.

DM: Uh-huh.

AS: Niacin is so valuable that we need to get it into everybody. For those who cannot afford good-quality supplements, I emphasize that a bad-quality niacin supplement will still cure schizophrenia.

DM: For some with schizophrenia would agree, because of this issue with the manganese stearate and the biofilm. It's a matter of priority or a triage in things, so it becomes less of an issue.

AS: We do the best that we can. Dr. Rudolf [inaudible 1:06:01] said this years ago. He said, "Spend as much money as you can on your health."

DM: Yeah.

AS: What I'm trying to do is make sure that we don't lose anybody on this. Because for those folks that are having trouble making ends meet – their house values has gone down, they lost their jobs, or who knows what else they're dealing with, their medical bills are higher, they're dealing with the elderly or who knows – they need to keep in mind that this is very simple. The niacin tablet, buy the big potency, break them into little pieces, take it all day, and that will cause you less than a nickel.

DM: Yeah, that's very cost-effective. For those who are interested in using this program, you've mentioned several times, and I think most people are aware anyway that there's niacin flush. So, can you describe sort of an optimized program to minimize this as a side effect, so that people will be more comfortable in engaging in this type of supplement protocol?

AS: That's an excellent question. Everybody who's listening or reading has that question right there, and they wanted you to ask it. There are many ways we can approach the flush. First of all, we can avoid the flush issue completely by getting niacinamide, or we can virtually avoid the flush completely by using inositol hexaniacinate. Once in a while, somebody flushes from that. But it's rare, about five percent.

Niacinamide, I don't know of anyone that's flushed from niacinamide. Problems with niacinamide: the nausea level is lower. With niacinamide, it's usually around 4,000 to 8,000 milligrams a day, where people might start feeling nauseous. With regular niacin, it's probably over 50,000 milligrams a day. That's two ways you can deal with it.

The third you can deal with avoiding the flush is to go to your doctor and get a prescription for the various proprietary sustained-release niacins. We've already talked about that. That carries the greatest safety risk. Incidentally, in *Niacin: The Real Story*, we've actually tabulated one (I'm telling you now) into a table that people can print out.

The next way that people can avoid the niacin flush is to divide the dose. If you take 4,000 milligrams of niacin at once, you're going to flush for sure. But if you take 4,000 milligrams of niacin in eight 500-milligram doses, you'll probably flush less. The next way that you can do it is to have it with meals. With food, the dilution is better. Or you can take niacin with lots of liquid. With liquid, the dilution is better. You can also take more vitamin C.

Dr. Abram Hoffer said that more vitamin C reduces a niacin flush. His preferred way was to say to people, "Well, just buckle up and do it. Take the niacin. You're going to flush like crazy for a couple of weeks. Keep taking it, the flush will go away."

Then there's the way that I've mentioned to people for the last 35 years. This way worked for me personally and seems to be a good option. Here it is: start with an idiotically tiny amount of niacin. Now, what would be an idiotically tiny amount of niacin? The U.S. RDA, that would be an idiotically tiny amount of niacin. [Laughs]

DM: Okay.

AS: Start with, say, 20 or 25 milligrams of niacin per meal. Some people will flush at that level. But probably it won't be you. Increase by another 25 milligrams each meal, each day. Each day, start out 25, 25, and 25, the next day, 50, 50, 50, next day, 75, 75, 75, next day, 100, 100, 100.

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This is a good way to determine what dose seems to work for you. In fact, some people go up even slower than that. They just go up 25 milligrams a day. You can gradually introduce it, and just see what happens. There is no need to have apprehension over using niacin.

Dr. William Parsons said, "In order for a doctor to use niacin, they have to understand niacin." Most doctors don't understand it. Quite a few use it and give it to people for cholesterol. But they don't really understand it. When you understand niacin, you realize that the flush is sort of an indicator – and it's a good indicator.

If you're flushing a lot, for instance, as Dr. Hoffer pointed out, it may indicate that you have a food allergy. If I eat certain foods, I have a different reaction to my regular dose of niacin. That isn't niacin's fault. [Laughs] It's because I ate the food that I shouldn't have eaten. Again, everybody's different. We don't know. We talk to 100 people; we're going to have 101 variables on this.

With niacin, if you want to flush, chew the tablet. If you want to flush, take it with something hot. If you want to flush, take it on an empty stomach.

DM: What dose are you taking a day, how long have you taken it, and do you think it's something that... Well, let's answer that question. I have a follow-up question for you.

AS: [Laughs] That's a good question. Dr. Hoffer refused to answer that question. He would not tell people what he took, because he was concerned that they would go and do it. He felt that it was between them and their doctor.

Not being a physician, I have a slightly different viewpoint. I think telling people what I do is a valid way to get them thinking about what they might want to look into and ultimately decide on their own time. I take 1,000 milligrams of niacin three times a day, which is exactly what Dr. Hoffer gave most of his patients. In addition to that, I take additional niacin mid-afternoon at bedtime, so I have probably around 4,000 milligrams of niacin a day. However, if I am under stress, I triple that amount.

DM: Wow.

AS: I would take about 12,000.

DM: Aside from your initial experience with the flush, you've never had it even in these high doses?

AS: Oh, I'm having a niacin flush right now.

DM: Oh, okay.

AS: I took 1,000 milligrams about an hour and a half ago, and I'm having a very slight flush at this second. I figured you might enjoy that. I was giving a lecture once [Laughs] to some post-doctoral students, and at their insistence, demonstrated a niacin flush. I thought, "Well, okay." Since I always have my vitamins bottle in my pocket (that's why when I walk down the halls, I would rattle and all the students knew it was me before I turn the corner), I took some niacin with some water. It was before lunch, so I had an empty stomach.

I took about 1,500 milligrams of niacin on an empty stomach, and I said, "Watch this." They're all watching pretty intently. It was a small class. There were only about 30 people. There's one fellow at the back who whipped out a pair of opera glasses. Now, this was really funny. It wasn't that big of a room, and he didn't do it to be a wise guy. But it was a very funny moment. He wanted to actually see precisely where and how I flushed. [Laughs]

DM: Uh-huh.

AS: Normally, you flush from the head down.

DM: Yeah.

AS: The cheeks, the neck, the upper arms, they tend to flush first. Then later on you might have a flush on your abdomen and perhaps your legs. When I say "later on," we're talking possibly in a matter of a minute or two, or we're talking – if you had a big meal – it could be hours. In fact, if you took niacin after Thanksgiving dinner, you literally might not flush for three or four hours, so long that you would have forgotten you took the niacin at all.

Well, they liked the niacin flush so much that one of the evaluation said, "The niacin flush was awesome. Do you do birthday parties?"

DM: [Laughs]

AS: We got a big laugh out of that. The niacin flush is not a big deal. People need to understand that it is a distraction. Niacin happens [Laughs] to cause you to have a flush. It's like a little bit of an embarrassment. Ladies, it's a little bit like a hot flush, I'm reliably informed. It's a little bit like feeling embarrassed or like you were maybe out in the sun for that extra hour.

DM: Uh-huh.

AS: A niacin flush – if you're doing it right – will last about 20 minutes. If you take enough niacin to flush for an hour or two and you have to lie down and feel nauseous, you did it wrong. You took too much. Don't do that. Well, how do you make sure you don't take too much? You

gradually increase. Dr. Hoffer started people at 3,000 a day right off. But he was a physician and he was working with them.

For people that are doing this on their own, they're going to have to be realistic. You really should work with a doctor. To do that, you're going to have to educate the doctor. For those who that are not going to go to that trouble and just take it on their own, I suggest that they start with very tiny amounts and gradually increase, observing what it does for them. Some days I have a flush, some days I don't. Now I live in upstate New York, and I don't have to tell you that a nice warm feeling in the extremities up here is a prized experience.

DM: You've presented in your book and you discussed here some very compelling arguments for the use of niacin in psychiatric disorders like post-alcoholic depression and schizophrenia, and then, of course, as an adjunct optimizing cholesterol levels.

AS: And arthritis.

DM: And arthritis. Oh we didn't we talk about arthritis. We can talk about it a little. But I'm sure that you don't have any of those conditions, and that you...

AS: [Laughs]

DM: ... personally relatively have a healthy lifestyle and eat a healthy diet. I'm wondering if you could explain why you're using this if you're not treating those disorders.

AS: All right. That's an excellent question. I do eat a pretty good diet. I live in a small town on Maine Street and my entire backyard is a whole other world – the giant organic garden.

DM: Uh-huh.

AS: I think everybody ought to do that. It saves you money. It's good for your health. It's good for your mind. It's just good for so many different things.

The reason I take a lot of niacin is: I – like you – have a schedule that can sometimes be very stressful. And if I'm travelling, I definitely need more niacin. I have several books in production right now. I'm the editor of the *Orthomolecular Medicine News Service*. I have the website, interviews, and a lot of media work. I find these things stressful. I always have. I enjoy public speaking, but quite frankly, I do feel some anxiety. Why do you think I took the niacin before doing your interview?

DM: Oh, okay.

AS: That's one reason I take it. The other reason is a number of years ago, I had a test at my once-a-decade physical and it indicated that my blood lipid profile was not as good as it could be. The triglycerides were a little high. The LDL was a little high, and the HDL could have been higher. Well, I thought, "I think I'll take some niacin," because I was eating a good diet, exercising, and doing stress reduction but I still had those numbers. With the knowledge that we had 15 years ago, I decided to take some niacin and noticed the numbers have all improved.

The other reason I really like niacin is that it helps you sleep better. It is a wonderful sleep aid. People that have never tried it don't know what they're missing. If you can't sleep at night – or

better yet, before you go to bed, take some niacin. I would say, that could be anywhere between 25 and 250 milligrams depending on who you are, what you ate, and how much you need. But take a small amount of niacin about half-hour before going to bed. It definitely shortens the time it takes to go to sleep.

There are some writers such as Dr. Jonathan Prousky, who is editor-in-chief of the *Journal of Orthomolecular Medicine* and on the faculty of the College of Naturopathic Medicine in Toronto, who said that niacin actually works like a benzodiazepine. It works very similarly and works with the same receptors as this anti-anxiety drug.

Niacin is not just a quaint idea that Dr. Hoffer had in the early 50s. This is an extremely well-documented medical approach that doesn't involve medicine. It is so inexpensive and so varied in its application that it sounds too good to be true.

DM: Uh-huh.

AS: We need to keep in mind that sometimes the greatest gains in healthcare come through the simplest methods. My grandmother said, "Chew your food."

One cannot even begin to list the number of health problems that go away if [Laughs] you take her advice and stop bolting your food and chew it well. Vegetable juicing – we had Jack Lalane, who was certainly big on vegetable juicing and who summed it up that if man made it, don't eat it.

DM: Uh-huh.

AS: Eat no junk. That's what Abram said to his patients who were teens and children. I still remember Abram leaning over. *[Laughs]* He would say to the child, "No junk." And Abram said to me, "There's not one kid that didn't know exactly what I meant." If we can get people to eat better, a lot less niacin is going to need to be consumed. But until we can get people to do what they really need to do, the very word "supplement" provides the answer.

DM: Yeah. I didn't have that niacin before this interview. I had a pint of freshly squeezed green vegetable juice. [Laughs]

AS: Good for you. [Laughs]

DM: But you know my lifestyle is such that, you know, I feel pretty good. And most of my health parameters are optimized, so I don't perceive a need for myself. But I do think that many other would seem to certainly benefit from it, especially with this anti-anxiety and insomnia issue. Also, I'm wondering if you could touch a little bit about its use for arthritis. I'm assuming this is the degenerative arthritis. But maybe it might even have some useful utilities in rheumatory arthritis.

AS: All right. First of all, let's just take sleeping for a second. We now have recent studies. There's one that just came out in March of this year that indicates that people who take sleeping pills are five times more likely to die prematurely than those who don't. They found in this study that even 18 sleeping pills a year almost triples your risks of dying prematurely from something.

So, just the fact that niacin helps you fall asleep at night in itself could save half a million premature deaths a year in America.

This study really makes us think. If just sleeping pills are making half-a-million people every year die early, niacin is good for many, many people and will save their life. We're not even talking cholesterol. We're not even talking psychiatric issues. When we bring in psychiatric issues and heart disease, now we're saving tens of thousands more.

Arthritis isn't killing too many people. But by golly, it is such a disabling, painful, and miserable condition. When we look at the work of Dr. William Kaufman, it's astonishing to think that this medical doctor, who also had a PhD was practicing in Connecticut and getting such good results using niacinamide for osteoarthritis primarily back before [Laughs] World War II started, was getting mail delivered by the U.S. Postal Service, and on the envelope it said, "Arthritis Doctor, Connecticut." [Laughs]

DM: [Laughs]

AS: Dr. Kaufman kept careful records of his patients. He documented them in this book called *The Common Form of Joint Dysfunction*. I talked with his widow, Mrs. Charlotte Kaufman, who very kindly gave me permission to scan and post the entire book at my website for free access. People don't have to go looking for a copy of this rare book, because it was privately printed and it's hard to come by. They can go to DoctorYourself.com, type in my search box "Kaufman" (K-A-U-F-M-A-N), and they can read Dr. Kaufman's entire book, including his case histories on how he treated arthritis.

He had people that were unable to bend their legs or their arms or get out of a chair. Once they started taking niacinamide – 250 or 500 milligrams five to possibly eight times a day – he noticed a profound gradual improvement. It normally took months. This is not an overnight sensation. Exactly why niacin helps in this case is not clear to me. Dr. Kaufman put forward some ideas. About 10 to 20 years ago, there was new work done that confirmed that niacin does indeed improve joint mobility. People can try this and see for themselves.

DM: Now, you had discussed previously the differences between the use of niacin and niacinamide for cholesterol and for psychiatric issues. In psychiatric issues, the niacinamide, outside of the nausea, seem to be providing useful benefits. Is there a differentiation with respect to the use of sleep, for the joint disorders, and for the joint pain also?

AS: As far as I know, using niacinamide or niacin will work for sleep and for arthritis. Dr. Kaufman used niacinamide; he preferred it. Dr. Hoffer used niacin.

DM: Okay.

AS: He preferred it. They both got good results. Dr. Kaufman reported in 5,000 patients' years of use, he didn't have a single reported side effect at all. Dr. Hoffer reported in 55 years of use, he probably had under a dozen serious side effects, out of I don't know how many thousands of patients.

DM: Well, that's certainly a powerful testimony. You know, I really want to thank you for bringing this form of treatment to everyone's attention by co-writing the book with Dr. Hoffer. I

was wondering if there's any closing comment you wanted to make to kind of summarize it. Then, you know, I'll say a few words.

AS: Yes. Dr. Harold Foster is the third author of *Niacin: The Real Story*. And I want to give credit to Harry for all the wonderful work that he did. He was a close friend of Abram's. They died in the same year. Abram was very advanced in age. Harry, unfortunately, died prematurely. It's for their memory that I went ahead, finished this book, and made it available to the public. I just couldn't think of a better tribute to these wonderful teachers, researchers, and doctors than to make sure that everybody had a chance to make up their own mind and see for themselves.

I owe a great deal of credit to a lot of different people who have taught me what I know today. That includes my children, because it's in having a family that you really learn. I want to pass on your kind words to those that really deserve it.

Orthomolecular physicians have been curing disease with vitamins for 75 years. I tell my readers and your readers and listeners that if your doctor is not using vitamins, you have an old-fashioned doctor.

DM: Well, again, I greatly appreciate your bringing of this information. You're bringing it to the next generation in a readable way and usable way that I think will provide a valuable resource especially in the treatment of these psychiatric diseases, which I think we're both in strong agreement as really nothing less than criminal to not consider the use of this type of therapy, considering the available options that we have today.

AS: I agree with you.

DM: Yeah. And I would strongly recommend that you (those listening) pick up a copy of your book. It's easy to understand, a quick read, and really provides lots of... It sort of expands to some of the topics that we discussed today.

I want to thank you for all your work, your continued good work, and for providing this as a resource to help people solve some of their health challenges.

AS: It's a pleasure to be with you today.

[END]