Everything You Need to Know About NAD (Nicotinamide Adenine Dinucleotide) Transcript

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What Is NAD and Why Is Everyone Talking About It

Why is every clinic telling me I should Why is every clinic telling me I should have some NAD, etc.? Well, here's the have some NAD, etc.? Well, here's the thing. We get all the way down, get into thing. We get all the way down, get into your cells, cells aren't working right, your cells, cells aren't working right, or you're trying to, you know, get them or you're trying to, you know, get them kick-start your cells again, or maybe kick-start your cells again, or maybe you've done some recreational or other you've done some recreational or other things that have really slowed your things that have really slowed your brain down, you know, you've had some brain down, you know, you've had some problems with addiction, etc. Getting problems with addiction, etc. Getting the mitochondria in your cells to wake the mitochondria in your cells to wake back up and do their job helps to get back up and do their job helps to get the body back online. So, getting NAD the body back online. So, getting NAD the nutrient NAD, your top six questions the nutrient NAD, your top six questions answered today. Hey, I'm Dr. A. Welcome answered today. Hey, I'm Dr. A. Welcome to my YouTube channel. I love talking to my YouTube channel. I love talking about all things integrative medicine, about all things integrative medicine, naturopathic medicine, regular naturopathic medicine, regular allopathic medicine, any questions you allopathic medicine, any questions you guys like to ask, and I try and answer guys like to ask, and I try and answer them here on video because I just do not them here on video because I just do not have the time to type out answers to have the time to type out answers to everything. So, let's get into NAD.

everything. So, let's get into NAD. First off, it stands for a nutrient First off, it stands for a nutrient nicotinamide adenine dinucleotide. So, nicotinamide adenine dinucleotide. So, we'll just call it NAD from here on out.

we'll just call it NAD from here on out. It's in the news, people are advertising It's in the news, people are advertising they're using it. I get a lot of they're using it. I get a lot of questions about it. Is this just some questions about it. Is this just some hype thing or whatever? And so, let's hype thing or whatever?

The Science Behind the Molecule

And so, let's just go through the big six questions just go through the big six questions that we see. The first thing is, and that we see. The first thing is, and this is a legit concern that everyone this is a legit concern that everyone should have is if you ever see something should have is if you ever see something promoted, I don't care whether it's a promoted, I don't care whether it's a drug from a pharma company or a natural drug from a pharma company or a natural substance or a new type of a car or substance or a new type of a car or whatever, and it just seems to do whatever, and it just seems to do everything correctly, and and it it everything correctly, and and it it cures everything, you should really cures everything, you should really probably look into it. Do a little due probably look into it. Do a little due diligence around it, all right? Same diligence around it, all right? Same with with things in the nutritional with with things in the nutritional world. But, I just want to break this world. But, I just want to break this down so you kind of know the plusses and down so you kind of know the plusses and minuses of NAD. So, first thing is, we minuses of NAD. So, first thing is, we said it's nicotin- nicotinamide adenine said it's nicotin- nicotinamide adenine dinucleotide. What that really means is dinucleotide. What that really means is niacin, niacin, niacin, vitamin B3, comes in two forms. There is vitamin B3, comes in two forms. There is nicotinic acid, and then there is nicotinic acid, and then there is niacinamide or niacinamide, depending on niacinamide or niacinamide, depending on what part of the country you've come what part of the country you've come from. So, niacinamide from. So, niacinamide is the piece that is put into NAD. And is the piece that is put into NAD. And so, what you have is a stack of two so, what you have is a stack of two niacinamides, and then a joining bit of niacinamides, and then a joining bit of chemistry that has some specific sugars chemistry that has some specific sugars in it. So, it's sort of a kind of a U / in it. So, it's sort of a kind of a U / Y shape molecule. Why would we care Y shape molecule. Why would we care about that? Well, NAD is kind of the about that? Well, NAD is kind of the final step as a cofactor in most of the final step as a cofactor in most of the operations in the body that vitamin B3, operations in

the body that vitamin B3, the nicotinamide, you know, family uses.

the nicotinamide, you know, family uses.

Do You Have to Inject It or Can You Take It Orally

So, if I get NAD in its fully formed, So, if I get NAD in its fully formed, you know, complex molecule instead of you know, complex molecule instead of just nicotinamide, I'm probably going to just nicotinamide, I'm probably going to get a bigger effect from it. And in get a bigger effect from it. And in indeed, that is largely true. Now, a indeed, that is largely true. Now, a question people will have is, do I have question people will have is, do I have to inject? Because it seems like every to inject? Because it seems like every place I go looking for NAD, they give me place I go looking for NAD, they give me an IV or have me injected subcutaneously an IV or have me injected subcutaneously or intramuscularly. Well, the reason for or intramuscularly. Well, the reason for that is it is this giant molecule, and that is it is this giant molecule, and if you look, when I teach doctors about, if you look, when I teach doctors about, you know, the use of these these things you know, the use of these these things like NAD and stuff like that, I show a like NAD and stuff like that, I show a picture of nicotinamide in sort of this picture of nicotinamide in sort of this kind of general molecule here, and then kind of general molecule here, and then this big old funky NAD over here. And this big old funky NAD over here. And it's like, what's going to happen if I it's like, what's going to happen if I eat this big old funky molecule versus I eat this big old funky molecule versus I eat this one nicotinamide? Well, eat this one nicotinamide? Well, nicotinamide's going to go in, largely nicotinamide's going to go in, largely it's going to be transported into my it's going to be transported into my blood. But, then I got to put a bunch of blood. But, then I got to put a bunch of it together to make this funky NAD it together to make this funky NAD molecule. If I take NAD orally, most of molecule. If I take NAD orally, most of it is going to get broken down, and it's it is going to get broken down, and it's going to be very inefficient, right?

going to be very inefficient, right? Now, here's the footnote. There are a Now, here's the footnote. There are a couple types of precursors to NAD that couple types of precursors to NAD that you can take orally. And so, if you can take orally. And so, if nicotinamide, plain vitamin B3 in the nicotinamide, plain vitamin B3 in the nicotinamide form, is kind of your base, nicotinamide form, is kind of your base, then priming or giving you NAD producing then priming or giving you NAD producing power goes up a couple of notches with power goes up a couple of notches with these other oral molecules. So, let's these other oral molecules. So, let's say you don't want to go get shots and say you don't want to go get shots and stuff like that. You can take stuff like that. You can take nicotinamide riboside, often known as nicotinamide riboside, often known as NR, or nicotinamide mononucleotide, NMN.

NR, or nicotinamide mononucleotide, NMN. Those are two of the precursor molecules Those are two of the precursor molecules to making NAD in the body. Well, so is to making NAD in the body. Well, so is plain old cheap nicotinamide. It's just plain old cheap nicotinamide. It's just nicotinamide makes NAD easier than plain nicotinamide makes NAD easier than plain niacin. NR and NMN make it even easier.

niacin. NR and NMN make it even easier.

Why Clinics Recommend NAD and How It Works in the Body

So, a lot of times you'll be put on this So, a lot of times you'll be put on this for whatever the purpose is, and we'll for whatever the purpose is, and we'll get But, if you really want NAD and you get But, if you really want NAD and you want it full force, normally they're want it full force, normally they're going to give it to you intravenously, going to give it to you intravenously, maybe as, you know, subcutaneous or an maybe as, you know, subcutaneous or an intramuscular injection. So, then next intramuscular injection. So, then next question is, okay, well, that's some question is, okay, well, that's some wonderful, you know, nutritional wonderful, you know, nutritional biochemistry there, Paul. Why is every biochemistry there, Paul. Why is every clinic telling me I should have some clinic telling me I should have some NAD, etc.? Well, here's the thing. We NAD, etc.? Well, here's the thing. We get all the way down, get into your get all the way down, get into your cells, cells aren't working right, or cells, cells aren't working right, or you're trying to, you know, get them you're trying to, you know, get them kick-start your cells again, or maybe kick-start your cells again, or maybe you've done some recreational or other you've done some recreational or other things that have really slowed your things that have really slowed your brain down, you know, you've had

some brain down, you know, you've had some problems with addiction, etc. Getting problems with addiction, etc. Getting the mitochondria in your cells to wake the mitochondria in your cells to wake back up and do their job helps to get back up and do their job helps to get the body back online. So, getting NAD the body back online. So, getting NAD levels up in the body helps because it levels up in the body helps because it turns out that turns out that the mitochondria, which give you all the mitochondria, which give you all this energy and make your cells operate, this energy and make your cells operate, the major way that they get their sort the major way that they get their sort of electrical current to move energy and of electrical current to move energy and make ATP so that you have energy for make ATP so that you have energy for your cell is through the breakdown of your cell is through the breakdown of the family of NAD. It's not just NAD, the family of NAD. It's not just NAD, but it's the family of NAD. So, if but it's the family of NAD. So, if somebody goes and they put some NAD into somebody goes and they put some NAD into an IV bag, and then they put an IV in an IV bag, and then they put an IV in your arm, and that NAD goes in, you're your arm, and that NAD goes in, you're going to usually feel that. You'll feel going to usually feel that. You'll feel energy, etc. Well, that's because your energy, etc. Well, that's because your mitochondria are waking up, right? This mitochondria are waking up, right? This is a good thing. So, what if I do it the is a good thing. So, what if I do it the oral way? Well, if you take NR or NMN, oral way? Well, if you take NR or NMN, or even long-term taking niacinamide, or even long-term taking niacinamide, but remember it's quite a lot slower, but remember it's quite a lot slower, you're going to sometimes feel the same you're going to sometimes feel the same thing. And I've experimented with all thing. And I've experimented with all different types of this, and I can different types of this, and I can definitely tell you if I inject it, you definitely tell you if I inject it, you feel it right away usually. If I take feel it right away usually. If I take plain old nicotinamide, which is the plain old nicotinamide, which is the cheapest of all of them, I it's very cheapest of all of them, I it's very subtle. If I take NMN or NR, subtle. If I take NMN or NR, nicotinamide mononucleotide or nicotinamide mononucleotide or nicotinamide riboside, I can actually nicotinamide riboside, I can actually feel an energetic shift, meaning not a, feel an energetic shift, meaning not a, you know, external ethereal one, but I you know, external ethereal one, but I mean an actual energy in my body shift mean an actual energy in my body shift within a couple hours of taking it within a couple hours of taking it orally. So, it really does help. Now, orally. So, it really does help. Now, just because something helps doesn't just because something helps doesn't mean it's always the best thing in the mean it's always the best thing in the world for you, right? Other things that world for you, right? Other things that help your mitochondria work are thyroid, help your mitochondria work are thyroid, right? So, certainly if you have a right? So, certainly if you have a thyroid problem, you want to fix that thyroid problem, you want to fix that because, you know, NAD's going to help, because, you know, NAD's going to help, but it's not fixing the thyroid problem.

but it's not fixing the thyroid problem. Other things that hurt your your thy- uh Other things that hurt your your thy-uh your mitochondria operating would be your mitochondria operating would be toxins, you know, that stuff. You won't toxins, you know, that stuff. You won't need as much. We mentioned, you know, need as much. We mentioned, you know, drug abuse, alcohol. It's used in drug drug abuse, alcohol. It's used in drug abuse alcohol centers. Same thing. It's abuse alcohol centers. Same thing.

Common Conditions NAD Is Used For

It's trying to undo the damage that was done trying to undo the damage that was done before. So, common conditions that used before. So, common conditions that used for tend to operate around or circulate for tend to operate around or circulate around mitochondrial slowness. So, around mitochondrial slowness. So, recovery, people with long COVID are recovery, people with long COVID are using it. Seems to work pretty good using it. Seems to work pretty good there. People with chronic fatigue use there. People with chronic fatigue use it, fibromyalgia, uh people with post it, fibromyalgia, uh people with post other post-viral syndromes, people other post-viral syndromes, people recovering from surgeries, any recovery recovering from surgeries, any recovery sort of thing. Anybody has a long-term sort of thing. Anybody has a long-term chronic illness, it can be very helpful chronic illness, it can be very helpful there. I mentioned in addiction use.

there. I mentioned in addiction use. Now, in addiction use, it's used quite Now, in addiction use, it's used quite differently, and if you if you're going differently, and if you if you're going to an addiction center that does NAD to an addiction center that does NAD therapy, they're usually very specially therapy, they're usually very specially trained because they're using much trained because they're using much higher doses than the average place higher doses than the average place does, and they're doing it in concert does, and they're doing it in concert with other types of

therapies.

with other types of therapies. Addiction's sort of a different use of Addiction's sort of a different use of it, but you can think of it, addictions it, but you can think of it, addictions often are to toxicants or toxins in the often are to toxicants or toxins in the environment, and toxins in the environment, and toxins in the environment literally stop your environment literally stop your mitochondria from working appropriately.

mitochondria from working appropriately. So, again, helping the cells come back So, again, helping the cells come back online, especially if you stop the online, especially if you stop the whatever thing you were detoxifying whatever thing you were detoxifying yourself with, the whatever addictive yourself with, the whatever addictive substance, now you're putting nutrients substance, now you're putting nutrients in, you get the mitochondria working in, you get the mitochondria working again, your brain will start to operate again, your brain will start to operate better. And I've known and I've heard of better. And I've known and I've heard of people who use this in addiction and people who use this in addiction and recovery, and it's a it's a very good recovery, and it's a it's a very good synergy. It doesn't fix everything.

synergy. It doesn't fix everything. There are many other things you have to There are many other things you have to do. But, that's another reason that it do. But, that's another reason that it is used. It's also used in people for is used. It's also used in people for athletic recovery, and athletic recovery, and any just about anything where your cells any just about anything where your cells need to turn back on. Now, there's need to turn back on.

Should You Avoid NAD If You Have Cancer

Now, there's always one little footnote, and this always one little footnote, and this really deserves its own video, and I really deserves its own video, and I will probably make my own video on it.

will probably make my own video on it. But, that is, should I avoid it if I But, that is, should I avoid it if I have cancer? Now, normally, and if you have cancer? Now, normally, and if you look behind me in the fuzziness, there's look behind me in the fuzziness, there's some books I've written about cancer, some books I've written about cancer, and some of them deal with this topic.

and some of them deal with this topic. Normally, nutrients are not that much of Normally, nutrients are not that much of a danger in cancer unless you're doing, a danger in cancer unless you're doing, you know, super high amounts, in which you know, super high amounts, in which case you should be working with someone case you should be working with someone who does that, right? The concern, now, who does that, right? The concern, now, this is a theoretical concern, and there this is a theoretical concern, and there are papers on both sides of this the are papers on both sides of this the ledger here. But, the concern is, if you ledger here. But, the concern is, if you use it periodically, like let's say you use it periodically, like let's say you recover from cancer, and you also went recover from cancer, and you also went to a drug treatment center, and they to a drug treatment center, and they used NAD, right? You're not going to be used NAD, right? You're not going to be at the drug treatment center forever and at the drug treatment center forever and ever, right? So, short time to get the ever, right? So, short time to get the job done physiologically or job done physiologically or pathologically, it's fine. Okay, so it's pathologically, it's fine. Okay, so it's not going to turn your cancer back on.

not going to turn your cancer back on. Kind of the same as if I have a long Kind of the same as if I have a long COVID patient, and they're somewhere in COVID patient, and they're somewhere in their cancer journey, or they or they're their cancer journey, or they or they're in remission, or whatever, and I'm using in remission, or whatever, and I'm using NM nicotinamide mononucleotide or NR NM nicotinamide mononucleotide or NR nicotinamide riboside or injectable, nicotinamide riboside or injectable, I'll do it for a particular outcome to I'll do it for a particular outcome to get their mitochondria back online, and get their mitochondria back online, and then I'm going to back off. I'm going to then I'm going to back off. I'm going to I'm going to slow down on the, you know, I'm going to slow down on the, you know, putting the NAD into the body. Whereas putting the NAD into the body. Whereas there's papers on both sides. Some are there's papers on both sides. Some are like, "No, it can never happen." Some like, "No, it can never happen." Some are like, "No, we don't know." Some of are like, "No, we don't know." Some of the best written biochemistry I have the best written biochemistry I have ever tried to understand and read, which ever

tried to understand and read, which means it took me a number of readings to means it took me a number of readings to go through, in papers around cancer, is go through, in papers around cancer, is your body, remember NAD is in the middle your body, remember NAD is in the middle of a family of molecules. Your body uses of a family of molecules. Your body uses that family of molecules for that family of molecules for mitochondrial function, which great, but mitochondrial function, which great, but also for total stuff. And if you don't also for total stuff. And if you don't have a really good, robustly healthy have a really good, robustly healthy body, and there's cancer that might, you body, and there's cancer that might, you know, need a little nudge in one know, need a little nudge in one direction, and you put a whole bunch of direction, and you put a whole bunch of NAD into the person, theoretically, NAD into the person, theoretically, according to some pretty smart according to some pretty smart biochemists, you could metabolize that biochemists, you could metabolize that NAD in a way that might do that. So, NAD in a way that might do that. So, it's as I say, as a therapeutic use, it's as I say, as a therapeutic use, again, only do what your doctor tells again, only do what your doctor tells you. I'm just talking I'm just telling you. I'm just talking I'm just telling you my experience. But if if I see a you my experience. But if if I see a patient and they have a therapeutic goal patient and they have a therapeutic goal to get this out of NAD therapy, whether to get this out of NAD therapy, whether it's oral through NR or NMN or IV it's oral through NR or NMN or IV through, you know, IV NAD, we're going through, you know, IV NAD, we're going to do that goal. We're going to do that to do that goal. We're going to do that treatment protocol. If it's a treatment protocol. If it's a longer-term thing, like long COVID, longer-term thing, like long COVID, something like that, I'm going to start something like that, I'm going to start and maybe give it to them every day. And and maybe give it to them every day. And then if we get past a couple of months, then if we get past a couple of months, I'm probably going to give it to them 5 I'm probably going to give it to them 5 days a week. And if we're out 6 months days a week. And if we're out 6 months later and they're still needing it, later and they're still needing it, which in some long COVID patients is which in some long COVID patients is true, you know, I might be like 4 days true, you know, I might be like 4 days on and 3 days So, I've just So, it's a on and 3 days So, I've just So, it's a nutritional build-up in the body, but nutritional build-up in the body, but I'm not putting more in every single I'm not putting more in every single day. So, as far as danger goes, that's day. So, as far as danger goes, that's really it is a area of contention in the really it is a area of contention in the scientific literature whether it would scientific literature whether it would have any effect or not. As someone who's have any effect or not. As someone who's worked with cancer patients for a very worked with cancer patients for a very long time, I'm very, very comfortable long time, I'm very, very comfortable with nutrients and cancer, and most with nutrients and cancer, and most nutrients are not going to make your nutrients are not going to make your cancer get worse. I promise you that.

cancer get worse. I promise you that. But because there is this effect where But because there is this effect where this is a complex molecule, and there's this is a complex molecule, and there's a difference between me putting you a difference between me putting you through addiction treatment for a couple through addiction treatment for a couple of months and giving you a bunch of it, of months and giving you a bunch of it, or me putting you through post-COVID or me putting you through post-COVID treatment for, you know, 2 3 4 5 months treatment for, you know, 2 3 4 5 months and giving you a bunch of it, or you and giving you a bunch of it, or you just taking it forever and ever. Those just taking it forever and ever. Those are two different dosing strategies. My are two different dosing strategies. My approach is use it for when you need it.

approach is use it for when you need it. As your body gets back online and you're As your body gets back online and you're getting more strong and everything's getting more strong and everything's working, you can dial back down use the working, you can dial back down use the simple molecule niacinamide, which is simple molecule niacinamide, which is just the plain amide form of vitamin B3, just the plain amide form of vitamin B3, and that one's not going to hurt and that one's not going to hurt anything, and you can use that as anything, and you can use that as maintenance. I'm really glad someone maintenance. I'm really glad someone asked this question. Again, we'll asked this question. Again, we'll probably do others on this, but that probably do others on this, but that gets me to the big six on NAD. Please gets me to the big six on NAD. Please check out the other videos we're going check out the other videos we're going to put up here somewhere on the screen.

to put up here somewhere on the screen. Check out our playlist on YouTube, and I Check out our playlist on YouTube, and I can't wait to talk to you on the next can't wait to talk to you on the next