

Improve Your Mood By Increasing Your Overall Mitochondrial Function

Diane Mueller, ND, DAOM, LAc
with **Kenneth Swartz**



Diane Mueller, ND, DAOM, LAc

Hey everybody, Dr. Diane Mueller here. Welcome to another episode from microbes and mental health. I'm so excited to have Ken Swartz from Shop C 60 with us today. Welcome Ken. Yeah, I'm so happy to have you. It's a really important conversation. And the C 60 world, The world is a, you know, the carbon 60 world, a new world for people and your product I think is something that some people have heard of. A lot of people have not. So we're going to dive into some root causes, tie this all the mental health store. Wait before we do all that. Tell us a little bit. How about how you got into working with C60?

Kenneth Swartz

Well, I was a fusion reactor researcher and we were doing a metal oxygen fusion reactor and a lot of the doctors and professors that were like the late dr this and the late dr that had been doing research on this. So I wanted to get something to protect my crew and myself against the dangers of radiation. So I went researching and I discovered this stuff called carbon 60. People call it C 60 for short science name is the Buckminster Fuller ring. And like one experiment they gave, you know, they gave one set of rats got C 60. The control group didn't get any C 60 then they hit them both with multiple fatal dose of radiation. And as you imagine, all the control group that didn't get C 60 pretty much immediately died. Whereas almost all the C 60 rats lived. And when I learned about that I got I found a couple of sources of C 60 for my crew and myself and we're all still around by the way.

So it did work in that sense. But then I kept taking it afterwards because I think like for instance the after noon blas went away like eat the lunch and get that crash that kind of went away. I just said I was a little bit more energy, maybe mental focus, those things I noticed. But what really happened was when I went to my optometrist, the eye doctor, my druze are dry macular degeneration had completely gone away and for instance, I was there a month ago and they have the new vision, the new photographic method in my eye and they were just perfect and I'm

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61. So and of course, you know, one thing is just a fluke if somebody has it. But in the meantime my electrical engineer on the project had developed after I learned about my thing. He developed severe wet macular degeneration and Gary Rodriguez of course the type two diabetes have been to do with that. And so I made a preparation of C. 60 and M. CTRL because M. C. T. Is medium chain triglycerides. I turned into ketones by your liver very quickly. So that's a great support for anybody, the glucose processing issues. And C 60 of course is a great antioxidant and he's also the kind of engineer he took one tablespoon a day for a year and he's the kind of guy that records how long he took the dog on a walk every day.

So we have good accurate on that. And in one year here his wet macular degeneration had completely disappeared. We used to be able to post his before and after pictures, but some three letter agencies said that's the claim. So we took him down, but, and after that, I really, I really, I just found out how to make it and I started making, I shared it with friends and family of course, because they benefited and then I gave it to some of my alternative healthcare people and they had great for themselves. Then they shared it with their patients and I became like the C 60 milkman driving around the front range of Colorado dropping stuff off until internet influencer who used our product, mentioned how it saved his and his wife's life. And then, well now there's the now that actually create The entire carbon 60 market in the United States before it was very tiny and after that Internet influence, it just went everywhere so

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I love this story. It's such a good story like that one person that helps get the word out and all these other things that you see were happening and all of a sudden things blossom, so exciting. So we're going to go in because I know one of the first topics that people are going to be, you know asking about is like what exactly is C60. So I want to go into that before we go into that. Let's just like set the stage cause we're gonna talk about a lot of things around inflammation and mitochondria and dopamine. And of course this is mental health. So before we go into C60 is like the mechanism for helping support reversing some of us. Can you just start connecting inflammation and mitochondria and dopamine as far as those three areas of possibly impacting mental health.

Kenneth Swartz

Yeah, well we can start with the dopamine suppression and of course there's different types of inflammation. There's a cute and there's chronic now acute is when like you sprain your ankle, right, it all swells up, it gets red. I mean that's and that's part of the body healing itself and it gets it's painful so you don't step on it and you know, that's part of it. But one of the things most people don't know, there's also another process which suppresses dopamine production and

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dopamine is the motivation molecule that's the molecule that gets you out of bed in the morning and so when you're injured, you know, they don't the body, they want the body going around so you're just really you know your best basically kind of passive and you don't have much motivation to do anything and that's perfect. That's wonderfully adapted. The problem is chronic inflammation. Especially as people get older you can have gut issues where you have inflamed gut you can have arthritis and you know dozens of other things and that same dopamine suppression thing will kick in and that's why you know I'm not feeling that I just don't have the motivation to do anything. I just feel like doing nothing.

That's all part of that. You know dopamine suppression. And so when you when you lift whatever inflammation is caused is happening in your body then dopamine productions return to normal and you know you want to go do the things that you used to do before and so and a lot of times especially with chronic inflammation that do suppression just kind of creeps up as the inflammation grows and grows. And so it's not all of a sudden like a twisted ankle it's just after a while you just don't want to do anything. And so getting rid of the inflammation is incredibly important.

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And then how about the mitochondria? How does that tie into all of this?

Kenneth Swartz

Well the mitochondria, if people know they're like little organelles in your cell, they even have their own little D. N. A. A few genes left. So they're kind of self regulating. And they make a teepee which is the energy molecule for the cell. And that provides something like 95% of all the cellular metabolism energy and but other people don't know that mitochondria also make other things and one is the key one is pregnant alone which is the precursor molecule for all the hormones And so and and the thing is as we age the cells the larger cell provides S. O. D. Super oxide dismutase and catalysts to the mitochondria to deal with a certain anti certain oxidative radicals such as like super oxide. That's the worst one.

And you know inflammation or oxidative radicals that cause that it's basically your body resting. Right? So super oxide which is an oxygen with an extra electron. Well if your body's gonna rust that's gonna do it. And also see 60 works with the hydroxide ion which is the second most damaging oxidative radical in the body. And these both of these are so damaging that they are not used as signaling molecules in the body. And those are the only two oxidative radicals that that sequesters interacts with. So I'll bring that in. And and so what happens because your body, as you get older this the S. O. D. And catalyst production in yourselves goes down well the

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mitochondria is self regulating so they have to turn down so now you're making less a tp less pregnant alone which is goes to all the different hormones. And also the mitochondria make like some precursors for RNA and DNA synthesis. So you can't you know so your ability to make proteins in the hall around repair processes go down and that's basically on that one.

Diane Mueller, ND, DAOM, LAc

So before we go on, I want to make sure that we're that everybody's clear on something. So talk to everybody a little bit about this. So this super oxide. Right? So we have this molecule being created. So first of all, what is going to actually create this type of molecule? Let's start there, Can you talk about that?

Kenneth Swartz

It's created naturally in the Krebs cycle. And the Krebs cycle is basically how A. T. P. Is produced in your mitochondria. They're like little furnaces and just like any furnaces they're gonna produce, you know, pollution and you know, your body is adjusted for this when you're younger, especially younger, you know, you've got plenty of S. O. D plenty of catalysts and CO Q 10 and bluetooth ion also help kind of on the side on that thing. And there's no problem. Right, It's like remember when you're young you could run or party and then get up the next morning and go do it again. Right, that's kind of what it is. And in those natural produced antioxidants in your body, you can take care of that, that burden.

Now the problem is we should get older this production of those goes down. And so now those oxidative radicals that are produced like super oxide and hydroxide ions, they can cause problems. And what do they do? Well, one thing they can do is they can punch holes in your cell membrane. So things leak out that shouldn't or things leak in which shouldn't. That's a pretty bad thing. And they can also damage proteins if you cross the approaching proteins have to fold up little origami, fold back up and back to do their job. And so if they get cross linked, they can't fold correctly. They can't do their job. And now they're either they're damaging the body or they just junk and have to be hauled away and replaced. And also of course oxygen radicals damage RNA and DNA, which is the blueprint of yourself. And if that's damaged, well, it's hard for that cell to repair itself.

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So it sounds like we can say super oxide is created as just like a normal part of energy production of cell. Right? But one of the problems is as we age, we don't have the same ability to offset some of the, some of the oxide. Oxidative stress has actually created just through creating energy, correct?

Kenneth Swartz

Yes. And super oxide has another. Use the Euro fills which are immune cells that go that are commonly found in inflammation. Actually use super oxide as machine gun bullets like to take out bacteria. So if you've got a chronic inflammation, you've got a lot of super oxide. You know, if it's, you know, they're shooting a lot of machine gun bullets, you're going to get collateral damage, so to speak with your regular cells. So that's another big source of super oxide.

Diane Mueller, ND, DAOM, LAc

So I'm also curious because another thing that's coming up a lot, as I interview people for the summit is leaky brain blood, brain barrier disease. The idea of like getting toxins into the brain and these toxins in the brain then can lead to mental health issues. So, could we say then, since you're talking about super oxide is damaging cell membranes, could we say that there's potential for super oxide to even cause things like leaky brain and the subsequent results of that?

Kenneth Swartz

Oh, absolutely. And they're also linked into leaky gut, which is, I'm sure the other people have seen that, you know, like a damaged gut has direct consequences on brain performance.

Diane Mueller, ND, DAOM, LAc

Yeah, absolutely, absolutely, huge, huge link there. And then I want to tie something back that you said earlier. So you mentioned about pregnant alone in the mitochondria and I've seen pregnant alone really help people if they're neuro inflamed and calm their system down. Have seen studies on this as well. And so I'm curious when we have a higher level of super oxide. Do you know if that actually does anything for saying turning down down, regulating the pregnant alone production?

Kenneth Swartz

Well, the super oxide doesn't damage that directly what it is. If you've got excess super oxide, it also tells you that your mitochondria aren't function fully. And so that means they're also not going to be producing pregnant alone, which is the precursor molecule for all the hormones. So it's it's kind of like a side thing if if this is going on then that's gonna be going on to,

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Right? So when you get the mitochondria not functioning well then you're just saying in general the mitochondrial functioning as well, we're gonna see it. The mitochondria not being able to do

their jobs and pregnant alone production is one of them. Right, okay, perfect. That's clear. Okay, so less than talk a little bit about carbon 60 what it is. What is the C 60 product? And then we'll go into more how it works.

Kenneth Swartz

Well, carbon 60 is a molecule of 60 carbons atoms shaped just like a soccer ball. You can see it behind me. And I was basically discovered in 1985 by Robert Curl, Richard Smalley, and Harry Kroto. And they got and it's actually solved an outstanding mystery in astronomy because C 60 is also made in the atmospheres of giant red stars, but on earth you can find it like in the bird wick of a candle is like 0.25% C 60 lightning strikes on trees. It's made by meteoric impacts. So it was really prevalent in ancient earth. And so it is a part of nature. It's been around forever. And but they got a Nobel prize in 1996 because it's like a totally unique molecule. It's like a spherical molecule, all of the same carbon elements.

And they actually named it Buckminster fuller Buckminster fuller ring after Buckminster fuller. For those who don't remember him younger. He was in the sixties and 70. He's like one of those polymath he made those geodesic domes that are real common. That's what he's going for. And this kind of looks like a geodesic dome. The scientists were also a bunch of old professors who knew Buckminster Fuller. So they named it after him. And because in the seventies Buckminster Fuller predicted this molecule would be discovered and then it would have amazing health benefits. And that was like decades before it was before the health benefits or even the discovery the molecule happened.

Diane Mueller, ND, DAOM, LAc

I love it. What a great backstory. I love it. Okay so that's what that's what C. 60 is Now. Let's talk about what it does. So what is it doing in the body? Let's start with like just telling us a little bit about the mechanisms from an inflammation standpoint. How is it lowering inflammation?

Kenneth Swartz

Well first thing it neutralizes the super oxide ion which is the most damaging oxidative radical in the body. And it also neutralizes an S. O. D. And catalysts take care of that generally. That's their only job in the body a little bit to take care of super oxide. Certainly S. O. D. Super oxide district taste. And it also takes care of the hydroxide ion which is produced by radiation. And usually glutathione takes that. So when you're taking C. 60 it can also like fill that sector that glutathione takes. Glutathione can do other things because glutathione has got like a dozen jobs right? It's not just taking care of the hydroxide ion. But what's really great about C. 60 is it doesn't interfere in any of the bodies signaling molecules. So like there's nitrogen oxides that's a vaso dilator

contracts or loosens your capillaries. That's super important, hydrogen peroxide is also a signaling molecule in your body in various processes. And then there's a bunch based around sulfur and iron and zinc and they do a variety. But C 60 doesn't interfere with any of them. And that's why it has no toxicity at any level. They did like you know there's studies where 60 double lifespan of test animals got rid of radiation.

You know got rid of arthritis and rabbits and lots of other studies. And so finally they decided what level is this toxic. So they went up to one g per kilogram of body weight in rats which is 10,000 times a health beneficial dose. And it had no toxicity of that level. If you tried that with vitamin E. Or vitamin D. Probably would've been fatal for those animals. So that's what's really important about C. 60. And the other thing is because it doesn't interfere with any of the bodies signaling molecules. It's the only it's the only anti oxidants you can take which increases athletic performance.

Diane Mueller, ND, DAOM, LAc

That's very interesting. I think this is a really important point because you know so many times we're taking these various antioxidants and you're right, it's like it's not they're not selective. It's not like we take something, it's like go here molecule and it just does that. Right? So it's much more widespread. So I think that's really really important to drill down for people that were not stopping any of these other processes. And we're really going after this oxidant of you know process with the super oxide. Do you see cause I know you know people that get into like single nucleotide probably morph ISMs like a lot of people will see like S. O. D. Come up on their genetic testing as far as that being a snip, is that like is that potentially if somebody has a problem with their S. O. D. From a genetic standpoint, would that be a, you know, another reason to consider using this.

Kenneth Swartz

Oh yeah that would be a definite reason you would most want to use C 60 because until the discovery of carbon 60 and its medical applications there is no way to supplement for S. O. D. And cattle is because it's kind of unique what happens the chemistry and cc 60 most molecules that will for the chemistry people out there like to get a positive charge. It like to have a positive charge by releasing electron in the environment. C 60 pulls positive hydrogen ions and stores them on the inside of this cage like structure here and then like when a super oxide comes and sticks to it just steals the electron off the super oxide, gives it to one of these hydrogen ions which turns it into hydrogen gas and the oxygen goes back into the Krebs cycle or wherever it's going to be used. And then the could just reset itself so it just pulls out of the environment. They're spontaneously created all the time and resets itself again and again. So it doesn't burden

the body chemistry like things like Bluetooth ion srd catalyze co. Q. 10. You know they interact with oxygen radical, they get bound up with it and then they have to be an enzyme is an A. T. P. To unbind and reset them. C. 60 dozen on all on its own. That's why it's characterizes several 100 times more powerful than conventional antioxidant. So if you've got an S. O. D. Processing issue because because there's no supplementation because it has two those are endogenous antioxidants that have to be made in the body themselves. S. O. D. And catalysts. And so when you have S O. D. You know the C. 60 it does the job of S. O. D.

And catalysts together to take care of the super island. So there's extra cattle because cattle is also takes care of hydrogen peroxide and a few things. So you have extra levels of catalyst to do the job that the body needs on that. And it's really important as you get older. You know usually there's really no treatment for mitochondria dysfunction. It's usually because of production problems. And so until C. 60 there was virtually nothing you could do. I mean they had they had some precursors. It was very slow and ineffective where C 60 is very rapid change and improvement in mitochondria function.

Diane Mueller, ND, DAOM, LAc

Okay so I have questions on this and I want to take a second to just remind people like since this is mental health. Like you know why we're talking about this in part remember is that some of these toxins these free radicals and inflammation gets to the brain can cause things like mental health issues. So that's kind of the step back that I want to make sure everybody is continually oriented to in this conversation. And so like one of my questions for you is as we're talking about free radicals right? We're talking about oxidative stress and C. Sixties ability to donate an electron which is how we typically stop some of the free radical stress in the body. So are you saying that because of this? The circle molecule with these hydrogen ions inside of it? Is it that C. 60 has the ability to say stop more free radicals donate more electrons and say an average antioxidant.

Kenneth Swartz

Yes and it's very specific. That's the key, it's it just goes after SMB and the hydroxyl ions. And so yeah, it's incredibly efficient at reducing that oxidative burden And then yourself can function, you have to remember nerve cells have the most mitochondria of any cell type in the body there, like what's 2% of your brain weight, but your brain is like 2% your body weight, but it uses 20% the energy. So there's a lot of action going on there and and actually nerve cells have to dump all their used products and toxins out because they do so much processing and so there's no way for them to recycle. So when UFC 60 it helps. And by the way my retina, the retina is actually part of the brain. It's nerve cells and it's that mitochondria. So myself and Gary, you know, we that came back and so anything nerve, I used to race motorcycles and I had a few bone break bones

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here and there and I had a little nerve damage that happens and I found you know, since I take C60 that this stuff has gone away. So anything that really works with nerves ourselves, the endocrine system or even muscle system, especially the heart C60 can help because, you know, those are the cells with the most types of most mitochondria in them. And so that's where you're going to see C60 is going to do the most good for you.

Diane Mueller, ND, DAOM, LAc

So one of the questions that I think people might be wondering is because the nutrient right that I think has gotten the most press for mitochondrial support is CO Q10. So can you talk to everybody a little bit about like when you're saying this is you know this is the I forget how you said it, something like this is the most important thing for the mitochondria. Can you talk about why C60 would provide benefit then over something like CO Q10

Kenneth Swartz

CO Q10 is really important and as we age that also goes down but there's like the four big ones it's CO Q10 you can supplement for CO Q10 and now they have some good things for supplements of lingual and they have some know those possible delivery for and but it's kind of hard for me to get there but still it's a process. But the other two big ones which is S. O. D. Super oxide, just be tasting cattle is there really is no way to supplement for them. So yeah I would definitely. And CO Q10 helps in the processing the Krebs cycle. And so that's that's that's really important and C60 is not a magic pill. It only does a very specific job of taking care of these oxygen radicals. So you still have to do the supplementation organic food. You know, avoid lifestyle habits that are bad for you and you know, fresh water exercise all of that C60 is really just one tool in the toolkit for good health. But you know, you have to do all the rest of them if you're really seeking that.

Diane Mueller, ND, DAOM, LAc

Okay, perfect. Is there anything else about C60 and the Mitochondria that we want to make sure that we cover and the connection there?

Kenneth Swartz

I know it's just well they're actively up taken by the mitochondria and I could give a long treatise on how they work in the mitochondria, but we don't have the time on that. But basically their uptake there, it's, you know, passes the gut barrier goes, it's taken into the cells by endo pinocytosis and the mitochondria pull them in and use them to endorse pinocytosis in the mitochondria. They fit naturally and work in the very early earth there was actually geologic deposits of C60 because the media can impact them technically. C60 if you had really, really

cold environment, you know, almost sub zero freezing cold C 60 can fit in the groove of the RNA molecule and the side of the DNA molecule and they think actually see 60 might have been the original antioxidant of life and the scaffolding upon which RNA and DNA chemistry started. But then as C 60 went away, life evolved other antioxidants, that's why C 60 has no toxicity at any level. And it's very specific and that's just that's just you know say hypothesis. It will take more research to actually confirm that.

Diane Mueller, ND, DAOM, LAc

So that brings me to another question. Which is C. 60. Is there any food source that contains C. 60 at all or is it completely unavailable to us in the food chain?

Kenneth Swartz

I mean it's in low levels but it's completely unavailable. And R. C. 60. And also want to be careful about where the C. 60 comes from. Our C 60 has proved through sublimation for those that were sleeping in chemistry class. That's when a solid turns into a gas and then back into a solid. It's like evaporate when you do that you get 99.99% pure like ours or 98. It's just the very nature of that distillate process. It gives you a high thing. The other problem is a lot of C 60 out there especially the low quality forms are made through a solvent based process and they basically use methyl benzene, a known carcinogen. So when you're looking for a C. 60 product ours or anybody else's look for sublimated C 60 because that way you're not getting industrial grade.

Diane Mueller, ND, DAOM, LAc

Thank you for that. Yeah. I really think we need to do so much educating for people on like not all of these supplements are the same. They're very very different. What about dopamine. How is C. 60 impacting dopamine?

Kenneth Swartz

Well, it's part with the inflammation process in the start of inflammation, especially when you're dealing with, you know, like chronic inflammation like gut problems, arthritis and such and part of that I should probably bring up, they did a study with the rabbits, you know there And they did some human cell studies that showed suppression of history and so they tried to take that with rabbits and they gave some rabbits arthritis and then they injected C60 in there. And yes, the inflammation went way down and then when they studied later they found that 60 actually stimulated the growth of cartilage And so they actually the rabbits joints actually regroup, they just didn't stop inflammation. And that's that's another thing that's come out that C60 stimulates stem cell production hugely. Like we have, we have the front range here in colorado, we have a lot of stem cell places. So we had a guy, seven year old guy, he gets stem cell

treatments all the time for some of the joint issues. And he went in like, he took 60 about three months later he went in and they come running in after they spun his blood and they said you got like 20 million stem cells, you know, this is amazing, what are you doing? And you know, he told him that, but that's that's for a seven year old guy. It's amazing. That's part of that is and that's especially important, like in gut health, One of the reasons you have a gut health is your the ability of your gut renews itself like every couple of days. And then it uses stem cells to do that. And if it isn't there with the proper stem cells to do that your gut can't renew itself. It has fissures in it. Things leak into your bloodstream that causes you know the neuro fills, get in there that causes inflammation.

Now you got leaky gut or crones disease or anything like that. Well with the stem cells in there and of course also see 60 suppresses the inflammation. We have lots of people the chrome's or the very sleepy gutter. There's a dozen conditions on there. They just find that their digestion totally improves. You still have to do all the good things that you have to for a good gut that doesn't go away. But it will bring brings them back to like a really good better much better functioning level. And so that's the two things that it does. Like if you have arthritis and the dopamine suppression will get in there. It'll stop those oxidative radicals because like the neutrophils are shooting Those super oxide bullets to take out the bacteria. But sometimes it's like an autoimmune response.

We'll see 60 suppresses the tops the basically the super oxide radicals from damaging. So if they don't damage the cells then the cells don't put out the cytokines which attract the macrophages, the neutrophils will put out more cytokines that cause more damage and more information, you kind of cut the whole cycle off before it starts the inflammation goes. And then when you don't have the inflammation anymore, then your dopamine levels start to rise. And that's one of the kind of things people take 60 and after a while doesn't take too long. They have like irresistible urge is to clean the house or do other things that they've kind of been putting off because that dopamine levels now come way back and they get up and start doing the things that they like to do and probably things that need to be done that haven't been getting done.

Diane Mueller, ND, DAOM, LAC

Yeah. So motivations are probably depressions down in that situation. Yeah. Yeah. And you know, I think just tying this all together too, it's like we've had so many people talking about gastrointestinal inflammation and intestinal permeability and the microbiome and parasites and all these various things. So if we have that damage, right, that's leading them and causing some of the mental health issues, then we can say that okay, putting the C60 and can actually repair

some of the intestinal inflammation and the subsequent mental health issues that can come from that, right?

Kenneth Swartz

Oh yes, yeah. Once you get the stem cell level also it reduces inflammation that's been caused the first place, it's increasing the stem cells that get in there and replace the guts. So once you get a healthy gut that doesn't have fish it doesn't have holes in it the leak. And also one of the things about healthy gut healthy gut s intestinal epithelium lining also secretes various chemicals enzymes and that are nutrients for good bacteria. So you actually get a layer of you know you've got healthy gut lining. You've got a layer of good bacteria on that gut lining. And you know they're they're they're doing a symbiosis thing and so both of those are necessary. And of course as you got I'm sure your other grasses have talked about you know you take the glyphosate, it wipes out your intestinal your good bacteria. So you know you still got to do those things. It's not C. 60 can help support. It lists the oxidative burn yourselves under and can help support but you still got to do all the good things and if for health.

Diane Mueller, ND, DAOM, LAc

So if C. 16 because C 60 increases that super oxide distant tastes and we get the lowering of the super oxide because of all of that. Is there ever a situation where we would want to do not increase super oxide? This new taste levels. Is there ever anything I understand that there's no toxicity at any level. Is there any time we're like wow we want to only do this amount of C. 60 because we do too much. We're gonna have too high of an S. O. D. Level.

Kenneth Swartz

No it's not like that because super oxide is just damaging in all its forms and it's not used as a signaling molecule is just just I mean it's a byproduct of life right of mitochondrial metabolism and various other things. But it's just really there just isn't you don't really need you know needs their super oxide. There's a few things like the neuro fills use them to take off bacteria. But that's when the bacteria and the euro filler right there right next to each other and they're doing the damage. C. 60 wouldn't interfere with that but in the general environment but a lot of that stuff goes out in the general environment and you don't want that.

And a lot of athletes like C. 60 they find that dom's delayed onset muscle soreness. That's the thing you get like two days after exercise that hurts more than the day before. And that goes way down with the dems. Because when you can make that because sometimes When you really ramping up your mitochondria production you can be producing 50 times more oxidative radicals than you normally do. And it just overwhelms the body's own antioxidant level. And so

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like that's why athletic performance people can run longer because when that happens then you get the lactic acid build up and there's actually a process the body has set. So eventually it shuts itself down rather than total damage. And but all that extra standards that's what I mean, when you get leaky guts. I mean, you get punches holes in your cell walls and things leaking or leak out. And you can remember that if people are interested out there, especially the doctors, you can they have all to hide test kits, their urine kit, basically be into the jar and put in the hydration and it'll tell you the levels of alcohol in your blood. And with C 60 you can actually see that go way down. It goes from like three or four for people and you can see it go down to zero or one. And so it's a measurable you can measure and see it because, you know, tests don't. Yes, it was really important.

Diane Mueller, ND, DAOM, LAc

Yeah. It's interesting. I've actually seen that in myself that antioxidants are directly related to my athletic performance. Very, very interesting. So, we've talked about a lot of different things that C 60 can be part of a treatment plan for, Right? So, athletic performance and macular degeneration and pain and mental issues. Brain fog, depression, motivation. Talk to us about some of the other times, I mean, obviously, it seems like we could include this with just about any health condition. Right? Are there anything though that is more specific to Big times, people should think about C 60?

Kenneth Swartz

Well, I probably should bring in. There is one counter indication on C 61 of the things that and that's if you're on blood thinners Because one of the things if you're taking a blood thinner, see 61 of the things when you when the C. 60 getting your adrenal glands in the cells there, the adrenals make mineral cord equates. And that kind of regulates important regulation the thickness of the blood. So if you take C 60 your adrenal function can rise back much to normal levels. And if you're taking a blood thinner, you're the underlying problem that making your blood quote thick, goes away.

And if you're taking thinners it can be a problem because then your blood's too thin. So that's something. If you're on a blood thinner, you should probably consult with your doctor and get more testing if you're gonna go on to C 60. And there are other things like, for instance, the hormone replacement therapy things. Because like for instance, an example, we got some guy in his seventies goes to the doctor, he's got testosterone levels of 350. Right? So the guy doctor gives him creams, he's up to get some low 700 then he takes some C 60 a couple months later, he goes in for his testosterone, he's 1200. And so the doctor takes him off the creams and one of the side effects of C 60 is a significant increase in libido in men and women. So, and that's

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probably part of the adrenals go on. The adrenals make the androgens, androgens turn into testosterone progesterone estrogen whatever it is and all the resulting things that come with that.

Diane Mueller, ND, DAOM, LAc

Yeah. That's amazing. That's amazing. What else have we not covered today that we want to make sure to cover for everybody?

Kenneth Swartz

Well on the sea I guess that's pretty much it. But one of the things like because the second set of cells, the cells they make, you know their basically their mitochondria are specialized in production. Besides the A. T. P. And they're very active cells. There's a lot of them. So like when you take the 60 like you usually get an improved sleep because your pineal gland you're now producing more melatonin more human growth hormone. And so and all the other master hormones by the pituitary hypothalamus complex and then also in the thyroid you can also get increases in T. And three and T. Four or whatever. And that's another thing you probably need for testing a lot of people who take C. 60 they can go off their thyroid meds after a few months. That takes a while. Most of this stuff.

This stuff takes like the for the eyes it took for Gary it took a whole year. You know the stuff to see in the thyroid takes like six months. Right? So a lot of these improvements, I mean if you have a problem for a long time it's gonna take a while. And what we think what's happening is the stem cell improved. Because what C. 60 does is C 60. You have senescent cells in your body. And those are basically the zombie cells. They've gone into the fermentation mode because they they stopped all production of Saudi and catalysts and stuff to supply the mitochondria. So the mitochondria have to go into fermentation boat. Right? So it's just draining. Energy is producing toxins poisoning the cells around it. When you take C. 60 those cells will pull in C. 60. But what the inversion thing happens is the mitochondria restart and when they restart they'll send messages to the nuclear D. N. A. They don't get the right message back and then they'll cause programmed cell death apoptosis.

And so when you take the 60 there's a huge amount of apoptosis that happens as those zombie cells are wiped out of your body. And by the way, the zombie cells the cells they break down into a pit topic bodies which are non inflammatory. And the sites come and clean them up. So it's not an inflammatory process. And then of course that's what happens is the body cells that sells send out, we need more. You know we need replacement cells and that causes the great increase in stem cells. And that's why when you take the 60 you have a huge increase in stem

cells and we've had like people, you know we didn't really know about this originally Knowledge of the c. 60 is coming out. So we've had people that took like telomere tests before and after c. 60 because we were really aware of what we're doing so that some of them that did and over time if you like three years or something people have significant lengthen telomeres. But it's not because any telomere obviously if you reduce inflammation will slow down the shrinkage. But basically all the senescent cells which had shortened telomeres got wiped out and replaced with stem cells which have almost a full set of kilometers. And so average telomere length because when you take that test your testing you know tens of thousands of kilometers and tens of thousands of cells not just one and so average telomere length in your cells increased. So technically you're getting younger when you take C. 60.

Diane Mueller, ND, DAOM, LAc

So this is really cool from an anti-aging perspective. Do you know if anybody's done any studies on c. 60 and clock age at all?

Kenneth Swartz

Not really. That's really there isn't even animal studies on that. I mean some of the first studies like the battery study because C. 60 was hard to make and it wasn't till the early two thousand's that they had enough to really do studies on them. And like one of the funds the classic battery study where they gave it to Wister rats and it basically double the lifespan increased by 90% the lifespan of the Wister rats. And but of course it could have gone longer cause they're basically when all the control group rats died they stopped giving C. 60 and all of the oil to the remaining rats But still just whatever improvements have happened continued. And so the average length actually actually the last couple of rats rats that live like 5.5 years and it was kind of publish or perish. So those rats so the scientists could publish so it could have been more than doubled lifespan but you know they had to publish. So.

Diane Mueller, ND, DAOM, LAc

Yeah. Yeah. Yeah. Yeah it's so good. Anything else? Anything else you want to make sure we throw in here?

Kenneth Swartz

That's you know I guess basically three things you're looking for in a C. 60 product you know we like to think we stopped C. 60 of the best. But you know there's a lot of other great guys out there when the C. 60 market was small. You know everybody made a quality product because they and their family used it it became popular Just like the CBD market or anything else. All these fly by nighters come in so the three things you want to look for, you want to look for

sublimated c. 99.99%. That's the purest on the market. That's what you want but especially to get the sublimated and then you also want to maybe get your C. 60 in the right oils. Like we do it in M. C. T. Coconut oil, olive oil, avocado, all organic oils by the way and because you know you don't want the proof as those seed oils like canola oil or sunflower oil. I mean those are inflammatory. The whole reason you're taking C. 60 is to stop inflammation. So you want to make sure that you take it in a healthy non inflammatory oil and also on our products. Let me see if we got a box here. Yes we do on the side of our products. Here's the gummies we haven't gummies by the way we have sugar and soon to be sugar free gummies.

They're really tasty but we also have a QR code that you can scan and just like in the CBD business what we do is you can scan that and it'll go to a site where we after our products are made you can actually go there you'll see like the certificate analysis for our oils, they're real oils, they're organic, you can actually see that and then and then the C. 60 the quality or C. 60 that after our products are made. They go to a third party which does testing for microbiological C 60 concentration. So you know our products are safe and effective and you can just scan there and go there and see it and so we just think that's that's important for people to have available. So and just this is a quality, you know, so you're sure we're not the only ones that do that, but but you know, if they're not doing that, if they're not getting sublimated, 99.9% good oil and you can see the, you know, the safety and purity.

That's just those are important things to do with any product, not just any health product. Those are like really key important things you want to do because and then some things too I bring it is a lot of times like, like there's some things we don't put oils in, you know, there's also a thing about omega three oils and we don't put any of our products in omega three oils because omega three oils go rancid really quickly. Like and they were talking flax, seed oil, hemp, seed oil, fish oil is krill oils. Please always buy those out of the refrigerated section of your health food store. You do not know how long that official has been on the shelf. And chances are it's rancid because omega three products go rancid really quickly. So you know, buy them off the refrigerated section, Don't get them off the shelf.

Diane Mueller, ND, DAOM, LAC

Okay, there's so many points in there that I emphasize so much of my patients like the third party purity testing, it's so important, you guys like it's so important because so many times we just it's so easy to just grab something and there's no quality assurance on it. So the fact that you guys are spending the extra time and resources to, you know, really verify your product. It's just something that I love so much. You stand behind it so well and also just want to put a plug in for

how yummy your gummies are. So everybody hears that. They're really delicious. It's a really there's a tiny little bit of sugar and the sugar ones.

Kenneth Swartz

So there's no yeah, so there's the sugar free ones will be out by the time you see this, this broadcast

Diane Mueller, ND, DAOM, LAc

And even the ones with sugar and it's so small, but I don't think it's that big of a deal.

Kenneth Swartz

But the only problem with the gummies is they're so tasty. You attempted to eat just too many of them.

Diane Mueller, ND, DAOM, LAc

This is true, This is definitely true. How do people find out about you, How do people go and purchase your products? Can you tell us a little bit about that?

Kenneth Swartz

Just go to shopc60.com. And that's our website and there's another place we really urge people to go and that is whatisc60.org. And like on our site we can cite and show human studies but obviously we can't put up animal studies because it doesn't contain human. So there's a group that we help and other C 60 companies support like good, good, you know, manufacturing processes and it's called, whatisc60.org and go there, You can see all the studies, the animal studies and in one of the things to support, knowing about C 60 only dissolved C 60 has any health benefit, fully dissolved particles of C 60 have no health benefit. There's people out there that like selling 60 powder, no, that's actually inflammatory particles of C 60 do not have any health, but it has to be dissolved in an oil. Otherwise it really you don't get any health benefit at all.

Diane Mueller, ND, DAOM, LAc

Thank you for that. I think there's so much in here that people can Now used to decipher, you know, when to buy C60 what to look for what is problematic and definitely go check out that site, you guys Ken. It's a pleasure. This was such a wonderful conversation. Thank you so much for your time today.

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PRESENTED BY:
DRTALKS™

Kenneth Swartz

I'm glad to be on and look forward to your conference.



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