# TRANSCRIPT

You’re the Cure – January 7th, 2019

ABOUT THIS EPISODE

In the first half of this week’s YTC Dr. Edwards and Morley Robbins summarize the 2018 podcasts with Morley, and in the second half of the show, they discuss neurodegenerative diseases including Alzheimer, ALS, Parkinson’s, and others.

([Original source](https://www.listennotes.com/podcasts/dr-ben-edwards/youre-the-cure-january-7-2019-J3COkiz_YM4/#transcript))

00:00:00 All right everybody welcome to the show this morning We're pleased to have Morley Robbins on the show again First of the year first Monday Morley's always coming up with so many new interesting articles and supportive research data to me totally supporting the four pillars So I'm always quite

00:00:23 interested And so we might try to do this regularly Morley every first Monday bring this scientific evidence to support the philosophy and the truth for so many people that need that always go back to my wife Jamie She didn't actually listen to the show oppression tell people that

00:00:41 she don't need any of the science shall need any of the proof She just knows Let's graters the way to live and be and doing But there's those of us who what Doctors kind of need some of the proof So anyways first money's with Morley will bring some

00:00:58 of that But in preparation for this first show of the year Morley really what I did was go back and review the other thing It's fourteen or fifteen shows I listen to all of them Wow because I want to summarize them and I'm not going to summarise each

00:01:15 and every show because that would waste all our time today But my overarching thought and understanding as I went back to the very first and all the way through it's still the same base It's the Our comms razor If we've talked about before on the show all things

00:01:32 being equal the most simplest explanation is probably the correct one Um and it I mean it's great to be able to bring the literature and improve how the TP O enzyme which is enzyme that converter inactive too active thyroid is copper dependent And to prove how cholesterol being

00:01:51 converted into vitamin D is magnesium dependent enzyme And to prove how the osteo blast which are the cells that build our bone Um that is an enzyme that is dependent upon magnesium to bill or bone For the enzyme to build or bone the osteoclasts was chew up The

00:02:10 bone Is that enzyme to chew up old bone which we do need to do But it needs to be in balance with the builder the one that chews it up that's activated by iron You know when it comes to heart disease you go in there improve How lipid

00:02:28 peroxide ation The oxidation of these lipids occurs by hydrogen peroxide and too much glucose in our diet Too much iron too much supplemental vitamin D all stimulate this hydrogen peroxide production which oxidizes the lipid membranes and can lead to some heart disease We talked about Parkinson's how iron

00:02:48 has to be in constant motion It has to be that square dancer that's that's constantly moving and stagnant iron drives oxidative stress And when you have stagnant I learnt in the substantia Niagara of the brain that can stimulate oxidized opening That means the dope main done worker right

00:03:06 You get symptoms We call it Parkinson's So just going through piece by piece by piece disease by disease and put those in quotation marks and making the mineral connection was really cool to do over the past year and a half or so And I encourage patient our listeners

00:03:23to go back and listening that if they want more of those details but it all boils down to this same thing that we've said probably a hundred times It's the cells got to make energy and it's got a clear exhaust Bottom line That's it Um and that process

00:03:41 is dependent upon some key minerals to make that energy oxygen Really When we're talking about making energy you're taking oxygen from what we breathe We're going to combine it with some fuel that we ate glucose or fad and we're going to run it through the mitochondria and out

00:03:58 the other side spits our energy R A T P which is attached to magnesium That's the energy And then coming out the tailpipe is the free radicals That's the exhaust So oxygen is delivered to the cell to make that energy by iron But I was just the delivery

00:04:16 man Copper has to open the door let the auction come in and and then work with that auction to activate it to actually turn it into water and energy So irons important to delivery But auction our coppers important to activate the auction to actually make the energy coppers

00:04:32 important to deal with the exhaust Come out your tailpipe to deal with the free radicals We've gotta have copper These anti oxidant enzymes That air is shut down by iron and activated by copper and magnesium Deal with all the free radical exhaust all the damaging oxidative free radicals

00:04:51 So it really does bull down to this These basic things you know the very first show we did we kind of focused on magnesium because that was what you you were known for is the magnesium man And that's kind of what you started You on this whole journey

00:05:03 was looking at magnesium and we learned about three thousand seven hundred fifty one different enzymes in the body that have tohave magnesium toe function That's about forty forty two percent of enzymes in the body The enzymes are the workers that enzymes are what make our body ah function

00:05:19 We talked about cholesterol converting to vitamin D What's an enzyme that's actually doing the physical work You've got a clip a molecule off of of this and add a molecule here and you're you're physically structurally pruning or building subtracting and adding things at the molecular level Word Well

00:05:38 it is enzymes that do this work not just for cholesterol the vitamin D but for every process in the body Enzymes are the workers the magnesium zehr The spark plugs are the keys that turn on these workers Magnesium is a big one but all the minerals play a

00:05:55 role stress to police magnesium chronic stress we learned about stimulates meth fallow thigh inning in the liver and that binds up your copper What we just said copper was needed to make the energy and clear the exhaust So it really was just reaffirming to me going through all

00:06:17 those podcast to understand that chronic stress low fat diet de mineralized soil and food it's this perfect storm excess iron added to our food since the nineteen forties this perfect storm of were hamstringing our body's ability We're handicapping ourselves our body's ability to make energy and clear exhaust

00:06:47 I mean the last show I think it was the acetaminophen that blocks glued a thigh on peroxide days Anytime Here ace At the end of a word that's an enzyme that's codeword for enzyme glue to found peroxide Days is the enzyme that recycles your glue to found and

00:07:02 glued a thousands One of your primary anti oxidants the fireman that puts out the fire and acetaminophen prevents a enzyme glue two thousand proxies from working So therefore you don't have as much antioxidant capacity You can't deal with the exhaust So um that's it in a nutshell Make

00:07:23 energy Clear exhaust magnesium a copper helped to make the energy excess iron prevent you from making a CZ much energy copper and Magda needed to clear exhaust excess iron in page ability to clear the exhaust That's it In a nutshell All the other factors in our world from

00:07:40 IMF toe blue light too toxins in the vaccines Teo You name heavy metals and all the different things These all damages too but in a body that is not equipped to make energy efficiently and clear exhaust efficiently All these other toxins and burdens and challenges in our world

00:08:00 Those are things like the straw that breaks the camel's back Let's make the camel's back a little stronger Let's make Armada Kandra stronger Let's make ourselves more resilient our body more resilient Bye Nourishing it properly supplementing that were nourishment is lacking And um yeah avoid the things that

00:08:18 we know well damages But most importantly let's bolster the BIS ability and make energy and clear exhaust So I think that it was less than ten minutes In a nutshell Ah summarized a year and a half worth of interviews Maybe there and I'm sure you have some comments

00:08:33 there which I'm eager to hear But I also want the listers to know that our goal my goal Hopefully Morley's up for this will do first Mondays with Morley to really focus on kind of the new anything he's learned in the past thirty days in the literature to

00:08:51 just reinforce the concept because the A comms razor I'd ah idea is kind of hard for intelligent type a high I Q people to accept that it really could be this simple So I think that will be one of our ongoing James This for twenty nineteen will just

00:09:09 be reinforcing and connecting the dots in the literature of why it does boil down to these basic basic things So more than welcome to twenty nineteen thank you for joining us today on the first Monday of January And any comments sir that first barrage Well first of all

00:09:30 Happy New Year And that was probably one of the the best ten minutes of roiling down what's really going on I've ever heard So I really commend you for that That was obviously uh that way Too much time listening to those conversations But you you you clearly have

00:09:51 summarized in a very succinct way What not only what we've talked about but you've boiled it down to its essence And I think you're right To the people who are drawn to this work and to be high I Q And people with high I Q have to genetic

00:10:10 defect We love for control freaks and we love complexity and and when to stress begin for someone with High I Q When they feel out of control because their body doesn't have the minerals that they didn't know about And they're looking for complicated solutions for why their bodies

00:10:30 working right And it really it's disarming to realize it's this simple and I think that there are many people who are just almost immobilized by it But when they start to focus on it as I know you have in your and your patients it is life changing which

00:10:50 is very very exciting But it is getting the the masses to realize that there is an alternative uh explanation for what's going on And it's a lot simpler than people realized I think that's probably one of the most important messages for people to begin to embrace that trying

00:11:11 well just to reinforce that simplicity of number one If you can't do that or we're having trouble doing that or you're being delighted doing that then you're left with either You're going to suffer from these symptoms of oxidative stress You suffer from the symptoms that come from the

00:11:28 inability to make energy and clear exhausted or you go Treat those symptoms with a pharmaceutical toe artificially lower blood pressure lower blood sugar get your migraine headache to subside or whatever it is or you can use integrative techniques to do that There's lots of different IV's and supplements

00:11:45 and um different technologies in the integrative room to deal with those symptoms And I'm not saying to not do that We no long term That's not the best way How can I say that Because we have a seventy year experiment going here in America with health outcomes that

00:11:59 have gotten worse and worse and worse every year And now we're in dead last in America Compared to other industrialized countries we get the worst health outcomes by treating the symptom only So if you need to treat a symptom for a few days or a week or a

00:12:13 month or two or whatever Fine but you let the basic foundational stuff come into your life Also start working on that So you're not just stuck in the realm of treating a symptom and therefore going to be stuck with a poor health outcome Healthiest people in the world

00:12:28 pre World War two now are the sickest So just understand that's a choice Now that you're getting educated you can make that choice Second comment I was talking to a cattleman last week I'm always talking his cow guys I guess because I live in cotton and cattle country

00:12:44 But he may made this comment to me He said All the cow men out here in West Texas understand You can move calves east or west but you can't move him west to east meaning Stalker calf So so these baby calves that have been weaned their old enoughto

00:12:59 wean off their mama and now you just need to feed him and grow Um before you Bertram So you buy a bunch of these young cows from back East Mississippi or wherever and you can move him toe Texas or Oklahoma and you have to doctor them some The

00:13:14 transition though they'll have some sort of illness or transitional stress It causes illness and you have to doctor him some but at least they'll survive and end up growing and doing okay But you can't do the opposite For some reason you can't move him wheat west to East

00:13:29 But that's the interesting thing he told me was he had a gentleman who was supplementing his cows with the particular mineral blend and this gentleman did an experiment half the herd I think he had three thousand cows so half he gave this specific mineral blend the other half

00:13:44 He just used his traditional feeding techniques in the half that ri mineralized appropriately he didn't have to doctor those calves Hardly at all if any insured and lose any in the half where he didn't do that They were sicker than dogs and they lost some of them and

00:14:01 they were doctored him all day long with tons of antibody Just that basic thing of proper mineralization in a cow And I know it's a cow but it does translate our physiology to And historically when you look at Weston a price it's the same thing What did he

00:14:17 mainly see the nutrition in that our ancestors in these fourteen different people groups around the globe that he studied They had minerals and fat soluble vitamins from animals basically which would be the retinal we always talk about And they were healthy They didn't have heart disease cancer and

00:14:31 bad cavities and all the other things that basic of a concept it's it is true So it was just one to reinforce said I'm sorry I cut you off there No no that's good That's wonderful And I think again so many people are no longer connected to a

00:14:50 farm Yeah and they don't They don't realize how critical the minerals are in the soil not just to put extra GIS plants but to produce healthy animals And it's just you know it's It's something that again I'm a I'm a city boy I mean I grew up in

00:15:08 Baltimore right It was my great grandfather who was the last farmer in the family And you know you're in a different part of the part of the country You're much closer to it But now later in my life I'm living in a part of Louisiana where there are

00:15:24 a lot of farmers and they're they're really focused all these minerals for their plants and animals But if they get in a kind of pain they run to the doctor not realizing that it's exact same minerals that they need in their body that they're focusing on in their

00:15:38 fields and in their stock It'sjust it's we've been divorced from that very simple concept And what people have completely lost side out is that these minerals are the spark plugs As you said they're the spark plugs to get the enzymes to work And you know we can't drive

00:15:58 trucks and cars without our keys Why do we think we can drive in science Some men So I'm pulling together A presentation they'll be doing is large are two hundred physicians out in Seattle And one of the points I'm going to make to them is that and I

00:16:17 you know I cut my teeth on business I went business school and it was a consultant the management consultant for twenty years And in that world nothing happens until a sale is made That's the basic transaction To get business to work you gotta You gotta have a sale

00:16:37 well in biology and in physiology I think that the parallel issue is nothing happens in the body until an enzyme is activated And I think it's important for people to realize how primal that processes and and there are literally Brazilians of of enzyme reactions that allow us to

00:17:01 exist and the the way they are classified is there called reduction and oxidation those enzymes that air reducing elements and oxidizing omens which means Teo and taking away electrons and anti electrons What's also called radack cycling That's what really runs our body is re docks likely It's a

00:17:26 very simple catty cake and that's how electrons move in our body Well with that Recycling doesn't go well as you very aptly expressed in the opening volley that it creates what's called redox cycling pathology And there there is no disease process It's just a spectrum disorder of of

00:17:53 the Redox cycling technology that effects the ability to create energy in clear exhaust It thought everything stems from that and it's just getting people toe to center on that Realize that once we get the body able to do those two core functions well that everything begins toe to

00:18:14 toe home if you will And one of the things that are really focusing what is trying to understand where did Where did the train go off Trump Because it's you know we're talking about some really smart people around the world over over decades that have you know the

00:18:31 thought processes evolved to where we were We basically understand that acquits and we've we've lost our true North about what really drives the the physiology of the body again Back to that Create energy clear cost and the vest I as I can piece it together is the thie

00:18:56 The breaking point was in nineteen twenty five It was an intellectual debate between Otto Warburg who is a world renowned scientist and clinician from from Germany and a guy named David HK Island who was that also world renowned biochemist at Cambridge University And they were both obsessed with

00:19:21the process of cellular respiration And in nineteen twenty five they were delivering break through thinking about hell ourselves In fact work with oxygen That's what cellular respiration means How do we work with this oxygen that we turn into energy to create energy And the fascinating thing is at

00:19:47the after Warburg was focusing on iron and Dr Cailin was focusing on copper Well guess who won the fight the Warbird and you go getting He was doing a lot of research with Micah Gia and he delivered a very important address in nineteen twenty five in Ah New

00:20:10York City at the Rockefeller Institute And thank God it was done in America because it was in English so I could actually read it But the one he focused on revealed where the problem wass and the the talk was about what he referred to as the respiratory ferment

00:20:30which is this process of off again cellular respiration And he was talking about the that iron was the oxygen carrying agent of the respiratory firm it and that's what he got the Nobel Prize for was identifying Iron is the oxygen carrying agent inside the mind of Kanda But

00:20:56as you pointed out a few minutes ago it's one thing to carry oxygen It's something completely different to activate it and and turn it and change it from being an O two molecules into it Two molecules of water And that requires a special process of what's called reduction

00:21:16to change that oxygen molecule into two Milic is the water Well guess it was focusing on copper and how that happens Inside Complex for that was David Kindly no at Cambridge University and the scientific world just blew past him because everybody was was absolute captivated by Warburg And

00:21:40just so the listeners have a sense of the scorecard here the score is Warburg forty seven and Morley eighteen One of those numbers represent Warburg was nominated forty seven times for the Nobel Prize and got it Woods I was rejected by eighteen medical schools so I just want

00:22:00people to realize that you know uh there's a There's a history here but I think I've uncovered important truth And and it wasn't until nineteen seventy two when Peter Mitchell got the Nobel Prize for his work in mitochondrial product It's called the oxidative phosphor relation of The Lady

00:22:21Contra and the title of his address And this was about nine years after David Kyla had died The title was in memory of David Kyla He dedicated his talk to Dr Cailan who he thought was the most enlightened about how the mighty country worked so that that's where

00:22:43I think the intellectual split wass and I think it's important for people to have a sense of how long standing this confusion has been going on And as you alluded to it it's been it's seventy years I would actually say it's been ninety years almost a century of

00:23:02off misunderstanding and I I I don't have my tin hat a one I'm not going conspiratorial There's just been a genuine misunderstanding about who's driving the train of respiration and in fact it's copper So why why is that so important Well there are a couple things that I

00:23:24think would be fascinating for people to hear that it has been actively preoccupying my mind of late so that the first is we know that we've talked about this We talked about the protein Cerullo classmen and when it's in its active state it expresses this enzyme called pharaoh

00:23:46oxidase So I find it coming came upon the analogy that I think will help people understand the unique qualities of this solar plasma protein Think of her Think of a camp elite So an athlete who is so talented they could excel in ten different sports they can sprint

00:24:08They could run long distance They can throw a javelin They could do a high job Mean they are amazing um individuals in their ability to express their bodies so differently Well that's that's that's a rule applies approach One of the events that it can competed is Pharaoh Ox

00:24:27Today's that enzyme is what turns a very toxic form of iron into a very usable form of iron So it goes from being Ferris iron two Faruq iron and when it's in the Ferric state it could be bound to other proteins One of the most important transactions in

00:24:46the human body is that process off Ferris to Farrah kind and that's only one of the events that this rule applies Um could do it when another event would be It can neutralize his two means And in that state the event that it's competing in is called testimonies

00:25:05It's a very powerful insight but it's the same protein just expressing its ability in a different event Another event is what's called the oxidation off biogenic a meads and you could go back to your your your medical school days when you were learning physiology You probably remember that

00:25:25phrase biogenic means what does it mean That they bring good things to life And if if those eight means don't get oxidized it'll work We'll get one of these a means for talking about the neurotransmitters They don't work unless you have this same protein So rule plasm expressing

00:25:46it another event called a mean oxidation So I just I think it's important for people to realize how incredibly um important it is but also how incredibly Fassel it is and talented across a wide spectrum and I'm just I'm just hitting three of what I could even go

00:26:07into a dozen different applications of that brocade So why why am I bringing that up I think one of the most important times with this transaction is taking place is when a woman is pregnant No and that protein in the placenta at same protein we call it surreal

00:26:32applies when it's coming out of the deliver And we caught a festive what is coming out of the intestine Well that same protein is called Zyklon opened See why Kolo Ki n what is being expressed in the well the mother's placenta and in that Zyklon pen is health

00:26:55of pharaoh Oxidation enzyme is expressed and and handles the transfer of iron between mom and the baby So why am I Why am I drilling with us Well have you ever measured Cyclops in any pregnant woman that you've had is the patient No I don't believe I've heard

00:27:18of it No I know I'm not I'm not trying to pick a with you I don't like my daughter in law is an o b g Y n up in Boston I asked you the same question and she looked at me like I did her between the eyes

00:27:31with a deer slug Like she said I've never heard this Well I didn't think you had And so I think it's important for people to realize that And then again and in our world of dialogue we recognized that this might be one of the most important enzymes in

00:27:50the human body Is that primal transfer of minerals between mother and child And so the cycle a pen is managing that that transaction But what's also happening is there's a download of copper between Bob and the fetus especially in the third trimester And and the baby is going

00:28:12to be getting ten times were copper in their liver during that I thought that last twelve weeks of the pregnancy um or thirteen weeks maybe but they will carry as an adult And why did they need that Because for the first two years of their life they have

00:28:30no abuse system And what's even more fascinating is that they get a download a retinal for mom whose breast feeding the child during the eighteen months to two years that the baby is developing Well that's the magic combination of retinal in copper To make it bio available copper

00:28:51too drive the copper based enzymes not just for making energy not just for clearing exhaust but for our immune system and and those antioxidant enzymes that you mentioned earlier that is the backbone of the immune system It's an incredibly important part of the of the health of the

00:29:13baby and the acetaminophen that you alluded to is filling a wrench And those works absolutely messes up the liver the of the baby So I think that is just bringing people making the more aware of hell important Uh this particular enzyme is in the mother's placenta to make

00:29:37people maybe start to question Well maybe I should be focusing world this these four pillars to make sure that I'm getting the minerals in the nutrients that I need In addition to the peace in addition to the the Bushmen Ah in addition to good food really good food

00:29:55To make sure that I'm I'm in the best possible state that I could be in so that my offspring can be in the best possible state that they could be I just think it comes back to the basics No a lot of green one hundred percent Okay we're

00:30:10up against a break so we'll pause and come back with more With Morley Robbins on you're the cure right here Stick with us We'LL be right back All righty Here we are Back again Thanks for sticking with this We've got Morley Robbins on first Monday with Morley today

00:30:33So we kind of hit a big overarching summary in the first thirty minutes which was awesome One last point I want to make there The I guess I didn't really catch in our first year and a half A knew for sure that acute stress depletes magnesium The body

00:30:51just uses up burns through the magnesium under acute stress but chronic stress This is a part of that kind of glazed over causes the liver to start making Othello noma tallow finding which will bind up copper This all important copper that we're talking about to make energy and

00:31:13clear exhausted make Pharrell oxidase I love that decathlete analogy I'm definitely gonna have to use that All the different events that Farrow walks today's needs to perform in copper is needed in it So chronic stress makes that copper go into a non usable state And therefore your decathlete

00:31:31just got put to the bench where he can can't perform Or if he's out there performing he's doing it one legged and one armed Yeah there are chronic stress is is killer Obviously the food's depleted We've talked about that the soil but poor farming techniques which were goingto

00:31:49interview I think in a couple of shows from now Ah the author of the book Dirt to Soil Fascinating book but and we'll talk about on that show but we've talked about before the minerals air just totally depleted because of modern farming and harvesting and food preparation techniques

00:32:08So we're not getting a copper in our diet or not eating the organ meats were whole food violent seas not being taken So we're not getting a number one but then we're under chronic stress So whatever copper we do have whatever copper did download from Mama it's bound

00:32:23up in a non usable state when we're in chronic stress So again the perfect storm of this de mineralization of the body So and and biologically Doesn't it make sense If the organism was under constant stress why was why would Nature one that that organism to survive No

00:32:45it's not I'm not trying to suggest if there's no intent here but just biologically it does make sense that are thie evolutionary Other of our being would suggest it If if the organism is constantly being challenged for then they maybe we shouldn't be here I tried to rationalize

00:33:08why would do that And it's that's the only way I could explain it right Well to me it's a marker for identifying Where's this chronic stress Because I don't think I'm supposed to be living like this I don't think I'm so be feeling this poorly and living like

00:33:23this So let me deal with that chronic stress and figure out what got me there and let me figure out how to not be there anymore you know And I think the part that's missing and again I think you're you're um sensitivity and awareness of the soil is

00:33:38we didn't realize that the soil had become so depleted I think we were completely unaware that thiss process that I actually found I think the original reference that you've been looking for It's too British I think there are agricultural researchers I'm not sure what their degrees right but

00:34:02they're both phD scientists But they were It was the can'ts and widow's son And the study was nineteen thirty seven and that's when they first began to raise the alarm bells about minerals in the soil in the UK and that their study has been replicated all the way

00:34:22up to the most recent that I know of is in two thousand eight And I think that's the Siri's that you were referencing you know in the very beginning of our dialogue where there's been this wide scale depletion of minerals and especially copper over of any of the

00:34:39year period that that's the those are the guys that did actually did the original study Okay thank you And that just reminds me in our recent a recent past show we talked about ninety milligrams of copper is all it takes to run all these enzymes in the body

00:34:55which compared to iron iron the surface area of a red blood cell where most of the iron in the body is would be nine tenth of an acre Basically an acre of iron two a penny was worth ninety milligrams of copper So even though I'm not a baby

00:35:12you just shave off a little bit of that penny even and you're going to have some percent wise it maybe one two three percent depletion of copper but that's significant in the body when you when you take away hope and Dr Ben my fear is that that Penny

00:35:30has been turned into a baby Yeah for those listeners who know the difference in size between a penny and A B B it's like That's the scary part because the food system doesn't provide copper And in fact there are specific ages in our food system like high fructose

00:35:51corn syrup Ah like the refining of food like the thie farming agents the herbicides that air used today that aren't the pleading copper from the food And I think that's a very serious um issue that people need to become more aware ofthe because it's it's absolutely vital especially

00:36:11as it relates to our thinking in our in our brain function And I thought that might be an interesting area for us to focus because I think a lot of people way pride ourselves on being sentient beings that we can think You know I think therefore I am

00:36:28I don't remember who said that but it's a very important saying and but we're losing that ability The one of the greatest conditions out there that there is afflicting people across all strata of society is Alzheimer's in Parkinson's You know Lou Gehrig's disease That's the rate of Lou

00:36:50Gehrig's disease What I didn't realise is that it's particularly high in people who have been taking um stance Yeah well that's that's not good Well what What causes Lou Gehrig's disease Well there's again We're back to an enzyme It's called the copper Zinc Asso di What's the getting

00:37:08rid of the super oxide radical What is super oxide It's the oxygen molecule It has an extra electron When does that surface He surfaces in the light of Andrea at Complex three when complex four kids do its job And so super oxide has been given off It's supposed

00:37:29to be neutralized ideally in the mighty conjure with another form of it called Bangui's S O D But there's also this calm perform in this in the mitochondria and in the cell and outside of the cell And if it can't neutralize that super oxide we could look Eriks

00:37:47Disease That's a serious problem And one of the things that I've been studying is so how does copper actually get inside ourselves It's you know it's like we just sort of assumed it and it just goes there right Well it's It's actually a lot simpler than I realized

00:38:09but it's also very vulnerable Two problems So when you picture that go back to high school biology class and you've got that kind of this The uh the cell that we were all introduced into our biology textbooks I think I kind of kind of a square looking cell

00:38:31Ah there's a doorway for copper It's called City Are one copper transport protein woods he care won And that's the doorway that lets copper inside the cell a very important doorway And when the copper dust get inside the cell there's a creator in that greeter is called Glued

00:38:57a stereo No it's always fascinated me about why people have referred to Glue two filed as an antioxidant I knew that the ACLU filed products today's was the enzyme occluded style is not an enzyme but it's considered it an antioxidant Why Because blows up copper It takes unbound

00:39:21copper that's coming into the into the cell and it makes sure that it's not allowed to cause any ruckus inside the cell And so people who are familiar with blue tie on know that it's very abundant We're supposed to be abundant inside ourselves and so they they refer

00:39:42to it as the master antioxidant Well it's the most prevalent but but if in fact we're back to that So Rula Plasm and Pharaoh oxidants that's the real master because of its ability to be a decathlete Luthan has very specific function And and yes there needs to be

00:40:01plenty of it And that's greater That Compra greater is what then passes it off to whether called chaperones It's like Greta like we're at a high school dance right So we got the greeter taking into the chaperones and there's three principal chaperones One takes the copper to the

00:40:22mighty Kong Jia another that takes the copper to this super oxide district case Very important connection between copper in a third that takes it to what are called it's called the secret Torrey Pathway Kind of this mysterious part of ourselves where proteins and enzymes are being made and

00:40:47they need copper in order to do it Well I can back to your ah classroom days You remember no Yankees disease and Wilson's disease is they're two of the first um genetic diseases ever identified inhuman beaks Well there there's two enzymes involved One is called a t P

00:41:09seven A That's the monkeys version and there's a teepee seven b That's the Wilsons version And one of those one of those ends I'm supposed to be doing moving copper and the and the seven AI is down in our gut supposed to get it into circulation so I

00:41:28could get around our body and be used and seventy is in our liver making sure they they can be put into critical enzymes like what you and I have been talking about like the Sioux Rula Plasm needs copper of the Amy Knock sedates that I was referring to

00:41:48a few minutes ago Dates Copper Uh and there there are a handful of enzymes that rely on that seventy four But if those proteins that are making the enzymes get tweaked access on down iron they don't work right and so thiss machinery of how so allows copper It

00:42:15greets It gets into the chaperones and from the chaperones gets it to the proteins that they can get activated and become enzymes That's some of the most critical functions in the body Again it's easily overlooked because we're talking about a penny's worth of copper in this near Acre

00:42:35of fired All the focus is on the earlier as we've talked about and then when it comes to brain function it's just about everybody knows about your odds No but my uh I uh younger son Tom who just happens to have a phD in biochemistry from Stanford pretty

00:42:57smart chump Ah obviously takes after his mom and he he loves two twos Us about chickens have Frieda runts They have a ticking neuron They have a squawking you're on and they haven't egg leg he said They are among the dumbest creatures on the planet like Yeah but

00:43:16they're really good for you And uh you can't has no comeback to that But again we know about your aunt's How many people know about Astro sites Say what What did you say So think of Houston Astros Astro sites And just to give you a sense of how

00:43:38the universe plays with May I started learning about Astra sites When I met a complete stranger had a local farmer's market His name is Wade and he was worried about getting Alzheimer's disease and I was explained in what we're talking about And then I realized he was where

00:44:03he was Originally from Houston he was worrying his accused and Astros baseball cap But it was a special baseball cap because of the thread that's still that Astros was copper colored I thought Oh the universe that has a great sense of humor So then I began to realize

00:44:23as I start to dig But it turns out that the Astra sites the's are the workhorses in her brain that are recycling cholesterol They're really they're breaking down glutamate so it doesn't become pox that they're managing glucose They're regulating iron They're doing all the heavy lifting so the

00:44:47neuron can peck and squawk and lay eggs It's like it's amazing that we know about the garage but we don't know anything about the workhorse And and why is that Cholesterol thing is so important because the cholesterol is to be recycled so that the violent sheath can be

00:45:08constantly rate remade to cover up the nerve endings in the brain so they don't fritz out And so you know thiss whole process of of Alzheimer's It's it's affecting a specific area of the brain called the hippocampus Well that's where memory storage and and where memory I think

00:45:31we may have talked about this protest reinforces memory is requires magnesium in orderto to store it It's like a finally cab If you don't have magnesium we can't open it Finally Captain Well the hippocampus is a copper rich part of the break and it needs his copper to

00:45:51make energy and keep oxidative stress that they can't tactic create energy clear exhaust But if if the brain is being constantly exposed to rising iron levels as we age and that's a proven fact that they just found a study toe to show it with ever I images It's

00:46:14a known fact that as we age iron accumulates in our brain And it shows up what Emery skins like light bulbs on a Christmas tree And that begins to effect the copper bio availability in the hippocampus which then causes serotonin which is being made in that part of

00:46:35the brain to fritz out And then we have memory loss Well that's that's Alzheimer's We've talked about Lou Gehrig's disease when that copper zinc asso di gets gets tweak because the essential nervous system relies on copper copper is regulating Ah the Occident isjust in essential nervous system and

00:46:59when it gets out of out of kilter that it starts to create the symptoms of of Lou Gehrig's disease Parkinson's There's another section of the braid down the brainstem There's two parts of the brain one called the substantial Niagara so substantially made It must be important substantial and

00:47:23diagram means black well It's what makes the black it's called Bella did which is very important Pigment in their skin is people though and and what What's important to realise is that as you go higher up the evolutionary chain there's more militant in the the brain stuff And

00:47:48you and I have twelve got off Bella Dinh and a chimpanzee Lee has eleven That's what's the state That's one of the distinguishing features between um the spaces So this Belden plays a really important role in the no substantial Viagra Well you can only make militant when you

00:48:08have whole food Vitamin C It has the Tiro citizens to enable it to be produced Well what's on the outside of of substantial night It's called Red Nucular us and there's So if we look at the brainstem there's a substantial ni grow on either side Enter on either

00:48:28side of that is the red Duke Eli in the brain What's inside the red new cure Why is it red It's red just for the same reason that soil is right Too much are you It's got a lot of iron there And as we age iron accumulates in

00:48:46the substantia nigra See me in the in the vet nucleus And if there isn't enough copper another major copper center is a substantial Niagara If there isn't enough copper there to keep it in check it starts to oxidize shirts to rust The dope Avi And when that happens

00:49:08you get tremor disorders And so again it's It's this dynamic of this balancing act between that nine tenths of an acre of of iron and that penny of copper And it is really I mean we're boiling it down through its very essence But it isn't a whole lot

00:49:30more complicated than that When you begin to understand where these copper depots are in the body deliver is copper Depot number one The brain is number two The kidneys is number three Well where do people have a lot of their disease today in those three areas you know

00:49:53And then the heart would be number four And what I find fascinating is that Leslie clothes a one of the world's authorities on copper Um back in two thousand he published in a textbook that he wrote that there were eighty anatomical chemical and physiological defects You know heart

00:50:17that's missing copper It's lacking bio available cover And so this'll it'll penny of copper is pretty darn important inside our body And I think what you and I are are harnessing ourselves to is making sure that ward or people begin to recognize uh not just the importance of

00:50:39copper but how easily overlooked it is and how easily overwhelmed it is by a conventional food system That doesn't seem to understand how delicate this balance of powers between comp retired run Well that's fascinating On your right on with the neurodegenerative in Alzheimer's in particular Of course a

00:51:02less and we see a number of patients with a L s these brain diseases that are already we're seeing in uptick more than an uptick severe ex potentially rising slope But the predictions on Alzheimer's over the next ten years the frightening twenty years Yeah if these predictions are

00:51:23accurate and then on the other end of the spectrum with we've talked about autism before But not this Autism dyslexia depression anxiety just mood disorders in the youth When you look at both ends of the brain youthful brain in an ageing brain you're seeing extreme dysfunction and an

00:51:46escalation of that dysfunction Again My point is this isn't genetic When you see such an extreme escalation we can't just say Oh well it's my jeans Nothing I could do about it There's an environmental component to this This that has caused this escalation of something you may be

00:52:02genetically predisposed to but you've got to turn on all those bad genes basically So it's an environmental thing It's a modern thing It's a Western thing in American thing in particular and that's where we keep going back to these very basics Diet lifestyle for pillars type stuff minerals

00:52:18in particular So connecting those dots she's enough and what it really is And one of the things that I'm kind of horny you know now is that understanding the difference between Thie Jane function that's supposed to make protein that's supposed to then become an answer And you know

00:52:38a lot of people are being trained like circus bears to believe that their problems their genetic Well yeah there is there is that there is a genetic component to it But the Why isn't the gene working right Well the what's staggering is to find out humanity It's called

00:52:56the promoter region of the gene That's where all the action takes place That's where it actually gets that the translation actually takes place Where the tree Because this transcription actually But but the thing is that particular section of the of the gene really relies on a derivative of

00:53:16vitamin A of retinal called rx R retinal ex receptor It's the master regulatory receptor So what we're talking about Jean issues People need to start thinking about what you wonder if our xar would be involved in that It's a classic example is the vitamin D receptor VTR doesn't

00:53:38work with the oryx are the viol receptor doesn't work without it Sharks are the fine red receptor doesn't work without our x R you know there there's um the estrogen receptor doesn't work without our X R You know And so you know there are about a dozen nuclear

00:53:55receptors It's just a work right Unless that oryx are thing is there Well that's all the Jane's life Well that on the enzyme side it's the mineral That's where the general's heir so important especially this catalyst called copper And what I've come to realize is that you have

00:54:13to be very careful when you're asking Dr Google about a question because you might be asking about for example a t P seven A Which is that inside that's so important for absorbing copper in the gut Well if you have lower case a teepee Saturday Dr Google those

00:54:33you're talking about the end What if you put it in his tea Pee seventy all caps it Thanks for talking about Jane and it does not compute When you put comprehend When you talk about this the enzyme you got a completely different response So that's where I think

00:54:50the search engines are very finely tuned to What are you really trying to do here What do you What do you really looking for And I just This is just in the last couple weeks that I've come to realize that I've got to be very careful and the

00:55:03catchphrase that I'm now using toe uncover treasure trove after treasure trove is copper Guess home e O stasis That's a mouthful But that's the phrase that opens up the Pandora of research that's been done especially about neural degeneration That's the phrase that the leading AH brain scientists are

00:55:28using to describe why the brain is not working Why the Astra sites are not working Why the Reese likely that needs to take place in the brain is not working It's because there's this homey in stasis in copper and it's thousand And that's where the really rich insights

00:55:48are are emerging in the research now Yeah but we're better term I think obviously this last half his show everyone's getting the picture Coppers really really important Bio available Copper is really really important Um and that this thievery and I just wanna clarify this oryx are receptor folks

00:56:08we're talking about inside the nucleus at the jenna at the gene level That DNA that's the instruction manual Basically the RX are receptor retinal based receptor Remember retinal is the vitamin A from an animal based source So passion raised eggs beef liver was your primary ones Cod liver

00:56:31oil is where you're getting retinal from And this RX are receptor retinal based receptor is needed to express all the right information off your jeans If you have dysfunction of that reading part of you know we've got to read what thes instruction manual say and to allow your

00:56:52body to be able to read it You've gotta have this Oryx are receptor on their appropriately so retinal is very important is appointed that retinal from the diet Um obviously copper we get that food based copper don't go to the supplement store Just get elemental copper You need

00:57:07food based Which is it found in organ meats Like beef liver on hold for environment sea and bee pollen Because you're top sources for Cupper And then you have to not be under chronic stress So you don't bind up that copper in a non usable state Okay well

00:57:26fascinating stuff Morley were we really appreciate your insights on the especially the neuro degeneration Folks don't need to be scared of this epidemic of neurodegenerative disease You just need to be informed educated Then you gotta go implement and do the things that need to be done And that's

00:57:43all point of the root cause protocol that Morley's come up with Yes two And I helped balance all these minerals the right way Morally Thank you Where can people find you or any closing comments Yeah well first just thank you for the opportunity to have these conversations They

00:58:00You know there were times when I just like there's so few people Aiken I really have this kind of exchange with So I really die you the time we spent together Um best places to track me down r the root cause protocol dot com Oh are you the

00:58:16shortcut would be RCP one two three Got orgy You know one And then of course I spent a lot of time One Facebook the magnesium advocacy group is the two best places to track me down and again will be having these conversations on a regular basis So that

00:58:35will be another opportunity for people Tune in and then start asking questions because I think they're people Should be asking questions about their understanding Is that they can begin to simplify this process of getting back into balance That's that's an opportunity Yeah well it's complex But half doesn't

00:58:54have to be complicated And for those of Y'all who don't need all the research and all the connection of all the dots in the literature then you can go playing the garden on first Mondays I guess But for those of us who appreciate a little more in depth

00:59:11and have to connect the dots or need to go debate other folks doctors or whoever or educate other doctors tune in every first Monday we'll bring Mohr of the evidence and more the literature literature to you regarding these minerals in the root root root cause of inflammation based

00:59:27disease oxidative stress based disease it which is what America is suffering from So thanks Morley We'll be looking forward to our next visit Very good Well thanks again for the opportunity that you have a great rest of the week Thank you You too Okay All right above us