
Bernd Friedlander: Methylene Blue in Treatment of Cancer, Aging & Dementia

SVHI Transcript, Transcribed by [Bulletproof](#)
Originally Recorded: 02/2015

File URL	https://www.youtube.com/watch?v=Ha8us1Q_4ic
Length	46 min

Speaker 1: Our first speaker tonight is Bernd Friedlander. Bernd has a bachelor's degree in physical education with emphasis in applied kinesiology, doctorate of chiropractic. He's been involved in developing nutritional therapies since 1982 as a result of his therapeutic formulas. He pioneered the research in use of nutrition and free form amino acids for improving athletic performances as a safe alternative to steroids. During his career, Bernd has served as a nutritional and sports injury consultant for athletic members of track teams at UCLA, USC, Berkeley, Stanford, and many professional track and field athletes from all over the US. He has also worked with professional players from the Los Angeles Rams, Raiders, Clippers, Lakers, San Diego Chargers.

In 1994 ,he served as a chiropractor and a nutritional consultant to numerous members of the US Olympic track and field teams and US Olympic crew teams. Tonight, he'll be presenting on methylene blue in the treatment of cancer, aging and dementia. Please welcome Bernd Friedlander.

Bernd: This is done very quickly under the guidance of Robert for helping me out and also I want to thank Robert Bown in the beginning and Susan got me to do this so quickly so I'm going to follow up as much as I can. Methylene blue it is also a new topic for me, so it's not I'm an expert in it, but I got excited about it because I started looking at the research on it and I started really looking at it with another fellow by the name of Ray Peat who I think is a valuable person for information. Ray and I, we're probably on the e-mail corresponding a lot, and the guy's a genius. He was the one that actually opened my eyes to nitric oxide and methylene blue and he did some brilliant work. If you have a chance, get his newsletter it's worth every penny. It's not an easy one to read, it's technically difficult, even a lot of doctors have a hard time understanding it. I have to read it through two or three times to understand myself, but the more I read it, the more valuable it gets and it becomes really a genius of a ...

Speaker 3: What is the name of ...

Bernd: Ray Peat. R-A-Y P-E-A-T. He's got a newsletter. If you go on the website. I'll show you how to do this, look up methylene blue and Ray Peat November's issue and he's got a whole column on it. Then recently, he just came out with another article on how it relates with nitric oxide et cetera, and that is enormous. What I started doing is ... Is it working? Wait, let me do this then. No. Here it is. All right.

What I started looking at, is more of understanding of these mechanism information NAD, NOS, methylene blue, the epigenetics of everything. I think epigenetics is going to be a very exciting area to look at how the environment controls us really, stress, lifestyle, how we eat, how we think. Even recently I ... Anybody knows Gheorghe Benga? A scientist who is a molecular biologist, I have a lot of his books, and I was looking at his books recently and something really hit me because of these alkalinity waters.

I started reading his science. He understands biology and the anatomy and the atomic levels of how cells work and that we have to be at seven point. If we go too far above

seven, it can cause disorganization in our body and disturbs the stability of the cell. If we go below 7, it does the same thing. I started realizing, I got into alkalizing water back in the '90s through a former friend who passed away. What's the name? Jim Constant. He got me involved with the company but then reading his book and understanding and talking to a friend of mine at MIT, who's probably one of the most brilliant guys I ever came across. I looked at ... and he told me four years ago, going to distilled water. It's neutral, it's safe, it's clean water, doesn't have heavy metals, heavy chemicals, Richard Canyon believes in it.

I spoke about it with Frank Shellenberger, he believes in distilled water and after understanding that, we need to not over drink alkalinity. It's not good for us, or acidic. I talked to Raymond Damanian and Gilbert Lering about that and they agree with that.

Speaker 4: That is where?

Bernd: What do you mean?

Speaker 4: Ph?

Bernd: You want to keep the Ph at 7. In water the same thing.

Speaker 4: [crosstalk 00:05:26] saliva?

Bernd: That's a whole different thing and I'll talk to you about that. There's a whole mechanism of understanding your blood, your saliva, your urine and there's a RH2 effect that we need to look at. What really got me interested in it is, all the research that's going on in NAD, molecule oxidation reduction and how that is so important and how cells under these influences just basically influences everything. One of the things I got into is looking at reversal of mitochondria aging with NAD precursors and low levels in ADD which I spoke a lot last time. I'm just going to interact that again because I think it's so important.

I want you to look at a blog. There's a very important blog I want you to ... anybody knows about the anti-aging firewall. Vince Giuliano, you've got to understand who he is, he's a genius. His blogs are enormous, they're valuable. He does research. It's all about NAD and other molecules like Mtor pathways and all that, how they affect us and also controls aging and diseases. Low levels of NAD as a cause of mitochondrial dysfunction. University of USC is doing a lot of work in that area. I spoke about a year ago with UCSF Blackburn about TCA and the telomeres, she says, "This is more interesting than anything else than telomeres and all that is, the NAD and how we can upgrade it, with all the precursors and all that and I'll tell you some of the things how we can do that."

NAD is just a molecule, an inadequate expression of mitochondrion coded genes are controlled by a cell nuclear factors NAD which generates energy, ATP. You have oxidation reduction, oxidation reduction in all living principles. That's how life works.

It works ... Under low oxygen levels. Not that we don't have enough oxygen, is that the cell doesn't know how to utilize oxygen correctly and that's a big factor and it's due to information stress by physical or psychological. It activates hypoxia induced factor 1, the primary driver of metabolism reprogramming. Just going to cover this, what we did last time. Oxidation of glucose to aerobic glycolysis due to low NAD cannot make ATP defective electron transport, runs in reverse, produces uncontrolled amount of free radicals, production is increased, pyruvate to lactate.

That's how cancer cells generate themselves. Then, when the body is under a lot of stress information all of that and NAD levels are low, and I looked at fatty acid synthesis. It's should be synthesis. It's really how the cells now utilize oxygen, they don't oxidize glucose any more because their metabolism is ship. They're very hyper metabolic. Their cells become ... It's a pregnancy cell, they want to survive. That's what happens in cancer cells but every disease, we know of cardiovascular, diabetes, Parkinson's, Alzheimer's, cancer, is led by these factors, these pathways. It's fatty acid synthesis where they break down into fats and proteins and they know how to oxidize that and that's how they regenerate energy and they generate lactic acid.

One of the key things that was very interesting is how it leads to these other components, which are tumor promoting, growth promoting factors like Mtor and IGF1, all of these are components of ageing. That's why in research today that if you look at all the studies going, is driving these pathways down. Inhibiting fatty acids. Go into any PubMed right now you'll see thousands of papers coming on how we can inhibit fatty acids and Ray Peat has talked about it for 10 years or more, about that. Then Richard Miller, who is an MD, PhD wrote about rapamycin, and how that's involved in ageing, diabetes and heart disease and cancer and how the Mtor pathway is the mechanism that causes these growths.

When we're young, we need Mtor pathways to grow new brain, to fill our muscles, to our organs but at a certain stage, we don't need them anymore and they're more of a problem than they are good. Then we also want to reduce insulin growth factor because of diabetes and sugars and all of that. These are some of the things that have been shown to work against blocking fatty acids and also Mtor pathways and things like that and you've got vitamin D, you got a niacinamide, aspirin, you've got Boswellia, EGCG, blocks fatty acid synthesis and so does aspirin, if you go back you Google it, and it has a mechanism there and vitamin D does that too. Really the key is also improved thyroid function.

I've been seeing a lot of cancer patients as someone here knows about, and one of the things I do is I measure their PSH before anything else and most doctors don't believe that they have thyroid issues. They come in they all say, "My doctor says my thyroid is fine." No, as soon as I give them a simple American biologic thyroid glandular, which is a non prescription because they cannot get a prescription from their own doctors, it turns them around. You see in the people we work with how much better they got since they got the thyroid functioning. I have four cancer patients, they couldn't sleep at night, they couldn't function during the day. Just by switching their thyroid, everything started getting better.

The other thing is, hormones such as DHEA, pregnenolone and progesterone are very important and they also suppress certain things and in the Mtor pathway but also they suppress the nitric oxide, which we'll talk more about that. One of the big things in NAD precursors, besides niacin ... niacinamide and low levels of tryptophan, is a new product called Niagen (NR) by ChromaDex. The last time I gave a lecture here, I had a call from an electronic ... from EPE ... I think is EPH technologies out of UCLA. He was the head of Motorola. His name is David Estores. Somehow he got online and saw the lecture. He ordered Niagen from Thorne Research and he started taking it and he said he noticed an incredible change in his energy, mental function and sleep.

His name is David Estores, I know him because he was an electrical engineer who built a lot of equipment for us when we were working with the athletes. We looked at all the Ks, not just one K and also look at DCA which converts lactic back to CO₂ and then one of the things is look at all these people I'm talking about, restriction of tryptophan and cysteine have all Mtor pathways. They inhibit Mtor. That's why collagen is the void of these three amino acids and that's why Linus Pauling has always been a big devotee of vitamin C, choline and lysine. I talked to Tori Hagen about it, who worked with Linus Pauling and he said he was very big in collagen and he knew collagen was a key component to a lot of his work.

Now we've got into another exciting area where I started realizing more and more that a lot of people are promoting nitric oxide which is good. We need it. But too much of it is not good, and it's involved in all inflammatory conditions if involved by the immune system when it utilizes white blood cells to kill nitric oxide, important. It's used in libido function and all that, Viagra, but it is also a component to stimulate cancer cells through the angiogenesis. There's a whole article in the whole scientific area on how NO promotes blood vessel and promotes the spread of stem cells of cancer cells. One of the members here who's got advanced stage of cancer who I'm working with. I immediately told her to get on a high progesterone and got into Methylene Blue. All her symptoms, we're talking about, I don't want to mention her because, I don't know of, you know about what's going on with this one individual.

All the symptoms went away, heart flashes, bleeding everything. Pain swelling went completely away. It's because we suppressed the prostaglandins, we suppressed nitric oxide. We also changed the lactate back to CO₂. A number of other things but she's still going to have surgery because she's in stage 4 of her condition, which is very advanced, and all the doctors are pressuring her to have surgery and as much as you can. Many of the tumors arise from infection and persistent infection, inflammation leads to autoimmunity degeneration, cancer, other process associated with aging. Inflammation fights infection, inflammation promotes proliferation, Inflammation produces peroxynitrite, promotes gene mutation, De methylation of DNA, rheumatoid arthritis, inflammatory bowel disease, viruses. It also inhibits P53 oncogene and causes mutation. P53 is a tumor suppressor so you that. Inflammation nitric oxide are components that also suppresses P53. There's a whole article on that.

When I wanted to work with simplicity and making a knit \$5 molecule that you can buy in a fish store that has a tremendous benefits on a lot of things. How many have ever used methylene blue for aquariums? What does that do for the aquarium? What the logic to it?

Speaker 5: [inaudible 00:16:37]

Bernd: It has an anti-microbial ... it keeps the water clean for the fish to survive and it helps with the oxygenation. It goes back to the ... MB goes back, all the way back to the 1600, 1800s when it was used for malaria and all that. Methylene blue in cancer by controlling the redox state of the cell. That's the key. The reduced state of the cell governing the number of structural fibrils in the cell and their strength, stress and reduced glycolytic state, stiffens the cell structure. MB plays a role in bringing back the oxidative state and which governs its shape, behavior and metabolism and interaction with the surroundings. That's key for fish. They need an environment around them that is healthy.

MB can restore respiration cells where the mitochondria has been damaged in many ways. Proliferation is increased by nitric oxide, which blocks oxidative energy production. NO activates the characteristics of cancer metabolism, anaerobic glycolysis creating hypoxia. An excess of NO increases general permeability of blood vessels in cancer which we talk about angiogenesis and MB inhibits with vitamin C. Also we talked about, you wanted to know about Candida. There's a whole article in science. If you go on methylene blue and Candida, with vitamin C, it's been very effective to get rid of Candida. There are even bloggers now on the blog, talking about their experience with methylene blue and Candida and they all will tell you that some of them get ridiculous amounts of points per 100 milligrams which is extremely high.

Ray thinks maybe one of two milligrams is all you need to get going. Some of the studies I've seen is 5, 10, 15 milligrams for cancer patients once a day. It's like 2%. You only need a few drops in water, water, water, not orally like a lot of these people are doing and getting blue tongues and all that in which talked about that. One of the things again, in excess NO increases permeability of blood vessels to grow and that's a big thing. MB increases the trans endothelial movement of TNB cells, lymphocytes so they help to organize these cells to be more efficient, to attack as well as to improve immunity. MB induces apoptosis by NAD, Ph, oxireduose state of the cells.

Something like that is really important because cells are shifting and they're becoming more hyper polarized in the cell. Another thing about cancer cells, they have a survival mode, and one of the ways they survive is by increasing their glue with iron. That's how they prevent themselves from chemotherapy. That's why all the doctors who are well versed in the oxidative reduction state will not glorify iron in cancer. They have, like your friend Stephanie. She's begun reducing glorify iron and especially in cancer patients and she's right. Another thing I want to say about Stephanie, she's absolutely right I've been looking at cholesterol sulfate. How important is cholesterol sulfate. We're eliminating all of these important foods in our diet. The more I read about cholesterol sulfate in the skin and cell membrane and the sun. How important

vitamin D3 is, it's that cholesterol sulfate also reduces inflammation. It's one of the key components to reducing inflammation.

She was exactly right, I read more about that recently, about cholesterol sulfate. You get that from butter, you get that from cream, you get that from coconut oil, you get it from palm oil, but you don't get it from Sun flower, saffola, canola or cotton seed or all these other polyunsaturated fats. There's another article I'm working on right now, with Edison pharmaceuticals they're here and also there's a group out of Fosta [Siri 00:21:15] called Gilliad. There's a friend of mine working there now, they're now seeing their polyunsaturated fats, have major problems in our health much more than sugar does. Because another wrong understanding is that cancer cells drive on sugar, they don't. They absolutely need ... The more sugar you give the cancer patients, they Actually recover faster. The more protein they get, they recover faster.

There's a lot of articles now that are coming out by Edison pharmaceutical, they're coming out by the UCSF, by Harvard, Philadelphia cancer clinic and Ray Peat has done a beautiful article on how important sugar is in our health. I forward out to Richard Canyon, Frank Shellenberger and Robert Rowan. All of them came back and said that makes sense. They loved that. Cancer cells thrive on fatty acids and protein. That's why you lose weight. That's why you lose muscles. That's why they start deteriorating, they don't have an immunity to fight anything, and lactic acid is the major way of blocking immunity. There's a whole study on lactic acid and how it inhibits immunity so that the cancer cells have another mechanism of protecting themselves besides using glutathione. One of the things is that, you need to look at foods that are very high in cholesterol sulfate and there's one amino acid that is so important in treating almost every disease, cardiovascular, diabetes, cancers, taurine. And

What is taurine? The only amino acid that has what sulphonic. It's a sulphonic acid. I've been really, in the last two days I inundated myself on taurine. I've googled Medline/Pubmed, It's enormous how valuable that amino acid is in protection against glycation. Just glycation, it has one of the properties of preventing aging of the cells. The misfolding of protein. That's the other way. Another thing, very interesting is, cancer cells' purpose is to make more cells. That's what their survival mechanism is. Under a lot of stress, under high levels of estrogen, this is according to Azevedos. Halena Azevedos was the leading researcher at the Philadelphia cancer clinic, who did 40,000 cultures of cancer cells. He was the head pathologist that everybody sent their cell cultures from their patients.

What he discovered, all the cancer cells have a common denominator at the glycoprotein which is HCG. Human chorionic gonadotropin hormone and a lot of doctors used that for measuring if you have cancer because if you're not pregnant, and you have a high level of HCG, there's something abnormal going on. If you look him up you'll see his papers. It's called the hormone of life is the same hormone of death. You needed HCG to be born with, to reproduce, to have a new fetus, but you also die from it, because that's what stimulates the cancer cells, and also HCG has the

same electrical factor as the immune system. It's negatively charged though doesn't allow the pregnancy to be attacked by the immune system.

One of the important things we got to do in all cancers is look at converting the fuel to lactic back to CO₂ and DCA is a big one. Methylene blue has that also back because it deals with a very important complex. Methylene blue helps with complex 4. It's the major pathways that it raises. All Parkinson's diseases, all Alzheimer's diseases, neural genetic or any dementia that you're seeing today, cognitive decline, function, is because they're missing complex 4. One of the major factors that MB has, methylene blue in actually raises complex 4. That's why there's clinical studies and I should be in here, I gave you. The clinical studies on MB and we'll go over that, Is that in Oakland, right here they're doing Alzheimer's studies, they have actually seen that. Methylene Blue either suppresses the symptoms of Alzheimer's and Parkinson's in some cases reverses it totally. By two things, by breaking down the amyloid, it degrades the amyloid but also raises complex 4, which is very important.

Oakland, there is a clinic here by Children's Hospital, they did a whole study. I may have it here. I wrote it down and I think I put it down I showed you. It should be in the end. I'll go over that. The inner of the cell is more negative. The cell membrane is actually more positive. Like the production by cancer cells reduce of the immune function, here's all the studies you can go on there, you can look it up. Cancer cells protect themselves and it's damaged by inducing an Enzyme GLO1 and also utilizes glutathione from glucose for their metabolism. This is all research right there. Nitric oxide is a free radical gas involved in signal injury. It's response to that is and always involved in so many new stem cell recruitment. We need it but at certain levels we don't need that much.

That's why arginine be careful I've had too many people with high levels of arginine come to me and having serious symptoms now and some of these are muscle symptoms, nerve function, things like that. That's why we have to watch out how much we take and what is necessary and also involved in all these stress signal, shock, muscle contraction, nerve function, organization of the cell, too much can cause this organization. That's to our environment. Epigenetics is involved in information, radiation, oxidation of fatty acid like serotonin, lactate, estrogen and our signals to respond to injury, radiator our cells and make them more damaged. NO is produced by white blood cells that fight infections, intestinal conditions strongly influence the amount of bacterial endotoxins, influence NO to be produced.

NO, too much in the gut, we have issues now with endotoxins which are released and then we have another serious toxicity load going on, inflammation is increased. Inhibiting energy production, production of toxic free radicals leading to information, that's what NO does when it's too much, it inhibits energy production. Obesity and diabetes, NO role in cancer is to promote angiogenesis, promoting blood flow, DNA damage, tumor promotion and Mets and metastasis, Lactaid activities, nitric oxide and other inflammatory mediators.

Here's some of the things that I found that seem to overwhelm the nitric oxide, fatty acid, Mtor is reduce your carbohydrates. Higher fat endogenic, meaning good fats. We're talking about butter cream, MCT, coconut oil, palm oil, those things. Eliminating polyunsaturated fats is important. When you're depriving glucose activates nitric oxide so here's the key. When you're not getting enough glucose, it activates nitric oxide and shifts the oxidative metabolism to oxidation of fatty acid leading to lactate. This is some of the people and Ray Peat had a beautiful newsletter on that not only once, twice but also several others. Urea and uric acid reduces nitric oxide that's why you remember the way back, urea was used for a liver cancer and was very successful and they outlawed it here in the United States so the people went back to Greece to get it done or in Spain. That's because it had another ... methylene blue also helps with that. And B complex, B3 and B1 and has a great protection against inflammation due to the nitric oxide. Then you have thyroid and progesterone.

Here's your strong tumoricidal, we just finished the studies with Florida AMM, this is the leading experts in the field Elizabeth Marshall and her colleagues. What they found was the strongest tumoricidal against anything out there, against chemo drugs anything out of 35000 compounds in nature. You're wildly and Beth through all these work frankincense Buswell of Rommel, gallic acid cafe cafeic, anti-viral. Here's your lysine EGCG per human. These are all the studies you Jess forwarded to me 2 to 3 days ago. Anti-mitotic (sperensia) the best of all , you can buy it from Kylix, a company called Kylix, K-L-Y-I-X out of New York they have an ... They have and epigenetics stability, with folate, a B-12, B-6, chroline, biotin and Sam.

LDH inhibitors, Chinese gallnut was way up there. Morning glory was another one and cinnamon, not only did it come out for LDH inhibitor, cinnamon came out as the highest epigenetics. Controlling the backs of genes. The wrong genes getting turned on and keeping the right genes on all the time and Cinnamon was one of the best. Immune stimulant was garlic and zinc. DNA repair was an NADH, Niacin and magnesium. This is the studies they have done, they documented, it's on Nature and Science and you are the first ones to actually see this before it even went into publication.

There was one area of methylene blue which, again it's a simple way to control the environment of the cells and we're trying to make things simple instead of going out there and spending a fortune, which a lot of people do. They get overwhelmed with too many things and too many things that ... a lot of it is lifestyle. Be positive. Enjoy life. Get out to nature, get some sun. Walk on the ground. Eat organic foods, eat grass fed foods, stay away from polyunsaturated fats. I'm going to tell you that has the highest incidence of damaging our bodies. Go back to nature. Any questions. Harvey, you're too old, you can't talk. We're going to make him the oldest man in the world in by freezing him.

Speaker 5: What about lactate production by exercise?

Bernd: That's part of the thing, that's why athletes ... we use a lot of potassium bicarbonate and sodium bicarbonate with athletes to rapidly prevent that from happening. A lot of athletes when we were training them, we actually had them take baking soda before they work out and it helps, and also magnesium and creatine and all that and glycine, all those things help, but that's part of it. It is the lactic acid that is due to the change in the respiratory mechanism of the cell and the excessive inflammation and inflammation again is so critical in this area because inflammation is the starting point, It's the final point, it's everything. Baswella was number one an anti-inflammatory. Aspirin, because it has a COX 1 in 2 inhibitors and if you take aspirin ... I take it every day, every night, every morning. If you take it with baking soda, it doesn't cause the upset stomach. It actually works well.

I will share with you, a friend of mine is an M.D. and Ray Peat also told me the same story. His father had colon cancer and he was a medical doctor and he gave his father 10 aspirins a day. He buffered it for him and in six months, It took six months. His colon cancer was totally gone. I've told people to do 3000 to 6000 grams when it's really critical. I get stories from people coming back saying, incredible. Yeah yeah. 3000 to 6000 grams ...3000 milligrams of aspirin. But take it with baking soda or take it with a lot of food. Baswella is good and so is olive leaves. Olive leaf is very high on anti-inflammatory mechanism and so is quercetin. Quercetin also is going to be on this also as a list for anti-inflammatory and heat Shockers.

Speaker 6: On the previous page, LDH What does that stand for?

Bernd: It's how the pyruvic converts the lactic acid and instead of going through the proper procedure of making CO₂ and so they're looking at inhibitors of that LDH now as inhibiting that molecule pathway. The whole thing is, we want to get NAD levels back up. Frank Schellenberg is big on this. That's his big thing, is mitochondrial he talked about niacin and rises NAD. There's a lot of research going on in this area of NAD molecule as one of the key molecules that has more significant function in promoting health and longevity than vitamins, hormones does, antioxidants. This is published now and that's why I want you to go into the anti-aging blog called firewall. It's call anti-aging fire wall, fire wall. Look it up you'll see he's one of these brilliant he's in his 80s.

The guy is 84 years old he's like A youthful mind, I'm on the phone with him almost every other day and he works with brilliant MD by the name of Jim Watson. Anybody know him in Santa Monica? You were in Santa Monica and you haven't met Jim once.

Speaker 7: I think so.

Bernd: He's another fellow and the whole emphasis is controlling down molecule, we control life. We control everything.

Speaker 7: NAD molecule?

Bernd: Yeah. Niacin and Niagin is a big one that's why life extension out of Florida is big. They purchased virtually every manufacturing of the NR from Cromadex.

Speaker 7: Is it possible for you to go back to the previous page because some of the ...

Bernd: There's a few things that I had in here that we didn't get in here because ... Here's one that ...

Speaker 7: The question I have was about the LDH inhibitors, like you have Chinese gallnut, morning glory cinnamon and what else? there were some other things.

Bernd: Let me go ... That's the recent that just came out of Dr Elizabeth Mozilles group out of Florida. Here you are, Chinese gallnut came out the highest by far. Morning Glory was number two, cinnamon, that helps to ... The LDH inhibitors also controls epigenetic function, meaning the genes that are expressed incorrectly. The head of the of the College of Pharmacy is Dr. Karim Solomon and Karim Solomon is a big LDH person, he is huge in that whole mechanism of shifting the pyruvate function, the oxidation phosphorylation function back to normal utilizing oxidation of sugars correctly.

That's really what it is and that's ... Right there your biggest molecules right there, wild yam since 2002 has been always number one on her list, on every cancer. They've done cell cultures of breast cancer, lung cancer, prostate cancer, leukemia and brain cancers those five. And all these were always on all five came out high, without any toxicity level. They will not give you the ones that have high rates but they had also toxicity so they're not going to include that until their second paper, and they are going to try to modify it. There's one here that very exciting she didn't tell you yet and I'm not going to really divulge that because I assign, there's a compound that did this cover from a seed of a fruit. That causes neural genesis that can regenerate a whole new neuron and brain.

They looked at 10000 compounds in nature. None of them did it, just one compound. It comes from Vietnam and Australia and now they're going to do a toxicity study before she wants to even talk about it, because the studies were incredible on it. Causes new neurons to grow. Far out prove anything like lithium or any other ones that also works and lithium does work In low levels, make sure you do low levels one to two milligrams. Has a safety mechanism for lowering GSK which is a major inflammatory thing. Elizabeth Mozzie. You can Google her and you can see she's ...

You won't see the new studies on the latest because it's ... also when you do get methylene blue again, start out with just a 2% percent from Condon you don't need a lot. One or two drops to see how you do, it has anti aging functions. It goes back to S.. 1862 where it actually was used widely for malaria and I had I don't see the malaria study here so that's missing, I guess when I send it over to you, Part of it didn't show up. You have it,, right? It's in the ... I send it all to Susan. It's in there so if you go on to newsletter you'll see all the other publications, science and the research on the brain, how it increases the neurons to grow faster. One of the ways through the complex war and how it suppresses better amyloid and helps with other mechanism nitric

oxide from getting in there and disturbing the function of the brain. Any other questions that we can go?

Speaker 8: Just taking the Methalyne blue as a preventative ...

Bernd: There's a lot of research on Methalyne blue now coming out that it has anti-aging benefits, preventing Alzheimer's, Parkinson's, if it's done on a regular basis. They've it with some concussion issues with you know athletes and concussion that's a new one that a friend of mine at the University of Tennessee is doing right now, I can't talk about it because that's something they're working on but I will tell you once he's done with it. Yeah and like you said you don't need much one or two drops seems to be very efficient and I would do it in distilled water myself. 8 ounces of distilled water, one or two drops.

Speaker 9: Can you give us a supplier for this or do we just go to the aquarium store?

Bernd: Yeah.

Speaker 9: Really? It's the same thing?

Bernd: Go to Amazon I don't even get involved with that.

Speaker 9: So there's not a human brain?

Bernd: I'm not the sales for that, I don't want to get in trouble. Amazon sells it for \$4 or \$5, It's 2% kordon. K-O-R-O-D-O-N. That seems to be really cheap and as a matter of fact somebody went to Petsmart the other day and they got some there. John McIntyre. He's not here and that's the other guy you guys need to know what Steve said about the plates, He's right. John has a beautiful set up in San Carlos, it's free. You just walk in there whenever he's there. You can use this facility for free. He's got the plates, he's got lasers. You want cosmetics done for free. He will do for free. And if you've got pain, it's free.

John McIntyre who is always sitting here the guy knows about lasers and he and he has the whole set up right. If you want to, you can set up appointments with this young lady, raise your hands, and she will set you up with John and her to get a full treatment of everything. He's got it all.

Speaker 10: [inaudible 00:43:47]

Bernd: No, it doesn't have to be food grade. It's got to be aquarium. Where they have an aquarium, anyone that has a fish or something. We can do it after Steve.

Speaker 11: Bernd, I spent days researching every article I could find on methylene blue and everything I could find everywhere and days trying to understand it and a lot of stuff that you said I found but on the brain stuff, it seemed equivocal and most of the research came from a group called Oryx Towel, which is making some kind of

pharmaceutical form Methylene Blue. I just didn't find it so maybe the research hasn't been done yet.

Bernd: I'll show you the clinical studies that came out of Oakland. I'll forward that and have the clinic and the head researcher there. No, that's also where ... And Ray Peat found it there too. He also uncovered studies on Methelyne blue and depression bipolar, that they would reverse bypolar by calling it.

Speaker 11: If you have questions please wait for the microphone because the people at home can't hear the questions.

Bernd: I think we are fine.

Speaker 12: What's the CM yYou had up on the list of ... Is that CME?

Bernd: That is CME. I'll put this on.

Speaker 11: Any other questions?

Bernd: I think we can do later.

Speaker 11: We're going to take a 15 minute break.