

**Mobilization and Elimination of Toxins:
A Special Interview with Dr. George Yu**

By Dr. Joseph Mercola

DM: Dr. Joseph Mercola

GY: Dr. George Yu

DM: Are you struggling with chronic health problems? Could it be possible that you would benefit from a detoxification program? If so, how would you start it? Hi, this is Dr. Mercola, helping you take control of your health. Today we have Dr. George Yu joining us to help us answer that question. He graduated from Tufts University Medical School, did his surgical training at Harvard and Johns Hopkins, and for the last 35 years has been associated with George Washington University. He's now on some very exciting trials to help detoxify people from the Gulf War, I believe, and also 9/11. Welcome and thank you for joining us today, Dr. Yu.

GY: Thank you, Joe.

DM: I'm wondering if you could help provide a frame for the information you're going to share, because it seems somewhat unusual for a surgeon, a really conventionally trained surgeon like yourself, to really start exploring these areas of natural health and detoxification. I'm wondering if you could expand on that.

GY: Yeah, it's a common question. Around 2002, as a urological oncologist doing lots of surgery for advanced diseases, I was asked to audit some of the cases in which an organization used caloric restriction to approach terminal cancer diseases. One of the things that we noticed when we looked at the radiographs with Dr. Peter Choyke at the National Institutes of Health (NIH) was that when the tumor regressed, the fat – the visceral fat – also regressed at the same time.

What happened was because I was so interested in fat along with the tumor regression, this fellow named David Root, who was involved with detoxification for the 9/11 firefighters, called me. We had a dialogue in which he said, "What happens when we remove some of the toxic chemicals from the fat? How much is left in the visceral fat," since they're fairly... Some of the firefighters were heavy. I said, "Probably quite a bit still." They feel much better, but it's a mobilization of the fat. That's how I got involved in it. I realized that perhaps some of the fatty tissues may be extruding the toxic chemicals at the time that they lose the weight on a calorie-restricted diet.

DM: That sort of sparked your interest in this area. What were the next steps that started your journey down the process of developing a protocol that seem to be effective at removing these toxins?

GY: It isn't my protocol, but we adopted a lot of other people's, okay? What happened was after I spoke to David Root, he presented a paper, which he published in 1990 and in which he did that sampling of workers in Yugoslavia who were working on capacitors. We noticed that that fat was 140 to 150 times higher than the blood level. At that time, I said, "Why don't we look at what it would be like in the present person in a normal situation, where they're not exposed to these highly toxic chemicals?"

I published a paper in 2012 in which we looked at toxic chemicals in the visceral fat in three different compartments: the retroperitoneal, the pelvic area, and the visceral/mental area. We found without surprise that a substance like dichlorodiphenyldichloroethylene (DDE), which is a metabolite of dichlorodiphenyltrichloroethane (DDT) – these were ordinary people – was about a thousand times higher than the blood serum levels, and this is consistently so. We also noticed that for the average person now, they are doomed to having lots of chemicals inside their bodies, from 500 times up. Then we said, "What do we have to do to get this out?"

What happened was one of the things that Dr. Root had a lot of experience with was looking at Agent Orange in Vietnam War veterans. He used a system that's not new – he used niacin as a way to mobilize fat and also to free up the toxic chemicals locked up in lipophilic tissues. That's fat in the brain. By using a graduated niacin dose, you cause a rebound lipolysis, which I suspect is why it's so effective.

Of course, you know, Joe, a lot of substances come out from your body. But the two biggest surface areas are the skin and the GI tract. In our clinic, we started thinking that we have to mobilize it not only from the skin by sweating after we use the niacin, but also using the GI tract to pull it out. This is well-known.

DM: Which is the largest surface area? Is it the skin or is it the GI tract?

GY: I believe it's the skin, and then comes next is the GI tract.

DM: Okay. Well, great.

GY: One of the things that I want to clarify is that people think detoxification is the process. I think [it's] actually mobilization of the toxic chemicals, and then having a way to eliminate it and to excrete it out. "Detoxification" by medical terms is only in the liver. That's very important. But to mobilize things quickly, you have to use this kind of system. By the way, if you lose weight, the Biosphere 2 study showed that you will gradually move the toxic chemicals out from the fat to the blood, and then you can remove it.

DM: That's an important concept since two-thirds of the people in the United States and in most of the developed world is overweight. A simple way to detoxify is to optimize your lean body mass, because you can't store toxins if fat is not there.

GY: Right.

DM: Are there ways that you mobilize these chemicals in a person who has abnormal body weight, so they can be excreted?

GY: Extrapolating from things like the Gulf War study and the present Gulf War study, we know that if you use niacin – okay, niacin, vitamin B3 – you can mobilize the toxic chemical and the triglycerides. At that time, you need to exercise to create a fat circulation, vasodilation. You're close to the surface of the skin and the GI tract. You have to pull it out either by sweating or using substances like activated charcoal, zeolite, and even oils. [Fiber 8:18] will do that. We used to see that. When I was an intern, we used to see kids coming in with a bronchodilator toxicity. We would give them charcoal, and it would pull it out through their GI tract from the blood.

DM: I'm wondering what type of chemicals you're finding. Maybe before we go there, if you could give us some examples of what you're able to do with this protocol once you optimize people to mobilize those toxins and eliminate them. Maybe you can give an example of some of the cases you've seen from the 9/11 or the Gulf War – what type of symptoms they had, what type of intervention you did, and then what results you saw after that intervention.

GY: The best example that I'll show (and send a picture to you) is the 9/11 firefighters. There was a man who developed a Parkinson's-like tremor along with the cognitive problems. What happened was they gave him the program, meaning they went on to a very high dose. After the program, he noticed that the towel was full of this purplish material. The purplish material was manganese. Thereby, he was able to relieve himself of these tremors. It's well-known that overdose of manganese will cause this kind of symptom. That's a very, very clear example of eliminating something that was housed probably in the fat cells.

[----- 10:00 -----]

Now, when it comes to the average person who's not exposed to these traumatic episodes, when you lose weight, when you sleep, you are causing a lipolysis. When you cause lipolysis, you are freeing the triglycerides, but also you are freeing some of the chemicals. At that time, the blood level is high with the toxic chemicals probably. Now, that's why yo-yo diet's bad, because if you don't get rid of it at that time by sweating or mobilizing the GI tract, it goes right back into your fat cells.

Yes, it is good to have a lean body and to lose fat, but then you have to go into a sauna. You may have to take niacin. The niacin dose that we use for ordinary people is nothing like the 5,000 milligrams of niacin used for people who are highly exposed. The dose you can start with is about 100. You will get a flush – don't get me wrong. This is a prostaglandin-induced effect. But as you get used to it and you do exercise, you take cold showers, and you take post-exercise sauna... Any kind of sauna will do; it doesn't have to be any specific one. I've even used bathwater. This goes for any kind of substance –from anesthetics to medicines to toxic chemicals.

DM: Yes.

GY: My experience as a surgeon was that a lot of times, we had patients who had small hernia repairs, and post-op they would be so fatigued for about two weeks. I said, "Okay, let's put them into a cleansing and elimination program using niacin and hot baths." They got rid of it very quickly.

DM: You had mentioned that pretty much any type of sauna would work. But the infrared probably is a little bit more ideal because most likely you're able to get that heat down.

GY: It's a little more comfortable and it can penetrate a little bit deeper without all that input, okay? We, of course, look for saunas that don't have a lot of electromagnetic field (EMF).

DM: That's a big component because when infrared saunas first became popular, that wasn't an issue that was looked at. But a lot of the earlier ones do have relatively high EMFs.

GY: Yeah.

DM: If you're going to use an infrared sauna, you want to make sure it's low EMF.

GY: There's a fellow named, I think, Gary Duncan, who invented a way to eliminate the EMF, which is great.

DM: There are a number of brands out there that have that, but any sauna would work.

GY: Exactly. As I said to you, some of our post-op patients, they didn't have saunas. I just put them in a hot bath.

DM: Right.

GY: They got the stuff out. The heat is the important thing.

DM: One of the other issues is that if you're doing this in a facility that's regularly doing it or even in your own family, you have to be somewhat cautious because these are chemicals that are actually being excreted through your sweat. They can contaminate that sauna. Can you comment on that?

GY: Yeah. I think for the average person, it may not be a problem. I do encourage people to clean their saunas periodically. But yes, there is an extrusion of that. In fact, some of our patients who have undergone chemotherapy and who have some of the residual effects, by going into the sauna, they could smell a different chemical in the saunas. They have to really clean it out because it's basically excreted through the skin. We use things like charcoal, activated charcoal, zeolite, and oils to pull it out of the GI tract, which is a little easier to handle.

DM: Okay. Now, I'm wondering, some people don't particularly care for the experience of being in a sauna, primarily because of their head exposure, you know. It just gets too

hot for them. There are so many saunas that just expose the lower extremity to a sauna. Obviously, that's much less skin exposure. But if you stayed in there longer, would that be just as effective?

GY: I think so. I mean, I don't have a lot of experience with that, but it seems to me the basic principle is using large surface areas such as the skin and the GI tract. You're actually breathing out some of the toxic chemicals, but it's very slow.

DM: Okay. It's an interesting combination. Basically, you have two processes to mobilize and then the sauna to excrete it. But the mobilization would be the use of the niacin and then combined with exercise.

GY: That's the key. That's the key point.

DM: You're also using exercise to help mobilize it. Can you describe that?

GY: Let me just expand on one thing. At the Karolinska Institutet around the '60s, there's a fellow named L.A. Carlson who did tremendous amounts of research on niacin. One of the things that niacin has an ability to do is to suppress lipolysis for about an hour and then it can't do it anymore, and it causes what they call the rebound lipolysis. It's that phenomenon, I think, that's what makes niacin so useful. So, a cleansing and elimination program.

DM: Maybe you can just touch on the protocol that you use for building a person up to niacin because, as you mentioned, it causes this flush, which can be very discomforting to anyone who has not had that before. You have to gradually build up the dose to therapeutic levels of the 5,000 milligrams that you mentioned, which virtually no one would ever want to take as a first dose because you can run into some serious problems.

GY: No. I personally have experienced 3,000 milligrams. I'll tell you: once you get used to it, it's not a big deal. But what I'm saying is that for the Gulf War syndrome project, which is going on right now with David Carpenter, they go right up to 5,000 gradually, but they go up within a 30-day period. They have a dose-related...

DM: Okay, 30 days.

GY: Yeah, they have a dose-related response. They get better, it plateaus, they get better, and it plateaus. For the average person, I would recommend starting with something like 50 milligrams, trying it out, and see how it feels like. I tell people to take showers if they need to and just be expectant that it's going to cause a vasodilation. Vasodilation, I believe, is important because it makes the arterials expand, and it's close to the skin, therefore facilitating the elimination. As you go from 50 on (you go up to something like 500 or even 2,000), you become accustomed to it.

DM: How long does that flush last for?

GY: About 30 minutes.

DM: Thirty minutes. Ideally, you'd like to time the flush to the point when you're in the sauna, so that you can get the maximum benefit from it.

GY: No, [it's] not necessary.

DM: No?

GY: It's not necessary because it, I think, persists but you don't see it.

DM: Oh, okay. How long does it persist? For a few hours?

GY: Yeah.

DM: Okay.

GY: The lipolysis is going on all the time. It goes up to five hours.

DM: It's not so much the vasodilation of the capillaries in the skin that increases the elimination; it's this lipolysis effect of niacin.

GY: Correct. Absolutely correct, yes.

DM: That is basically breaking down the fat cells.

GY: Well, it's exploding it. That's what lipolysis is. When you're sleeping, you'd be eating every two hours if you couldn't get a lipolysis effect. The lipolysis releases triglycerides as a form of fuel. But I believe that the toxic chemicals do come out at that time.

DM: Okay, all right. That's what we're trying to people to think about.

GY: For the medical community and for the research community, I believe that there have to be more studies done looking at this empirical finding and to do more animal studies looking at how the toxic chemicals mobilize out when there is a lipolysis effect.

DM: Perfect. But your process basically involves a 30-day protocol that you're putting people on.

GY: Yes. That's the protocol that has been used with the really exposed people. My feeling is it can be used for people who are less exposed. In fact, David Root and I were talking that we should be offering that to all the companies that have their workers exposed in one form or another, just like the gasoline industry.

[----- 20:00 -----]

DM: Sure. What are the specifics of the protocol? How often are you doing the sauna-niacin combinations? Is it a few times a week? Is it every day?

GY: You mean for the average person?

DM: Yes, right.

GY: For the average person, I would say twice is enough.

DM: Twice a week?

GY: Yeah. And you have to mix in the exercise because it also causes vasodilation and increased cardiac outputs. You're moving things. We insist that we follow the same protocol for the more toxic people: they take it, they exercise, and then they go into the hot room to sweat it out. Because we are in the private sector, we can add things to eliminate things from the GI tract.

DM: Interesting. Those would be the clays like the zeolites and the activated carbon?

GY: Yeah. It's interesting that the gasoline industry has this Super-Sorb, which is even higher surface area of charcoal, that basically refines gasoline. That's what your water filters are; it's nothing but charcoal.

DM: Charcoal is obviously very safe. They used it to give it to people...

GY: We use that...

DM: In the emergency room.

GY: Yeah, you use it for infections. You use it for toxic chemicals.

DM: Sure.

GY: If you want to get any medicine out of you, just drop charcoal in there, and it'll just absorb it.

DM: The only problem with it is the palatability is a bit of a challenge, because it's basically very gritty and it's not very palatable.

GY: You take it as a tablet.

DM: Oh, you take it as a tablet; you just don't take the powder.

GY: Right, you don't. This is a modern world. You don't have to put black stuff. In fact, the Japanese use a charcoal-based toothpaste. I'll tell you one thing: it'll clean up the coffee stains from your teeth very quickly.

DM: Yeah, activated charcoal is amazing. We use a form of it in agriculture, too, called biochar, which does pretty much some miracles on the soil. But what type of dose are you looking at orally?

GY: You mean for the charcoal?

DM: Yes.

GY: The charcoal, I generally use about five commercial-based tablets. It's encapsulated. Five will do wonders.

DM: Is that a gram per tablet? Per capsule?

GY: I think it's 500 milligram. But it really doesn't matter. It's pretty arbitrary.

DM: Just to get a few grams down. It's not really going to matter. You just want to have a minimum dose because you really can't overdose on it.

GY: You can't overdose.

DM: I think the caution would be you wouldn't want to take any supplements around that time because obviously, the charcoal would tend to bind those supplements and excrete them, too.

GY: Absolutely. For instance, people who take digestive enzymes for digestion, if you take the charcoal tablets with it, there will be no digestive enzyme to effect.

DM: Yeah.

GY: If you take a medicine with charcoal, there will be no effect, even things like Coumadin.

DM: It's considered a magnet. You want to use it therapeutically and wisely to pull out the toxins; you don't want to remove the nutrition from your food or your supplements.

GY: Right. You have to take it at a certain time. We know, as I said, in the emergency room when I was an intern in 1973, we used to use that for bronchodilator overdose. Just pop five charcoal tablets in the kid and within an hour, he's not shaking anymore from the overdose.

DM: Yeah, that's an effective approach for sure. Obviously, it's a very important tool to use in eliminating the toxins that we're almost all invariably exposed to. I'm wondering if you can comment on some of the more common ones that you see the typical person might encounter, where this process would be useful for.

GY: You know DDT has just been around. Many of the generations of people probably listening to this probably never want to be exposed to it in an active way, yet it's in all over the whole world. As I said to you, when I did that publication, which I'll send to you, we saw it's up to a thousand times higher than the serum. It's already in the soil. Of course, if you eat seafood, you kind of get a lot more. It's just naturally inherent by you existing that you're going to be exposed. It's in the water. It's finally going into you.

DM: What's even more dangerous and certainly now more pervasive than DDT is the Roundup or glyphosate, because they're spreading nearly a billion tons – a billion tons – a year on the soil. Obviously, DDT is not used in the US anymore. We've got this massive input. I'm wondering if you've looked at glyphosate's ability for this process. Is that something that would be helpful? Because if you're eating processed food, you're eating glyphosate; it's in there, guaranteed.

GY: Yeah. What I see a lot of times in talk shows and books is what's in there and that you have to eliminate it. But you're not going to eliminate all those chemicals. What you have to do is you have to use an active proactive approach like the program to clean your body out effectively.

DM: Yeah, but have you looked at glyphosate? Is that something that is actively eliminated with this process also?

GY: I don't know the formal studies yet.

DM: Okay.

GY: But expect anything organic with a carbon or aromatic chains will have the same effect.

DM: Okay. That's going to be a progressively increasing issue. I think we're really in the early phases, somewhat like smoking when it first started. We didn't know that it kills people with cancer. They were in denial for a few generations, but now we know.

GY: Right. You're talking about the chemicals, but your own body probably makes a few things that are not so desirable either. You want to eliminate that.

DM: Okay. That's a good process that you're helping refine. Now, with respect to this detoxing, are there any other benefits, like improving life expectancy or slowing down the aging process?

GY: I don't want to get into this, but Michael Skinner is one of my heroes. He's in Seattle. He talks about the epigenetics of chemicals. That's different from the traditional toxicologist who talks about how it's an endocrine disruptor and all that. This is an epigenetic methylation process, which goes into your genome, and God knows whether it goes into your mitochondrial DNA. But it stays for generations, you know, for generations. It gets passed on. This whole area of epigenetic effects of chemicals is clearly demonstrated and proven, which is what you're talking about. You say, "What are we going to get out of this?" It's unknown. It's many things.

DM: Okay.

GY: We know that in Michael Skinner's studies, he looked at certain variables like fertility, and he could see it passing on from F1, F2, F3, to F4 offspring.

DM: F1 is what's used to refer to subsequent generations in research.

GY: Right.

DM: For those who are not aware of that. Is there...

GY: Of course, that can affect cancers, too.

DM: Yeah, there's no question. Our strategy for keeping people healthy is to optimize your lifestyle by eating the healthiest foods you can, exercising, and getting sleep, sunlight exposure, and good water. The other key is limiting your exposure to this toxic influence. But sort of a subset of that would be to engage in a regular detoxification process, too.

GY: I think it's even more important to regularly, proactively, implement something to remove that, because you don't even know what you're getting exposed to.

DM: This would be good for many if not most of the toxins. But there are some that are really firmly bound with covalent bonds, like mercury, which binds the sulfhydryl group. Now, this type of protocol that you're using wouldn't be useful for mercury elimination.

GY: I'm not sure. I think, you know, I have not looked at that nor have other people looked at this method. But this is probably the most powerful system developed, and believe me, it's not developed by me.

DM: Sure.

GY: I'm just using it.

DM: Yeah. You're using it in government-funded research to get results from pretty significant, socially established challenges like the Gulf War syndrome and 9/11.

[----- 30:00 -----]

GY: Right. Well, let me clear up one thing. I sent you the brochure for the Gulf War syndrome. This is not me; I am peripherally involved. But David Carpenter of the University of Albany was the champion of synergistic effects of toxic chemicals acting as one unit affecting your body. He was instrumental in getting this program together to help the Gulf War syndrome soldiers. It's not me.

DM: Sure.

GY: But I do practice this. For our clinical practice, one of the things that's very practical is that for people who had anesthesia after surgery, you could remove that the same way.

DM: Sure.

GY: You could remove drugs.

DM: Many people aren't aware that the anesthetic may be one of the most dangerous aspects of the surgical intervention.

GY: Correct.

DM: Yeah, because a lot of them are fluoride-based or have fluoride in them.

GY: Right. I mean, it's a necessary evil. Chemotherapeutic drugs probably are also trapped. When we say "clearance," we're not thinking about what's in the fat, and it gradually comes out.

DM: Sure. What would you recommend for someone who's reasonably healthy as to the frequency of doing this detox program? It sounds like it's a 30-day process and a few times a week. That would take about a month. How many times a year should they do that? Twice a year? Three times?

GY: The way I look at it, I don't look at it as a 30-day program. It should be a part of your lifestyle. You should have a sauna at home. You should be doing this maybe twice

a week as part of your exercise routine. I haven't talked about exercise routine as part of moving your lymphatic [system] and removing toxic chemicals out of your body.

DM: Interesting.

GY: It's a lifestyle issue.

DM: Yeah. Now, when you're engaged in the sauna aspect of the program, how long do you typically find it necessary to get the benefit before you've sort of exhausted what you've mobilized?

GY: Usually, not the extreme where they stay in for three to four hours. I would say an hour. I mean, the temperature has to be high enough, so that you're sweating.

DM: Yeah, you got to sweat.

GY: It's got to be, from a sauna standpoint, around up to 104. You're really sweating.

DM: Okay.

GY: Now, you could be sweating even in a bathtub if the water's clean.

DM: How about the process of combining it with the ultimate infrared sauna, which would be the sun? Obviously it's not possible or practical for most anyone in the winter, but in the summer, it is, and it gets up to pretty high temperatures. Could you take the niacin, exercise, go sunbathe, and sweat?

GY: It's tough on people because the niacin does cause that vasodilation. What I tell people is to take a cold shower any time you want when this happens. Go for a swim and then do your exercise outside. That's fine.

DM: But then...

GY: But then on most people... Yeah, go ahead.

DM: Well, the sun is a source of infrared obviously. I'm wondering if that would provide similar benefits as an infrared sauna as long as you're engaged in starting to sweat.

GY: To a lesser extent, yes.

DM: Oh, really, lesser than the sauna?

GY: No question about it because the temperature of the sauna is much, much higher. It's 104 degrees.

DM: Oh, okay. Now, how about a steam sauna? Obviously, there's no infrared radiation there, but it can get pretty darn hot and seems to be much more effective than a dry sauna.

GY: Not necessarily. The important thing is the heat.

DM: The heat.

GY: And the niacin.

DM: Okay.

GY: The niacin and the heat is what's important.

DM: Okay. That's good to know. Now, you've been doing this for... How many years now have you been involved with it?

GY: I've done it clinically for my patients after surgery for about 12 to 15 years.

DM: Okay. You've been involved with it for a while. Have you seen any changes involving conventional medical circles as to incorporating this? Or do you see a shift occurring where they're starting to understand the value of this process?

GY: I think it's low. That's why we need studies like the Gulf War syndrome study with David Carpenter. The Department of Defense (DOD) gave him this grant because they didn't know what to do with these people. But the important thing is that we learn from this and we can apply it to ourselves. Of course, when that happens, it's published in peer-reviewed journals and people start thinking about that. But I think it takes a long time. It's a paradigm shift in thinking about removing... That's why I always say it's mobilization and elimination; it's not detoxification necessarily because that's in the liver.

DM: Okay, that's a very good distinction. Thank you.

GY: Yeah, and most doctors and health workers understand that very well. When you say "detoxification," they think liver.

DM: Right. But then they're also thinking, "This is some New Age knucklehead who doesn't understand what the whole process is."

GY: Right.

DM: Just expanding it with some other terms – mobilization and elimination – might help them better understand what's going on.

GY: Yeah, it's much easier to understand and it's quite demonstrable.

DM: So, this David Carpenter is doing this study?

GY: Yeah.

DM: I think you mentioned that it was available. Some aspects of this are available for someone who might be sick or ill to be involved with this. Can you expand on that?

GY: It's free for all the veterans. It's free for all veterans [who have been] exposed and who have the symptoms. Of course, they're doing the recruitment. I want to put a plug in for them because they're doing a great job and the DOD has forked out a lot of money to do this.

DM: The DOD would be the Department of Defense.

GY: Yeah, right. It's a great opportunity. David is world-renowned. We can get something out of this. Along with it, people who may be exposed to chemicals... I don't know the results of this. But even people who may be exposed to asbestosis can possibly benefit from this.

DM: Okay.

GY: One of the slides that I'll show you is that even sunlight and radiation is eliminated by this process. We see people from the 9/11 incident in which they went through the program and they saw first their old swimsuit... After the first four treatments, it's gone. No more.

DM: That's great. If anyone is a Gulf War veteran with these symptoms of Gulf War syndrome or [if you] know someone who does, definitely connect them up with David Carpenter's study because it's a free treatment. There's a good chance it could have dramatic improvements for their condition.

GY: That's right. In addition, they may be at the same facility. People who are exposed and who want to go through the program, they could do it outside of the research.

DM: But in general, it's your conclusion after being involved with this for more than 10 to 15 years that it's probably a wise routine or habit to integrate into your lifestyle to mobilize and eliminate these toxins that we're invariably exposed to. Twice a week, consider the niacin, exercise, and sauna routine.

GY: Yeah, plus the GI tract.

DM: The GI tract, right. But be careful to time it with your supplements and your food.

GY: Right. The other thing is this whole issue of drug addiction. A lot of the drugs are organic, and they also stay in the fat cells. This whole arena of exposure to drugs, abuse of drugs, there's an opportunity to take care of those people and get that load or burden out of the fat cells and the brain.

DM: Sure.

GY: The brain is nothing but a very lipophilic lipid.

DM: There are a lot of benefits for living in the 21st century, but the downsides are that there are a lot of industrial toxins that we're exposed to. I'm wondering with the GI tract (thank you for reminding me of that), the timing of the activated charcoal and actually the timing of the niacin, too – if you are going to time your exercise, when would you take the niacin, when would you take the charcoal?

[----- 40:00 -----]

GY: I would take the niacin at zero time. In 20 minutes, you should be exercising. In about 40 minutes, you should be in a sauna or a hot medium. After you get out, you can use the charcoal to get rid of it.

DM: After you get out of the sauna, you do the charcoal?

GY: Right. That's a good time to do it because then you have it in sequence. But keep in mind, when you sweat, you lose a lot of minerals and even vitamins. You have to replace it somehow. For the person who does it twice a week, it's not an issue.

DM: Right.

GY: For the person who's truly trying to get rid of something very bad, it's very important.

DM: Yeah, you want to make sure you take a lot of electrolytes, which would be the key thing, like sodium.

GY: Electrolytes.

DM: And potassium.

GY: There's a program that I like to use. There's a program that's very clear. I could show you that. It's very well-documented, the sort of things you need to do.

DM: Would there be a benefit to taking clays in addition to taking activated charcoal, things like zeolite?

GY: Zeolite, all you're using, Joe, is an absorbent. It can even be oils. Oils will also attract, because a lot of lipophilic substances will gravitate toward the oil. You can use lecithin. You can use things like that. But the problem with oils is it runs right through you sometimes.

DM: Sure. Hopefully, it runs through you with the toxins, and you can eliminate them. That would be a good thing.

GY: Right. That's what you're trying to achieve.

DM: All right. Are there any other words of wisdom you'd like to share with us on this process?

GY: I think we covered it. The important thing is that people don't think of this as toxic chemicals – even alcohol is a form of toxic chemical. It's habitually practiced by just about everybody as a social vehicle. Medications that you take for headache... The people who are using substances would all benefit from eliminating some of that regular interval as part of their lifestyle.

DM: But with the alcohol, as far as I understand, that's not lipophilic. That's relatively quickly metabolized by the liver. It's not stored and something that a detox program wouldn't be necessary for. Is that correct?

GY: Right.

DM: I mean, it's a toxin for sure. But thankfully, it's one that the liver eliminates. The reason that we're reviewing this is that for many of the toxins we're exposed to, that is

not the case. Your body's way of addressing this is literally to store it in your fat cells. When you do lose fat, it can cause problems. This is an active process to mobilize it and remove it from your body.

GY: That's a very good point about the yo-yo diet. Most people undergo yo-yo diets. When we have people losing weight, we insist that they use the niacin to eliminate the toxic exposures in their bloodstream. We want to get it out. Every weight loss program should be thinking about that. But you know, most of them don't think about that.

DM: That's a very good point. If a person's engaged in an active weight loss program, they're going to have some way to eliminate those toxins. Say, someone is in the process of losing 30, 40, or 50 pounds, would you recommend that they take the niacin on a daily basis and do the sauna daily?

GY: Yes.

DM: Okay. All right. That's great. Thank you for all your time and for sharing your years of experience with us to help us understand this important process of eliminating these toxins that we're all regularly exposed to.

GY: Yeah, and one last note: people who have to be exposed to certain chemicals like anesthesia and even chemotherapy, afterwards they can eliminate some of those by helping themselves.

DM: All right. Thanks again. We'll definitely share the information especially with those who might be suffering with the Gulf War syndrome.

GY: Okay, thank you.

DM: Thanks a lot. Bye now.

[END]