Dr. Tom O'Bryan: As we go through the next three sessions, I'm going to be a little bit geeky and so you'll want to listen to it again and again. The purpose of this course is beginning the base hit, so let me explain for some people who are not in the United States what that term means. I've been signing my books when people ask me for an autograph. I'm really happy to do that and I sign it now the same way and it's always the same. It's base hits win the ballgame and so for those of us in the United States, we know what that means. For those in other parts of the world, in the game of baseball, the game is played where a person hits the ball and then runs to first base, then to second base and to third base and to home and when they come home, they score and that's a point.

Dr. Tom O'Bryan: The idea is for as many people as possible to go all the way around the bases and the other team tries to stop them by catching the ball and throwing them out, but we all think that home runs, hitting the baseball out of the ballpark, the big home run is so exciting and we think that that's how you win ballgames. That's not how you win ballgames. Base hits win the ballgame just getting to the first base and then the next person that comes up hits the ball and they go to the first base and the person who is on the first base goes to the second base, and the next person comes up hits the ball and then each runner goes around the bases, so more people score.

Dr. Tom O'Bryan: In our healthcare system today, we have been, bred is the word I would use, bred to believe that when you have a symptom, take a drug and when the symptom's gone, you're fine. The drug is like the home run. The drugs were designed to address the symptoms in general, to address the symptoms and it's very important to have symptom relief, very important but when you have symptom relief with almost all medications. If you look at the explanation that comes with the medication or if you look in the PDR, the physicians desk reference, there is a list of side effects to the medications and many of them are what are called comorbidities.

Dr. Tom O'Bryan: Meaning, for example, if you have diabetes and you take the medication for diabetes to get your blood sugar stable, it's important to take the medication, but the medication leads to a higher risk of heart attacks and a higher risk of high blood pressure and a higher risk of strokes and a higher risk of dementia. It's called type 3 diabetes, it looks like Alzheimer's. The side effects of taking the drug which keeps you less symptom oriented so it looks like a home run, but in the long run, you have earlier illness and earlier mortality with the other possible side effects. We've been led to believe home runs win the ballgame, take a drug, and you'll be fine and nowhere does that come more into being than in the area of antibiotics.

Dr. Tom O'Bryan: It is critically important if you need antibiotics, you take the antibiotics and it's really important that you take the antibiotics for the length of time that your doctor has prescribed them. If you have a sore throat and they give you antibiotics, now we'll talk about should they have given you antibiotics.

Dr. Tom O'Bryan: That's whole nother question, but if they give you antibiotics and two days later you feel fine, but it's a 10-day prescription, you need to take the 10 days because in the first two days of taking the antibiotics or the first few days, not just the number two, but in the first few days, the antibiotics kill off the larger colonies of the not good bacteria that are weaker and vulnerable to the antibiotics, but those bacteria that are stronger and a little more resistant to the antibiotics, they don't get killed off right away. The antibiotics are used up killing off the weaker invading bacteria and the stronger invading bacteria is still there.

Dr. Tom O'Bryan: If the weaker invading bacteria was the highest amount, most of the army is the weaker bacteria and you wipe them out in the first two or three days, so your sore throat is gone and you think you're fine, but the stronger bacteria is still in the background and you stop the antibiotics, now that stronger bacteria that was growing with the weaker bacteria, the stronger bacteria can then grow more and they are stronger, more resistant to the antibiotics. They didn't get killed off right away. You got to hit them a number of times and if you stop the prescription in the first couple of days, then those stronger bacteria colonize and get stronger.

Dr. Tom O'Bryan: Now the colony of bacteria you have is more resistant to the antibiotics. Two months later, you have another infection and you get another prescription for antibiotics, but now it's seven days, eight days before you feel better because the stronger group of bacteria are more resistant and then take seven or eight days, but there's still stronger bacteria underneath those. I think you get my point. This is the genesis of antibiotic resistant bacteria and it is a epidemic now. When I was first in my practice in Chicago in the 1980s, I tried to look it up, I couldn't find it. I don't know how to do the research to find this, but I think it was 1984. The first child in Chicago who died from an antibiotic resistant bacteria.

Dr. Tom O'Bryan: None of the antibiotics worked and it was a bacteria that we all were familiar with. It was a type of staph infection, but none of the antibiotics worked and the child died and it made the newspaper, child dies, antibiotics don't work. It was the first one. Now last year, there was over 30,000 people in Chicago that died from antibiotic resistant bacteria and in New York and in Minneapolis and in Atlanta and in San Diego and San Jose and Missoula Montana. You get my point that in the last 30 years, bacteria they're really smart. They've been around for thousands and thousands of years, they adapt to the environment and the really strong ones survive and they colonize, and you get more of them.

Dr. Tom O'Bryan: The first message here is that we look for the home run, so we fall back and our doctors are trained to think this way to immediately prescribe when there is a symptom. If you are going to take antibiotics and we're going to show you in week session two which is the third session. Today's the intro, then session one is going to be on toxicity and detoxification, then the next session will be on inflammation, and then the third will be heal and seal the gut. I'm going to show you in this third session inflammation when bacteria or when antibiotics are

more likely to be a benefit and what are the things you can do before you fall back on antibiotics that often will work and when is it okay to do that and how do you do it.

Dr. Tom O'Bryan: I'm going to show you that, but we need to set the context first here because so many people just don't know and we want to believe what our doctors have been trained. Some of the things I'm going to tell you, I'm hoping that you will be skeptical, I'm hoping that you will. Skepticism means I'm not sure I can embrace that, I'm going to look into it further. That is great, that's what I hope for out of these four sessions, is that you look into this further because beginning the base hits means you're beginning the path to really understand how to protect you and your family because you all know the numbers aren't working in our favor right now.

Dr. Tom O'Bryan: You've heard some degree of that in the past from me and many other of my peers and articles that you read of diseases are going up, autism's going up, heart disease is going up, mortality is going up. The last three years in a row for the first time since we've been keeping records, the lifespan of adults in the US is going down. For the first time last three years in a row, down, down, down. Every year before that since we started keeping records, it was going up, up, up, up, up, but we've hit a threshold and three years in a row now, it's down, down, down. That's not making the newspapers. It should, it should be on the front page of every newspaper, but it's not.

Dr. Tom O'Bryan: This is a heads up that what we're hearing and what we see in advertising is not what's going on in healthcare in our country today. It's what the pharmaceutical industry would like us to believe is the direction of our help, all the happy people that are taking the drugs that they're taking in the ads. There's a place for pharmaceuticals. Please don't misinterpret me. If you need the drugs, you take them. If you have high blood pressure, you take them, but you've got to ask why is that happening. This concept base hits win the ballgame, another way of saying it for those that live out country and they can't quite understand this game of baseball is baby steps get you to your goal.

Dr. Tom O'Bryan: Most of us have heard the very famous quote from the Chinese philosopher Lao Tzu that says, "The journey of a thousand miles begins with the first step." The journey to higher vibrant health for you and your children and your family begins with the first step. There is no magic pill that is going to do it for you. We really have to learn how to protect ourselves. It's going to drop your jaw in the next session on toxicity and detoxification. When I show you the pictures of what happens to aluminum foil when you bake with it and what happens with your shower heads, it's just going to what, what, but this is the world that we have and baby steps are going to be when you learn what the options are instead of aluminum foil.

Dr. Tom O'Bryan: Baby steps are going to be when you learn what the options are instead of plastic containers. Baby steps win the ballgame or baby steps get you to your

goal. Base hits win the ballgame. Same concept, very same concept. That's the first message that I want to make sure to deliver here today is that for most of the people on this call, I believe that you're a much more sophisticated health consumer, that you've been working on this for a while. Maybe you've read my books, maybe you've read the Autoimmune Fix already or You Can Fix Your Brain or you've watched Betrayal or you listen to the Gluten Summit or you saw a Broken Brain and Broken Brain 2.

Dr. Tom O'Bryan: Many of you have had a lot of exposure already and you're very sophisticated, so this first concept is old news for you in some degree, but for some of you, this is a first ever your daughter encourage you to register for this as a couple of people said when they registered or you heard about us and you're here for the first time, so thank you so much for being here, for all of you. I'm flattered that you're here and so that's the first concept that I want to make sure we all understand is there's no magic pill, that it really is one step in front of the other, in front of the other, in front of the other and our birthright is to be healthy.

Dr. Tom O'Bryan: Our birthright is to be vibrant, dynamic, and healthy, but unfortunately the world that we've been born into will not allow us to be that way. It's extremely toxic. For example, I'm just looking at a question here from Jane that says, "How can I best manage primary biliary cirrhosis?" Really good question, critically important question, critically important. Primary biliary cirrhosis is not a good diagnosis, that's an autoimmune disease and the first thing Jane read the book about where autoimmune diseases come from.

Dr. Tom O'Bryan: When you read the book and you understand this big picture, then the baby steps that you have to take that you're going to hear in the next three sessions will make a lot more sense to you and you say, "Oh, I understand why I need to do this. Oh, I understand why I have to do that test. Oh, I understand that it maybe I have heavy metals. Oh, I understand that maybe I have celiac disease." Primary biliary cirrhosis is 20 times more prevalent when someone has celiac disease than [inaudible 00:15:09]. It's going to describe it to you and ask that you imagine it with me and I did this in my practice all the time.

Dr. Tom O'Bryan: In the first day when a patient is about to receive care after we've gone through an evaluation and my initial training was as a chiropractor, and so I worked with a lot of people hands-on on the musculoskeletal system, a critically important approach to take. For some people, it is the reason why they have autoimmune diseases is because of a mechanical problem. It's in the book, just read about this, but for others, it's not mechanical. If it is mechanical, no pill is going to fix it until you deal with the mechanical imbalance. You also have to deal with the mechanical imbalance.

Dr. Tom O'Bryan: When we walk into the treatment room for the first time and there's a table there that the patient would lay down on, but before they lay down, I would say, "Mrs. Patient, I'd like to give you an example if I may first of how we're going to deal with this condition that you've been diagnosed with," and if I use

primary biliary cirrhosis Jane as the example. I would stand next to the patient and we're facing the table, so the table is right in front of us. I would say, "In a moment, I'm going to put my hand on your arm and ask you to take a step backwards with me together, okay?" She says, "Oh, okay."

Dr. Tom O'Bryan: They don't know what I'm doing, but they say okay and I say, "Okay now, imagine that you're lying on the table," so I'm going to use Jane as the example who asked the question about primary biliary cirrhosis. Jane imagine that you're lying on the table right now and you and I are looking at this body on the table that has been given a diagnosis of primary biliary cirrhosis. What we have to do and then I would touch her arm and say, "Okay take a step backwards please with your right foot your left foot," and we'd step back to the others. We have to step back and we have to look at this body and not be the body.

Dr. Tom O'Bryan: You can't be Jane on the table with primary biliary cirrhosis. You have to step back and look at Jane with primary biliary cirrhosis because if you are that body with those symptoms, you just want to get rid of the symptoms and that's critically important, that's why you're here. In order to do that, you have to step back and take a bigger picture look than just the symptoms, you have to step back and ask where is this coming from and I would do that with every patient. Then when I do this in seminars to demonstrate it, I explain to the doctor, "So doctors when you have a patient step back like that, two extra things are happening.

Dr. Tom O'Bryan: You're not just giving them an idea in your head, but when you touch their arm and you guide them stepping backwards, when they physically step back and at the same time hear you say step back and look at the body on the table, you're anchoring in them more of a understanding of the concept." It's not just a cerebral concept, it's not just in your brain an idea, but you're trying to get it more somatic, more in their body so they can really grasp that oh yeah, I can't just be thinking about the symptoms, I've got to find out why do I have these symptoms. Another example of that would some of you have heard from me before is what I call life jacket medicine and I'm going to repeat it for those that haven't heard it before.

Dr. Tom O'Bryan: When you come in to see a doctor and you've been diagnosed with diabetes or you've been diagnosed with mild cognitive decline, meaning you're not thinking as well as you used to or you've been diagnosed with recurrent unexplained miscarriages or you've been diagnosed with rheumatoid arthritis. It doesn't matter what the diagnosis is, but when you come in with a diagnosis, it's like you've fallen over a waterfall and you've crashed into the pond below. You swim up to the surface and you spit the water up and say, "Oh God, thank God I'm alive" and you're trying to stay afloat in the pond of diabetes or the pond of recurrent miscarriages.

Dr. Tom O'Bryan: It doesn't matter what the diagnosis is, but it's really hard to stay afloat in that pond because the waterfall keeps falling into the pond, so the water is really

turbulent, it's hard to stay afloat. You're still living the lifestyle that's caused the diabetes or the recurrent miscarriages or the migraines or the rheumatoid. You're living the lifestyle, you're exposed to the environment, you're eating the same foods, you're still doing everything the same as when you fell into the pond of those symptoms and you're wanting to deal with the symptoms. Everybody's looking for the life jacket, everybody's looking for the symptom relief which is a really good thing to look for, really important to look for.

Dr. Tom O'Bryan: If you have high blood pressure, you take the medication. Without doubt, you take the medication, but you don't stay in the pond, you don't keep living the same lifestyle that caused the problem. Rather, once you're stable in the pond, once you've got the life jacket and your blood pressure is normal, you swim over to the side of the pond, you get out of the water, you walk up the hill and you walk back up the river to figure out what fell in the river. They carried me down stream and I fell into the pond of high blood pressure or I fell into the pond diabetes or recurrent miscarriages.

Dr. Tom O'Bryan: That's how I got into this whole field, was that my ex and I, we couldn't get pregnant, I was an intern and we couldn't get pregnant and I called the seven most famous holistic doctors I'd ever heard of and said what do you do for infertility. They told me what they do and I wrote it all down and I figured out what it was they were saying because I didn't know some of the terms that they were saying, I was just an intern and I put a program together and we were pregnant in six weeks. My neighbors in married housing heard about this and they asked if I'd work with them because she had been through artificial insemination and nothing had work and I said, "Well you know, I don't think it's going to hurt you. Okay, yeah sure."

Dr. Tom O'Bryan: She was pregnant in three months, so we were hot to try. I was ready to get out in practice and help every couple get pregnant that was having problems with it, and we were so happy to be pregnant that we tell our friends. Our friend's sister in Wisconsin was having fertility problems and she would drive down to Chicago. We lived in Chicago at the time. She would drive down to Chicago and I would treat her in my dorm room. We lived on campus and we just started working with people. When I opened my practice, we started working with people for infertility and recurrent miscarriages and we've helped hundreds over the course of my career for that.

Dr. Tom O'Bryan: I'll give you an example of what it means to step back and get a bigger picture with that particular example. Because the same concept is critically important for primary biliary cirrhosis or for rheumatoid arthritis or for mild cognitive impairment, the same concept, it's going to be a different realization when you step back. There'll be other things that you'll find out, but here's an example in the world of infertility. When the doctor tests the male, they test to see what his sperm count is and whether they swim, the motility. That's all they checked for men and when that comes back negative and the guy's really worried and it comes back negative and he says, "Huh, must be you honey."

Dr. Tom O'Bryan: Then the woman who had no indicators of any problems gets injected full of hormones trying to shotgun extra hormones in and sometimes it works and sometimes it doesn't without evidence that she has hormone insufficiencies. When a couple mates and the man ejaculates, millions of sperm are swimming up the canal, millions. Why is it only one maybe two penetrate the egg? There's millions that hit the egg. How come it's only one or two? How does that happen? When the sperm hits the egg, it secretes an enzyme and the head of the sperm secretes an enzyme that digests a little bit of the mucus around the egg.

Dr. Tom O'Bryan: The mucus is like a force field that protects the egg and the enzyme in the head of the sperm digests a little bit of that mucus that can swim right through. When it swims through, it activates genes inside the egg that shuts down the mucus layer, nothing else can get in. Great, that's how it works. That's why there's not 10 sperm that penetrate an egg, one, maybe two. That enzyme in the head of the sperm that digests a little bit of mucus so the sperm can swim through is completely zinc dependent. When a man has a zinc deficiency or a zinc insufficiency, it doesn't have to be an outright deficiency.

Dr. Tom O'Bryan: It may just be that the low-end, doesn't have enough, he's firing duds. The enzyme is completely zinc dependent, he's firing duds but nobody checks for that. We've had a number of couples over the years when I checked the guy, it's really a simple test, "Hey it looks like you got a zinc deficiency, take some zinc," and many times a couple gets pregnant within a couple of months that it was the guy and not the woman. You see, that's by stepping back and just getting a bigger picture than just the symptom pattern. That's a critically important concept to understand is that baby steps, you reach the destination of a thousand miles or base hits win the ballgame. Really, really important concept to begin with.

Dr. Tom O'Bryan: Looking at some of the questions, "Any recommendations on whole house water filtration systems? The one we have does not filter fluoride." We're going to talk about water filtration systems in toxicity and detox next week and which kinds of units and which units we recommend, so we'll get to that one. "Gluten GMO and supplements, can you talk about this?" Thanks Julie, yeah, 1 a.m., it's fine. I just took a bath to wake up, so when I sat down, I'm a little sweaty and I'm not sweating now and I'm in my game, so I'm good now.

Dr. Tom O'Bryan: The first thing about toxicity of our foods and we'll talk about GMOs next week, but toxicity of the foods is a critically important component of toxicity and what I want to talk about here is this whole concept of toxicity and what's the impact of toxicity. I'm going to bring up a couple of my slides here and I'm going to geek out on you guys for a few minutes. I apologize for that, but there's a couple of critical concepts that we all need to understand. I'm glad that you'll be able to review this and I hope you'll take the time to review this before next week. I was just mentioning last night to my wife's niece who's studying for a big exam.

Dr. Tom O'Bryan: We've known for a long time when you get a lot of information, if you review it quickly within 24 hours and you review it again once more quickly within 72 hours within three days, it goes to long-term memory and you retain a lot more of the information. If you have the opportunity from this episode, if you can review this episode within 24 hours, if your system has the ability put it at 1.5 in speed, so I'm talking faster and you can go through this in about 40 minutes 30 to 40 minutes as opposed to taking an hour and just listen to it again, maybe when you're driving somewhere.

Dr. Tom O'Bryan: If you can set yourself up to do that for the next three sessions, you will retain a lot more of what I'm going to give you, but this one that I'm going to show you now is really important. I'm going to share my screen because this is a very important concept, so let's see here. If I hit share, there we go and I'm going to do this and share, so now you can see my screen and I'm going to put some slides up here and move my pictures out of the way and move the Q and A out of the way. What do these two symbolize to you? Well, the first one, the iceberg, I started using this in my first talk in 1980 when I opened my practice and we had slide projectors back then.

Dr. Tom O'Bryan: We had the round carousels you put the slides in and I used this picture of the iceberg, that what you see on the surface, these are your symptoms. This is what you've noticed about how your body's functioning is nowhere near the scope of the problem, that is all of this under the surface that we can't see that is really where you have to go to do with this problem. Then the second picture is the yellow canary. What you're about to learn, what I'm about to show you is jaw-dropping. It's like oh my God, this is crying wolf, this is overwhelming. I know, I know, but I'm going to show you what to do about all of it, about all of it.

Dr. Tom O'Bryan: I'm going to show you in these next three sessions how to identify the yellow canaries in the coal mine. The yellow canary in the coal mine, coal miners used to bring a canary down into the mine with them because if there was any methane gases that were leaking or carbon monoxide gases leaking, the canaries are very sensitive to it and they would fall down and they would die. When the coal miner saw the canary had fallen down in the cage, they got out of there really quick, that there was gas leaking that they couldn't smell. I'm going to show you how to look for the yellow canaries in the coal mine of the diseases that were falling prey to in our world today.

Dr. Tom O'Bryan: That's the goal here is to understand this big picture, so these next three weeks are about a primary component is the yellow canaries in the coal mine for what we are vulnerable to as humans. This comes from the National Academy of Science, so these are our top scientists in the world. I'm trying to get this control panel out of the way, but I don't know how to do it, so I'm just going to have to stay there. Our top scientists and this article came out in July, about a year and a half ago of 2017, and our top scientists are referring to a biological

annihilation and that means things that live on the planet and it's called the sixth major extinction, the sixth extinction.

Dr. Tom O'Bryan: You just go to Google, type in the sixth extinction and here come all the studies on this. This should be on the front page of every paper. Now I don't know about the politics in the United States, so I'm not talking about politics here, but I'm talking about the reason why there is a group now in Washington DC, these young congress people that got there and they have a green movement. Oh, I forget what it's called. I'm sorry, it's the green something movement and they're saying no gasoline cars within 10 years, everything is electric, no coal burning because of the amount of pollution changing the environment and all that.

Dr. Tom O'Bryan: They're taking the stance because of this sixth major extinction. Bad scientists say, "No doubt, it's no theory." Then 50 to 75 years, they're saying it's not possible for humans to live on the planet. These are our best scientists saying this and it's really easy for us to have our heads in the sand about this. Now I got to tell you, this session and the next three sessions are not about crying wolf, but we have to understand this concept as we move forward from here, okay? I have to go into this concept a little bit with you, so stay with me on this one.

Dr. Tom O'Bryan: The population extinction pulse that we described here shows that earth sixth mass extinction is more severe than anyone thought when looking at just that we're losing animals, species extinctions like the polar bears are going extinct oh, that's too bad. We don't have any reality around the polar bears going extinct, it doesn't impact on us. It's too bad, but we're numbed to the effect of it, it doesn't mean anything to us. Aren't they cute, but this is what we're dealing with today. This is today because the glaciers are melting and their food source is disappearing. Once again, our top scientists, humanity needs to address, this is some really geek terms, this population extirpation and decimation immediately.

Dr. Tom O'Bryan: I'll show you what this means, sorry for the geek terms, but these people are not english majors. They didn't take english courses. Anthropogenic means environmental pollution originating in human activity and extirpation means a species that ceases to exist in its chosen geographic area, but it still exists somewhere else. Polar bears are still in zoos, right? They're saying that we have to deal with this immediately. We have to deal with this environmental pollution from humans immediately that is occurring and in research papers, they rarely do this, but they did it here. On the front page of this research paper, they put significance, this blue box and you normally don't see that.

Dr. Tom O'Bryan: Once again, these are our top scientists at the National Academy of Sciences and this is what they said. The strong focus on species extinctions, meaning if we just think about it's too bad, the polar bears were going and it really doesn't relate to me much but that's too bad, oh it's too bad about the brown build pelicans or whatever birds are going extinct but it doesn't relate to me much, the strong focus on species extinctions leads to a common misimpression that

earth's biota is not immediately threatened. Earth's biota meaning everything that lives on earth is not immediately threatened, and then the last line. This biological annihilation underlines the seriousness for humanity of earth's ongoing sixth mass extinction.

Dr. Tom O'Bryan: Now we don't know what to do about this, so we go numb when we hear this kind of stuff and we think about our day and what else we have to do just to get through the day and get our kids from school or whatever it is. I fully understand, I just need to give you a little information on this and I'm going to show you what to do about all this. Once again, base hits win the ballgame. The baby steps will get us to the journey where we want to go. We have to step back to see this big picture of what's on the table in front of us for planet earth. We've got to see the big picture because it's going to be the motivation for you to take the baby steps that are a pain in the butt to do.

Dr. Tom O'Bryan: I mean what a nuisance some of this stuff is, but we got to do it, right? I'm going to show you that. This research paper came from... This is a policy statement from the American Academy of Pediatrics. What that means is that this is not just an author that wrote a paper and it was accepted for publication in the most prestigious journal for kids health, the American Academy of Pediatrics. This is a policy statement from the board of the American Academy of Pediatrics. What did they say? The TSCA, this Act that was passed by congress and in other countries for those of you in England or those of you in Ghana or those of you in Japan, very similar legislation all over the world is occurring and has occurred.

Dr. Tom O'Bryan: This Act that was passed in 1976 is widely recognized to have been ineffective in protecting our children, pregnant women, and the general population from hazardous chemicals, completely ineffective. Its processes are so cumbersome that in more than 30 years, this Act has been used to regulate only five chemicals or chemical classes. Only five out of the tens of thousands that are out there. There's no teeth to the Act that the lobbyists got there and they paid off the congressman and the senators to pass this bill that has no teeth whatsoever, and it's still enforced today.

Dr. Tom O'Bryan: Manufacturers of chemicals are not required to test the chemicals before they're marketed or to collect data from tests that may have been performed by others. They're not required to do any of that. They can just make a new chemical, put it in your refrigerator and place a Freon and just put it out there in the world. They don't have to prove that it's safe for humans. Without sufficient information on the safety or health effects of chemicals, it's impossible for the EPA to engage in appropriate regulation because the EPA regulates the Environmental Protection Act. They regulate our environment, but it's impossible because they don't have the money to do the research on all these chemicals.

Dr. Tom O'Bryan: Congress doesn't give them the money to do that. They don't have the hundreds of scientists to study these chemicals. The industry is supposed to do that, but they got this Act passed so the industry doesn't have to do it. Here's how bad it is and for those of you that have seen betrayal, you heard me talk about this in betrayal. Twenty-seven trillion pounds of chemicals are produced or imported in the United States every year. This is a policy statement from the American Academy of Pediatrics. That's 247 pounds per person per day. For 10 people, that's 2500 pounds. That's fifty 50-pound bags, floor to ceiling stack, fifty 50-pound bags for 10 people every single day of toxic chemicals in our environment.

Dr. Tom O'Bryan: Now nobody knows what to do about that, so you can go numb but stay with me because all we're doing right now is taking a step back to get this bigger picture. I'm going to show you what to do over the next three sessions, but you got to understand the big picture. You got to take a step back and see this big picture. I didn't put the studies in here. I can, maybe I will for next week. Every child born in America today, every child has over 200 toxic chemicals in their bloodstream at birth. Every single child and many of these chemicals are brain toxins. They affect the development of the brain and the function of the brain and some of you have heard the incidence of autism keeps going up like this and right now it's...

Dr. Tom O'Bryan: When I came out and practice, it was one out of every 10,000 children were on the autism spectrum. Now according to CDC, it's one out of every 36, 36 and Dr. Stephanie Seneff, a biostatistician at MIT, very famous PhD biostatistician at MIT says within the next 10 years, it's going to be one out of every two children because it's going up like this and where is it coming from? A major contributor is all the toxic in our environment. You're going to hear me say this about Alzheimer's, you're going to hear me say this about diabetes. I've got all the studies, so right now we're just taking a step back to look at what's on the table of the world we live in, okay.

Dr. Tom O'Bryan: Stay with me on this, don't go numb, don't go thinking about dinner or something else, just stay with me please. I put this one in here. He didn't say this, but I'm assuming he would or say something similar to this. It would seem that attention to creating a predominantly human life supporting environment will pay big dividends. It's like you think, of course it will and then the American Academy of Pediatrics said children are not little adults, that kids are much more affect... I'm not going to read all this, so you can read it. That kids are much more affected by these toxic chemicals than you are, so the new Freon compounds in refrigerators are much more toxic to children than they are to adults.

Dr. Tom O'Bryan: The detergents that you use in your dishwasher are much more toxic to children than they are to adults. Your dishwashers are not airtight and the dishwasher is one of the most toxic components in your kitchen because really hot water you use with all the chemicals and those dishwasher detergents that produce gases

that come out into the air, you're breathing the air. One of the things I'm going to tell you next week is run your dishwasher at night when everyone's asleep, don't run it during the day if you're going to use a dishwasher. I don't think you should and I'll show you why next week, but if you are, you're going to run it at night.

Dr. Tom O'Bryan: That's just a little baby step that gets you to the end goal of less toxins in your family's lungs and less toxins in your family's brain. How do you do that? Well, I've always used a dishwasher. Well, don't turn it on until you go to sleep at night. Turn it on before you go to bed. Two things you do at night before you go to sleep, turn off the wireless. Nobody needs wireless when you're sleeping and turn on the dishwasher if you're going to use a dishwasher. You have to start thinking this long way. This comes from the World Health Organization and they tell us that 26% of all deaths of children between the ages of zero to four are environmental deaths.

Dr. Tom O'Bryan: It's what they're exposed to in the environment and that goes up to 36% from 0 to 14. The older they get the higher, the percentage of deaths that occur in children are from the environment. Why? Because more this stuff is accumulating in their bodies triggering the diseases that they died from. Once again, we're just taking a step back to look at this stuff and here's that incidence of autism and this is the incidence increase in Alzheimer's research. These are the dollars that are allocated.

Dr. Tom O'Bryan: This is a National Institute of Health because they've seen the studies of what's happening with Alzheimer's, so they've allocated much more money for research, but you'll hear me say this again and again and if you get the book You Can Fix Your Brain, you'll see in there. Pharmaceutical companies are closing down their Alzheimer's research departments and they're laying off the scientists. Why? They know there's never going to be a pill for Alzheimer's. They've spent billions of dollars and I'll talk about that more next week, but they'll never be a pill for Alzheimer's, but the government's saying we have to figure something out so they're allocating more money for research on this.

Dr. Tom O'Bryan: This is a number of people 65 and older who are projected to develop Alzheimer's. It's just going up and up and up. Why? Because more and more toxins in your body. That's the primary trigger. You'll hear me talk about that in great detail. Now this comes from the Alzheimer's Association. Look at that stat down at the bottom. That's a horrific step and this is a percentage changes in causes of death between 2000 and 2015. One percent reduction in breast cancer, okay that's going in the right direction, we'd like it to be better, but that's in the right direction. Seven percent reduction in prostate cancer, 11% in heart disease, 16% in stroke, 55% reduction in HIV, but 123% increase in Alzheimer's.

Dr. Tom O'Bryan: That's what we're up against now and the costs of care for people with Alzheimer's how it's going up and this was really interesting. The projected

increase between 2018 and 2025 in Alzheimer's, state-by-state, the darker the color, the higher the percentage. Forty to 47% of the people in the Nevada, Arizona, Alaska, Georgia, South Carolina, Virginia. Why? The concentration of toxins that are there and this one, this is a analysis of many, many studies on sperm count in healthy men. Not infertile men, healthy men. Between 1974 and 2011, there has been a 59% reduction in sperm count.

Dr. Tom O'Bryan: That doesn't mean anything to anybody and you go numb with numbers like that until you understand scientists worry about extinction of a species at 72% and we're at 59% in 37 years, that what's happening now has never happened before in history. We've never been exposed to the kinds of toxins that we are now, never and the human body does not have a defense mechanism for this. I'm going to stop sharing the screen now and come back to just me, so that I'm done crying wolf now. I just wanted to give you a big picture overview of what it is that we're up against.

Dr. Tom O'Bryan: Remember, I said take a step back and just see what we're up against so the individual diseases that we have like Jane's primary biliary cirrhosis or Cathy's rheumatoid or MS or whatever the diseases, they're critically important to address, critically important. You need a life jacket, but the bigger picture is that you've got to get out of the pond, walk up back up the river and figure out why did I fall eventually into the pond over the waterfall into the pond of primary biliary cirrhosis, where is it coming from, and that's what this is about. That's what we're going to be addressing. Linda says, "Laughing out loud, I'm in New Zealand. I knew there'd be an explanation for base hits."

Dr. Tom O'Bryan: Right Linda, yeah someone did ask the question so I made sure to do that. "I have a 7-year-old here," Heather says, "help with alopecia, 7-year-old, 35% hair loss." Heather actually sent me pictures of her daughter and we are going to help her daughter. Heather I'm glad that you're here. This big picture of you, you understand. I mean 35% hair loss is terrible, it's just terrible and we'll do everything we can to help you and you have to take a step back and look at your daughter on the table of life and what's she being exposed to. You're going to get the Tupperware out of the kitchen, you're going to stop using the plastic wrap to wrap your leftover chicken in.

Dr. Tom O'Bryan: You're going to learn all this stuff because those are some of the toxins that create the autoimmune diseases. When you read this, you're going to understand where the autoimmune diseases come from that are triggering all of this. There's no pill that's going to fix hair loss. It's the baby steps or the base hits that accumulatively are going to have a big impact and usually you start seeing results within a couple three months. Usually you do if not sooner, but it depends on the individual. Even Alzheimer's, usually within the first three to six months you see noticeable changes once you start addressing some of this stuff, but it's this big picture overview that we have to look at.

Dr. Tom O'Bryan: By the way, I will look at all of the questions like can you talk about microwave reheating food, yes I will and that will be next week in toxicity and detox and how best to detox. Ingrid that's next week's topic yeah, although you got that. Okay, please disregard, thank you Ingrid, got it. How to detox safely next week, we'll talk about that. Becky says, "Does it make a difference what type of detergent you use?" Absolutely, it does, absolutely. You're going to learn that nail polish, the phthalates in nail polish are in your bloodstream in five to 10 minutes. Some studies say three minutes. Five to 10 minutes, you got these phthalates in your bloodstream from nail polish.

Dr. Tom O'Bryan: What do you do? You want healthy nail polish if you're going to do nail polish. I was in Chicago recently lecturing and visiting my daughter and my granddaughter and driving down the street and I saw in this area, this kind of new uptown area in the North Side Chicago around Wrigley Field, north of Wrigley Field and there's a nail place and big sign in the window phthalate free, natural nail polish. I thought yes and I'd meant to take a picture. Actually I did take a picture. I forgot I took a picture, it's on my phone and if I find it, I'll make a little slide. You just have to look for this stuff. "Is lymphedema an immune disease in your opinion?" Your immune system can be the activist for your lymphatic spooling up.

Dr. Tom O'Bryan: It can be, but I don't know that we'll address that exclusively here, but it can be, yes it can be a response of your immune system. "I've had bouts of dizziness for years, did all the medical tests and finally just found out lately my problem was with my cervicals." Oh, there we go. There's an example of the mechanical components. Yes, sometimes it's mechanical. Someone asks what kind of laundry detergent would be recommended. MyGreenFills, yes and here's a link that's put in for MyGreenFills. Thank you. I think Mary Agnes posted that. Is that right? Mary Agnes was that... I think it's you. It's from Mar... Oh, it's Martha, thank you honey. Dish detergent as well, they've got that, right.

Dr. Tom O'Bryan: MyGreenFills are great, they're natural products and they did this brilliant thing and we'll be talking about a lot of things like that. By the way folks, we're going to put links in in the next 48 hours that I think are important to today's topic. We'll plug the links in here for you like MyGreenFills and so that when you go back to review this again, all the links will be there. MyGreenFills, what do they do? They send you your first batch of laundry detergent, dishwasher detergent, all that and then when you get your refills, you just use the same plastic jug that you use the first time and they send you the concentrate and you add water to it and shake it up and there's your detergent, but you're not using a new big plastic jug every time creating more landfill waste.

Dr. Tom O'Bryan: What a smart idea, so easy to do and helpful. That's another one of those baby steps or base hits that's going to reduce our landfill waste and use these plastics that we have for the things that are good for, like carrying stuff around that we're not eating, the stuff that's being carried in it. We also talked about detoxing even with bad genes. Of course, of course. By the way, there are very

few bad genes. There's a reason for ApoE4, the Alzheimer's genes. It was a survival mechanism for our ancestors, so they put us at risk and we'll talk about the genetics of detox next week. See, Julie Wilson sends love to Lea and Australia grant in 2018. That's cute, okay.

Dr. Tom O'Bryan: Okay, let's move on here and I have a list of questions that were sent over to me, so let me find them here for you. Pam, pam, pam, pa, pa, pam. Bear with me while I find our questions here. I had them up on my screen and I don't now, so I'll have to bring them back up. Let's bring this down and if you type it another question while I'm looking, I will... Pa, pa, pam. Where is it? Okay. Physical signs, efficiently oriented. Let's see. These are all the studies that I just downloaded today about endocrine disrupters. We're going to talk about endocrine disrupters next week also.

Mary Agnes: Dr. Tom would you like me to share it from my screen? I could do that for you.

Dr. Tom O'Bryan: Oh. Thank you. I think I just found it. Let me see here if I have it, question. Yes, if you could Mary Agnes, that would be great. While Mary Agnes is putting that up, one of the questions that came is, "What's your opinion on gluten-free oats for celiac? Being originally from Scotland, I'm really missing my porridge." I fully understand. When oats grow out of the ground, there's no toxic gluten in them. When you buy oats off the shelf, there's toxic gluten in them and there is gluten-free oats which you can get in stores. Thank you and may I see it there? There are gluten-free oats that you can get in stores, but a study just came out two weeks ago.

Dr. Tom O'Bryan: No, a month ago in the Journal of Gastroenterology, the number one gastroenterology journal in the world and they looked at over 5700 different items on menus in restaurants around the United States. Restaurants that have gluten-free menus and they order the product and they tested it right there. Over 5700 of them and what did they find? Thirty-four percent I think, it was either 34 or 32% of all the products that were listed as gluten-free were not gluten-free. One out of three of them were not gluten three. For listed gluten-free pizzas, 54% of them were not gluten-free, more than half and for gluten-free pastas, 52% of them were not gluten-free, but they're listed as gluten-free but they're not gluten-free.

Dr. Tom O'Bryan: What do you do with that? Well, that's why we have E3 Advanced Plus and so for all of you who are trying to be gluten free which I think is a very good idea, but for all of you that are trying eat when you go onto restaurants and you believe the menu and you're trusting the restaurant, they're doing their best but there's contamination all the time, you must take E3 and it protects you. We have videos on my website for it. I'm not going to talk about it a lot here. Okay. "I have a client who is highly adherent to her health program. She's had gut issues. Her second week Zoomer was much worse than her first one.

Dr. Tom O'Bryan: She made it to some bites of her husband's homemade bread using some non-steroidal anti-inflammatory drugs in December and to licking her envelopes. I put her on your colostrum. In her words, her gut has been a rolling mess since then. I did the Vibrant Dairy Zoomer on her. She's extremely reactive to all dairy. I took her off the colostrum after two months and off all dairy, problem her guts now it's April have not stopped being a mess. Burping smelly stools, uncontrolled bowel movements, pain that particular associated, blah, blah, blah. Glad to suggest a colonoscopy. A colonoscopy would be important. Everyone needs a colonoscopy after the age of 40 just to make sure you're okay.

Dr. Tom O'Bryan: I won't quote you, but I'm really wondering how to help her further on her healing journey." That's a really good question. "Patient who also interprets her emotions as physical symptoms. I'm wondering if there has been a severe increase of emotional stress." Really good detective work on this doc's part to think that way. It's so very common. If you have an experience in life and I don't know what this woman's problem is and I haven't seen her test results, but this is a really good question. If you read the book You Can Fix Your Brain, I talked about the four pillars and the four pillars for any health condition that must be looked at. That's the other thing I wanted to talk about today are the four pillars that we have to look at.

Dr. Tom O'Bryan: It's not just chemical toxicity we have to look at. There are four sides to a pyramid. No, there's three, no there's four. There's a base and then three sides, right? The base is your structure. I reference that a little while ago, the base is your structure. Any problem maybe a structural problem. Then one side going up is your biochemistry and we all know we've heard about drugs and nutrition and foods and air and water, and we're learning a lot about that. One side is your emotions and that can cause any problem at all. Literally any cancer can be triggered by emotions. Rheumatoid arthritis can be triggered by emotions.

Dr. Tom O'Bryan: The only rheumatoid arthritis patients clinically that we've ever had that don't get better are the ones that won't deal with their emotional issues, whatever they are. They won't deal with them. They won't go see a therapist when it's clear they have something going on. Anyway, that's the second side of the pyramid and the third side of the pyramid is the first time in the history of humanity that we've had to deal with this and that is the electromagnetic pollution we're all exposed to now. Just go to your cellphone, turn it on, how many wireless networks might you connect to. That means the wave frequency patterns from that router are going through the air and your phone's picking them up.

Dr. Tom O'Bryan: That means they're also going through your body and there is no evidence anywhere that the amount of radiofrequency waves, the EMF waves that you are absorbing from your apartment right now or from your condo or from the restaurant that you're sitting in, there's no evidence that that amount of radiation is poisonous to you, but it's an accumulation over time that triggers this off and there's a lot of evidence of that. In the book You Can Fix Your Brain,

I quote study after study after study and just recently Dr. Mark Hyman, my friend Dr. Hyman finished Broken Brain 2 and I talked a lot in Broken Brain 2 about electromagnetic frequency will cause a breach of your blood-brain barrier, leaky brain.

Dr. Tom O'Bryan: You've heard of leaky gut? There also is leaky brain and EMFs will cause leaking brain and I put six studies I think it was because Dr. Hyman wrote to me and said, "Tom can you send me the studies that you're referring to?" I sent him six studies and they're all listed there for you and he said, "Holy cow, really?" Yeah, you put this here, it causes irritation and a breach of the blood-brain barrier. That's why you always use a corded headset which I have plugged in right now. The corded headset is plugged into my computer to talk to you, but I plugged it into my phone. You do not put this up to your ear and you certainly do not use a Bluetooth because that's a battery next to your brain all the time.

Dr. Tom O'Bryan: There maybe an emotional component to this person's problem also and there could be a lot more, but I would certainly include an evaluation of the emotions. In terms of the colostrum, that may have touched off something in her intestine. She has a high dairy sensitivity and when patients have a dairy sensitivity, I recommend colostrum for healing the gut because nothing turns on genes like colostrum does for one to two months that's mostly patient, as long as you don't have any problems taking the colostrum. If you get any bloating or any gas or any abdominal pain, just stop right away, but stop all the other dairy stuff.

Dr. Tom O'Bryan: We just found out your sensitive to dairy, get the milk out of there and the cheese and the ice cream and the yogurt, get it all there. Eat coconut yogurt. It's great for you, but take the colostrum as long as you don't have any discomfort because it turns out more genes to heal the gut than anything else and in this woman, this is one of those rare people who would not be able to take the colostrum right now because her gut is in such distress, there's something going on there. "Please talk about alopecia and best mold air filters." Okay, we'll go through that next week. Alopecia, autoimmune disease, we will go more into that in general. "What do you consider to be the best strategies to internally slow down aging?"

Dr. Tom O'Bryan: What we're talking about here, there is nothing that's better to bring you more into an anabolic state compared to a catabolic state than everything are talking about here are. "Are the autoantibody panels and gluten sensitivity test which you recommend an Autoimmune Fix available in the UK? I'm grateful for the opportunity to be part of this program. I'm really looking forward to learning and being inspired." Thank you so much for your comments. There are good quality tests now available in the UK from Cyrex Laboratories. In the US, there are even more sensitive test but Cyrex is head and shoulders above anything that's been offered in Europe until now, much more comprehensive.

Dr. Tom O'Bryan: Cyrex, C-Y-R-E-X, the Cyrex tests are available in the UK and in Great Britain and Ireland and Sweden and Portugal and Spain and I think Italy. They're available throughout more of Europe and the company that's the representative in the UK and for Europe is... I'm going blank on the company. I'm sorry, I can't remember right now. I will get it and I'll make [inaudible 01:08:28]. Someone says, "I'm at the Swiss Mountain Clinic until April 30th, having wonderful time. Thank you for the induction of this wonderful place. Everybody here are so professional." Yes, they are and I'll be sending out an announcement next week. I guess I'll announce it now for those of you that are here because you're special, you guys are part of my team now.

Dr. Tom O'Bryan: Marcy and I will be at Swiss Mountain Clinic the last two weeks in October. If any of you are considering about going, we'll be there for the last two weeks of October to host you. I won't be treating patients, but we'll be at all the meals, sitting with you, talking about healthcare issues, going for hikes with you in these beautiful mountains. It's really quite a remarkable place and we're going to do the announcement next week about that for anyone who's interested. Let's see. "Things I believe are holding me back, can't completely let go of sweetness, mostly milk chocolate, completely went off gluten, listened to your 2012 Food Summit, high-five to you, way to go.

Dr. Tom O'Bryan: Great until they made me give it up and I never looked back, but still creep in dairy or chips, uh-huh. Why can't I let go of all?" That's a really good question. "Working on other functional medicine doc or gut infections now down to one." Good for you, baby steps. Everyone's a baby step. "Mold on top of that, constant UTI." Okay, the constant UTI, what's the trigger and if there's mold in the air, I would suggest you do a mold panel and depending if you're in the US, Vibrant... Wait a minute. Your PC, oh Pauli, Dr. Pauline Harding. Oh, what a wonderful. She's a good friend, I haven't seen her a number of years when I was in Chicago.

Dr. Tom O'Bryan: I love Dr. Harding and so the test you want is the mold and fungus panel from Vibrant Labs. It's a new one that's come out. More comprehensive than anything else that's out there and if that comes back positive, then you need to have a mold inspector come out to your home and where you work and your car. Most people don't think about their car, but do you ever notice you start the car and when the air starts going, it just smells a little something? That could be mold, that maybe where you're getting it. If that's the case, I don't know how you clean the car, but you try and if not, you get a new car.

Dr. Tom O'Bryan: "Oh my God, a new car?" Yes, a new car because 60 to 65% clinically of all Alzheimer's cases that are seen are inhalation Alzheimer's according Dale bredesen, the guru of Alzheimer's treatments. Sixty to 65% are in inhala... It's what you're inhaling. That's why everyone this test is so darn important. When am I talking about it? Am I talking about it? Yeah, yeah, I'm talking about with inflammation in two weeks, the smell test, but if you want to do a heads up and

really just go to the dr.com/smell and watch my videos on it. Mary Agnes did I lose you? Mary Agnes are you there? All of a sudden the screen went blank.

Mary Agnes: Hi, Dr. Tom, I am here. Here let me scroll to the top. Just some of these had the person's name in the question so hopefully they wouldn't mind because we're about to see his name. Here are the questions from the top.

Dr. Tom O'Bryan: Okay and let's see. I noticed that we've been going an hour and 15 minutes. Do we have a limit with Zoom in how long this can go?

Mary Agnes: I put us on for two hours just in case-

Dr. Tom O'Bryan: Perfect.

Mary Agnes: You needed to set some framework for everyone.

Dr. Tom O'Bryan: You know how I am, I like to talk.

Mary Agnes: Oh, we appreciate you sharing your great wisdom and well most of the questions now can be pushed off to other nights if you are tired and want to end, but you can go as long as you want. We'll get the according to everyone and the transcript.

Dr. Tom O'Bryan: Okay, thank you. I've got a couple of questions here that I will answer. Let's see. "Is there an alternative screening test for cancer that replaces a colonoscopy?" Well, that's really interesting. There is a study that came out that showed the evaluation of the microbiome was... Just a minute, just a minute. Forty-seven percent identified adenomas, those are polyps and 60-some percent for cancer. Your microbiome analysis can give you some pretty good links, but I'm not aware of anything that is as sensitive as a colonoscopy. Okay folks, we've been going for an hour and 15 minutes. Tonight on how to do the course successfully, it's really about taking a step back, having this big picture.

Dr. Tom O'Bryan: Please review this a little bit and for next week, if you can take a look in the book that we've sent you on detoxing and take a look at... Just one minute. I had it here. If you can glance through, you don't have to read all of it, glance through chapter two. It starts on page 34. When you look at chapter two, it's called culprits and causes, genetics exposure and intestinal permeability, there's a couple of concepts in there that are really important. One of them is molecular mimicry that's in the first couple of pages of the chapter. If you have a chance to look at that, that'll just make next week's information a little easier for you to embrace.

Dr. Tom O'Bryan: When you see the page the full page on Molly, this case study and you see reversing a tumor in her eye by putting her on a gluten-free diet, within two months, the tumor was gone. When you see that and it's like what, so just get a little understanding about molecular mimicry and what that means, and it'll

help you as we talk about toxicity. Thank you all for this first evening. Hopefully there's a pearl or two in here that will take you more comfortably forward for the next three weeks as we get more into the meat of the matter and I will look forward to seeing you then. Thank you so much.