

The Origin of the MATH+ Protocol

A Special Interview With Dr. Paul Marik

By Dr. Joseph Mercola

Dr. Joseph Mercola:

Welcome everyone, Dr. Mercola helping you take control of your health. Today we are joined by honored guest Dr. Paul Marik. I'm sure many of you know who he is, but I will give you a brief summary in case you don't. He is the Marik of the Marik Protocol, which he popularized, which is a relatively low dose of intravenous vitamin C. We'll discuss some of the reasons why it was so low dose because most clinicians in the field are using much higher doses. He is a world-class intensive care physician, incredibly well-published and I think he's the founder of the FLCC, which is the Frontline COVID Critical Care group of physicians who published probably one of the most rigorous, comprehensive protocols for treating not only COVID but long COVID. It's a really great honor and privilege to connect with Dr. Marik today.

This isn't the first time though I've tried to connect. I wanted to go into that, at least a little bit too because I think it's illustrative of the challenges that we have. Once you're a physician and you understand the truth, you tend to become vilified and discredited and that is the general perception in the public. Dr. Marik went through this in spades. I've certainly been a veteran of this too and so much so that the first two times I attempted to interview Dr. Marik, he refused me and I suspect it was because of this discrediting. But I'm so delighted and honored now that we can have this dialogue and share it with you because it's a really important part. There's a lot of things we're going to talk about today. I just want to maybe delve into this in a bit. I'm sure you had your reasons, but my suspicion is and the conclusion because you're not the only person, research scientist or prominent clinician that I've attempted to interview and really dive deep into their work and expose it to the public that has refused to interview with me. I suspect that the central theme is pretty similar and that they didn't really dive deep into what was going on. I'm wondering if you could just share your thoughts on this.

Dr. Paul Marik:

Yeah, I do apologize for refusing to speak with you. It wasn't an intentional personal thing. I think it was at the time that – I was still digesting what was happening and I was unsure. I didn't realize how important you are in telling the truth and standing up for the truth. I was a little bit protective but I think we have spoken subsequently. We have subsequently met and, obviously, you're one of my heroes because you stand up for the truth and obviously you've known about the dishonesty, the deceit and the deception for much longer than I have. I had swallowed the Kool-Aid. I was a tenured professor of medicine. I was the only one tenured in my department, in fact. I believed the medical literature, I believe the narrative, I believe what I taught and you can understand how disturbing it is to one's very core when you actually discover that what you've been teaching and what you've been promoting is based on lies, falsehood and deception.

Fortunately, in ICU, and I think my good friend Dr. Pierre [Kory] would attest to this, most of what we did is based on understanding human physiology. We were less influenced by the evilness of Big Pharma, big hospitals and their collaborators, obviously until COVID came

around. COVID has changed the world. Up until then, we had pretty much therapeutic freedom. Patients were critically ill, they were dying and doctors did what they do. They, at the bedside, they do what they can to save the patient's life. That was pre-COVID. Then obviously COVID came around and changed that completely. Indeed, as you know, we had a really successful protocol for treating COVID in the hospital. That's how we really started the MATH+ protocol. We know it was effective. My results were better than any of my colleagues. But what happened is the hospital decided to basically outlaw what I was doing.

I was using safe, FDA-approved (Food and Drug Administration) drugs which have been shown to be effective for COVID and the hospital I worked at, Sentara Healthcare system, basically publicly made a statement that the pharmacy would no longer dispense the medications that I had used, which were safe and effective, to treat COVID. Basically, all I was left with was remdesivir. As we know, the use of remdesivir was halted for Ebola just because it was shown to be a toxic drug that killed people. We know that Gilead [Sciences] and the NIH (National Institutes of Health) and [Anthony] Fauci cheated in the – they committed scientific fraud in the conduction of the remdesivir study. It'll be interesting because we're going to talk about the charges against me against scientific fraud, but they committed out-and-out scientific fraud and we can go into it. We know, according to WHO (World Health Organization) data, this is publicly available data, remdesivir increases the risk of a patient developing renal failure twenty-fold.

We know it increases your risk of dying. You can understand the situation that I was in. I was the director of the ICU. I had run the ICU for 15 years and now I was told I can't use safe and effective drugs to treat my patients. Rather, I must use a toxic drug for which the hospital gets an additional bonus. That was a big awakening for me and it basically speaks to the depth, the breadth of corruption. Basically, the health care system is not patient-gearred or health care-gearred or geared to enlighten patients, improve their health, improve their lifespan, make them happy and improve their general health. The system is designed to make money. Simple as that. Make money for Big Pharma. Make money for the hospitals and the system and therefore empower the NIH.

That's a brief overview of this journey that I've traveled. As you say, they have persecuted me professionally, personally. Their goal was to take me down and destroy my career. They were somewhat successful in ending my clinical career. As you know, I'm not going to give up and I will never give up because you have to fight for truth and honesty. I think now I have a much bigger role because I and you and many of us have revealed the deceit of the system and we need to empower patients and health care providers to do what our Hippocratic duty is, is to help patients. That's what we're here to do.

Dr. Joseph Mercola:

Absolutely. You referenced your MATH+ protocol as a combination of drugs, but I would tend to disagree with that because two of those ingredients are actually vitamins. The MATH+ protocol, for those who aren't familiar with it is the M is methylprednisolone, the A is ascorbic acid, the T is thiamine or vitamin B1, H is heparin and the + are some other drugs that you can elaborate on but you revise it and continue to revise it, I'm assuming. I'm just curious as to – the fact that you integrated two powerfully important nutrients into the protocol and got amazing

results with it, I want you to discuss the results because they were really pretty astounding. A sepsis is a major cause of death in the world, many people don't appreciate. The protocol, I believe, was able to knock the death rate down by 80%. I'm particularly curious as to what contributed to your open mind to integrating these nutrients? Why did you do that? You clearly had some commitment to seeking the truth and finding out what really worked, not some drug driven propaganda.

Dr. Paul Marik:

I'll tell you how it started. MATH+ which was for COVID, was an extension of our HAT protocol for sepsis. HAT stands for hydrocortisone, ascorbic acid and thiamine. How did this start? I'm a bedside clinician and as Dr. Osler said, "You learn medicine at the bedside." And the question is, why? Because that's where the patient is. The patient's not in a lecture room or in an auditorium or at the end of Zoom. That's where some of the most important discoveries are made, at the bedside. What happened was, this goes back to about January 2016. I had a patient who had overwhelming sepsis. I think she was in her '50s. She had biliary sepsis. She arrived in the ICU. She became intubated. She was in renal failure. She was in multiple doses of pressors. As a doctor, I knew she was going to die.

You just can see it. She was on massive doses of pressors and when you're at the bedside, you have a duty to the patient. The doctor always thinks, "What can I do to help this patient? Is there a rabbit that I can put out of the hat to help her?" It just so happened I had read some work on vitamin C by Dr. Fowler in enrichment and I was really impressed by his work. I did some reading and he had done a preliminary study looking at vitamin C in sepsis and I thought, "You know what? Why don't I try it?" It's available in the hospital. It's FDA-approved. I called my pharmacist, we had vitamin C. I told them what I wanted to do. I explained to the family what we were going to do. I decided to use vitamin C.

I was unclear about what dose to use. You talk about the dose because I never used it before, so I looked at Dr. Fowler's study and in his paper, he used two different doses, 50 milligrams per kilogram per day and 200. Not knowing any better, I thought, "Well, I'll go halfway." We started off on 100 milligrams per kilogram per day, which worked out about 1.5 grams, six hourly. I thought, "You know what? Vitamin C is anti-inflammatory." I was always very impressed with hydrocortisone for sepsis. More recently, like a week ago, we now have a paper proving the lifesaving benefit of hydrocortisone in pneumonia. This wasn't something I'd sucked out of thin air. Then I added thiamine because of its multiple beneficial effects. At first, I thought it may protect against oxalosis with vitamin C, but that wasn't true.

But thiamine, actually, has important effects in intermediary metabolism, mitochondrial function, energy metabolism and patients with sepsis are often both vitamin C-deficient. In fact, they're all vitamin C-deficient as well as thiamine-deficient. That was the initial rationale for this. I thought, "Well, what do we have to lose?" I was convinced the next morning when I came to work, she would not be with us. I can tell you I was completely dumbfounded and stunned. The next morning, she was sitting up in bed, she was off her pressor agents. She got extubated. Her kidney function had improved and she left ICU three days later. I was stunned. Our nurses were stunned. The residents were stunned. They'd never seen such a thing. This is a woman who we knew was going to die and she walked out of the hospital. She walked out of the hospital.

When you see something like this, you say, "Wow, maybe there was just a fluke. It was just a lucky thing." I did it again and again and again and exactly the same thing happened. We started this as a protocol in our ICU and this was endorsed by our nurses because they could see the dramatic effect. The nurses tell the truth. They're the ones at the bedside. They saw their patients come off pressors very quickly. They came off the ventilator and they were my biggest supporters. Although, the hospital tried to – the shenanigans trying to silence them as we'll see. At one point I thought about being a randomized study and I discussed it with my nurses who said it was immoral and unethical to do such a thing because we have a treatment that saves lives and now you want to randomize patients to placebo? How's that ethical?

They actually dissuaded me from doing a randomized study. That's why we continued to do what we did. We published our prospective observational study. What we did is we compared our data to retrospective data. We used the same selection criteria and we showed a significant reduction in mortality from about 40% in the ICU to 8%. These were patients who met certain criteria who were vasopressor-dependent, means they required blood pressure medication to support their blood pressure. These are people at high risk of dying. We showed this dramatic reduction in mortality. At the beginning I was a hero at the hospital. They thought that this was the most wonderful thing. They supported me. They endorsed me and the dean supported me. At that point I was a hero, but with time, as the media and the forces that be started playing out, I became less and less and less popular to the point, obviously, as I told you when it came to COVID, I was a pariah and they wanted to destroy me.

There are some interesting stories associated with this and I had really forgotten. At that time in the early or late 2017, 2018, sepsis was a big deal in hospitals and it was used as one of the indicators of the quality of hospital care and CMS had quality indicators. Hospital sepsis mortality was a big deal. There was a company called Truven, which then became I think IBM Watson and then became some other company, which basically contracted with CMS to report hospital data. This is completely independent of me. What happened is they actually provided the CEO of the hospital with the hospital mortality data. At that time, this CEO, not the subsequent one, was a very nice man. He was communicated with me. He was respectful of me. He was respectful of what we were doing. He was a kind man. Obviously, that's why he didn't stay there too long. But he actually provided me with the data. This was independent data from a data analytics company that showed that since I had introduced the protocol in the hospital and mainly in our ICU, the hospital mortality from sepsis fell from 20% to 8%. That's independent data verifying the effects of this intervention. Obviously, after that, things turned pretty bad and pretty-

Dr. Joseph Mercola:

Before we go there, let me just hold you on for a moment because I had a few questions. With respect to the actual intervention that you've established. You're a pioneer and you've established this in the conventional medical literature, you're an astute researcher with respect to reviewing the scientific literature to have validation and support for your clinical recommendation. You know initially started at 1.5 grams every six hours of the vitamin C. I'm wondering two things. One, if your subsequent review of literature and clinical experience has supported a higher

intervention. Secondly, with your understanding of the medical science, what do you believe is the mechanism for vitamin C, ascorbic acid, being useful in sepsis?

Dr. Paul Marik:

Yes. Those are two really good questions. I'm assuming the first was, when we did this, we were somewhat naive and we didn't put all the dots together. The actuality is when patients came into the hospital we treated them pretty quickly, which makes sense. If you're septic, it's a time-sensitive disease. We know to time to antibiotics is critical. What we did is we treated these patients initially when they first arrived in the ICU. The very first patient, I treated her within an hour or two of being in the ICU and subsequently we did the same thing and we even actually moved her to the emergency room. Patients who were septic in whom we were consulted to see in the emergency room, we treated them immediately because that made sense. Give them antibiotics. Give them vitamin C.

The mistake we made was when we wrote up the paper, we didn't really put together this time-sensitive issue. We said patients were treated within 24 hours. That's what we wrote and that's what we thought. It's only subsequently that I read us how time-sensitive this really is. In reality, our patients were treated within six hours. I think this becomes a fundamental question because – now there have been studies that have reproduced what we did and all of these studies gave the vitamin C and the dose we used within 10 hours. Then there are many studies that used the same dose but gave patients the vitamin C days later. The biggest study published in New England Journal, which tried to invalidate our data and make us look really bad. What we know is we don't know the time to the first dose, it's probably in excess of 18 hours.

In fact, many patients were transferred from one hospital to another hospital. They were in one ICU, they were admitted there, deemed to be too sick, transferred to another hospital in their ICU. It was days before they were treated. In addition, our patients were medical patients, which is really important because surgical sepsis is a surgical disease, largely. In this large, randomized study which so-called disproved our paper, the time to initiation of therapy was exceedingly long. Most patients more than 24 hours. Many were surgical patients and the investigators had previously viciously attacked me. In fact, at an open meeting they had implicated that I was a snake oil doctor at a meeting [crosstalk 00:21:43]. They had viciously attacked me. They were out to-

Dr. Joseph Mercola:

You were making loads of money for the companies that were selling ascorbic acid, which is almost free.

Dr. Paul Marik:

Oh yes. I was financially empowering myself and Big Pharma and the hospital by selling this expensive drug, which is obviously the issue is that as we know, and as you know, this is a war on repurposed drugs and they will do whatever they can. When you look at the data, it seems that if it's given early, that it works. I did somewhat of a dose-finding study with our initial patients just based on the variation according to what the pharmacy did. And it seemed like 1.5 grams if given early, makes a difference. The question now, and this is an important question and that's why we've changed our protocol. If it's given after six to 10 or 12 hours, I think you need a

higher dose. We need better dose-finding studies. We know it works. So, how does it work?

Well, we know many patients – firstly, vitamin C shouldn't be called a vitamin C. It should be called a stress hormone because all animals on this planet except for humans and guinea pigs make vitamin C when stressed. It's made predominantly by the liver, as well as the kidney. It's an essential stress hormone. It has multiple modes of action. It's very important for sepsis. It's very important for stress. As I said, it's a stress hormone. It's a powerful antioxidant. It's required for the synthesis as a cofactor of many enzymes and proteins. It's really vital for the immune system. It's important for white cells to function, to make interferon. It has a host of really important actions. Unfortunately, humans have evolutionary lost the ability to make vitamin C. When patients are septic, they have exceedingly low vitamin C levels. Animal models show that when you replace the vitamin C, it improves the outcome. This is not rocket science. Vitamin C is essential as a stress hormone. It's an essential antioxidant. And sepsis is a potent pro-oxidant. It's important for the immune system. It's important for the synthesis of catecholamines. It's essential for tissue repair. It just makes sense that it would be beneficial in sepsis.

You ask a good question. I think, because most people criticize about the dose we used and the answer is, I'm not sure, to be honest. I think if given early 1.5 grams, six hourly is fine, maybe 2 grams. Dr. Kory has done work in his ICU and he found exactly the same thing that when there's a delay in the initiation of vitamin C, the mortality benefit disappears. Now the question, obviously, is if you give it later, can you use a higher dose? That's what we [are] now are suggesting, that if you miss that window of opportunity, you probably need to use a higher dose. What the optimal dose is, I'm not sure. The reason I had some reservation is that in high doses, paradoxically vitamin C can act as a pro-oxidant, particularly when there's free metals and free iron and – with sepsis you do get release of ferritin and ions. That was our caution. But you're absolutely correct, I think we need to do more research to give you the answer.

Dr. Joseph Mercola:

There's also the issue of the oxalate, maybe metabolized to oxalic acid, which is not a good thing in high doses.

Dr. Paul Marik:

Yes. The optimal dose, we don't know. I still think if given early 1.5 or 2 grams, a q6 is probably optimal. It's what we would suggest. There are studies. There was a randomized study done in Taiwan, they couldn't get it published because the results were so striking and they gave within two hours and the mortality reduction was completely off the charts. I think there's a relationship between time and dose. You know what? Like most things in medicine, we don't know all the answers and the way you answered is by asking questions and studying it and looking for answers.

Dr. Joseph Mercola:

Thank you so much for indulging in my curiosity and for the curiosity of many as to the historical perspective of how the Marik protocol came to be. From there, I think, now that we've established that, we can review what's happened to you as a result of implementing this because it's pretty interesting, not surprising, but interesting certainly that what's happened. I don't really have the full update now because I know that your board certification, which I believe is the

American Board of Internal Medicine, moved to remove your certification and that's, "So what? Who cares if you're certified from them?"

Well, it's a big deal because once you lose that certification, you're not eligible for patients that you see have their insurance cover your services, and many institutions, hospitals and companies require that certification to work. It is a job-buster, essentially, if you lose it, almost like you're losing your license. It's almost comparable in many cases. I wonder what the status of that is and then maybe you can discuss what happened in losing your position. You have something, I think, you popularized, which is sham peer review where supposedly your peers go through the process of removing you with essentially no legal recourse. Why don't you give us an update as to what's happened to you as a result of your experience with this protocol?

Dr. Paul Marik:

Obviously, MATH+ then became an extension of HAT therapy. This was 2020. At that time, the NIH, the CDC (Centers for Disease Control and Prevention) and WHO said there's no treatment for the hospitalized patient with COVID, which is completely absurd. How can a doctor not treat a patient? We came up with the MATH protocol. It made most sense. We knew this was a profound inflammatory disease and a clotting disease. As you said, we added methylprednisolone, ascorbic acid, thiamine and heparin to this protocol. Then the + became a number of other things, including melatonin. What we demonstrated was a reduction in mortality. I had data from my own hospital showing the reduction in mortality. The first assault against me came when Pierre, myself and Dr. Jose [Iglesias], we wrote a review paper on MATH+. It was a review paper.

It wasn't basically an observational study. We just reviewed the rational for MATH+. In it, in a small part of it, I quoted the hospital mortality, just one line, which was 8.6% at that time. Where did I get the data? I should say that the hospital mortality worldwide at that point was 20% and we've subsequently published data in peer-reviewed journals showing the average hospital mortality for COVID was 20%. The CEO of the hospital, sorry, CMO. Let me say that again. The chief medical officer of the hospital personally gave me the data of the hospital mortality at Norfolk General. This was Dr. Michael Hooper. He personally gave me the data. He told me that – this was personally, he gave me the data that the hospital mortality was 8.6%. That was the data at that time.

As a very small part of this paper, it was included in one of the tables. We said, “The hospital mortality was 8.6%.” Anyway, Sentara Healthcare system and Dr. Hooper, basically, they had complained to the medical school that I had made up the data, I had fabricated the data. Dr. Hooper didn't give me the data. This was completely fabricated. They reported this to the medical school. There was a big inquiry. In the end, the medical school agreed with me and they did agree that maybe what we should do is just add an addendum that the mortality as I had quoted was at that particular time, which was accurate and obviously with time as you know because there was sense that the mortality increased to like 10%, but still it was substantially less than the world average. Anyway, what happened is the hospital put pressure on the journal, the Journal of Intensive Care Medicine, and they forced them to retract my paper or our paper because of scientific fraud and misconduct.

The journal followed what they said. Clearly there were other extraneous or forces acting with the hospital, but they retracted our paper, Journal of Intensive Care Medicine, which reliably, faithfully, honestly reflected the truth. That was really the first major attack on me, personally, and on the MATH+ protocol and against what we were doing. I should add that this wasn't my first run in with the health system. They had actually accused me of scientific misconduct a few months previously. They had accused me of plagiarizing an IRB protocol. Haven't heard of such a thing, so I applied to the IRB for a protocol to study our COVID data and Centura-

Dr. Joseph Mercola:

What is the IRB?

Dr. Paul Marik:

The IRB is Institutional Review Board. Whenever you do a study looking at human data, it's standard across the U.S. and the world, you have to provide your protocol to the Institutional Review Board, which looks at the data, make sure that it satisfies certain criteria and give you permission. The hospital, believe it or not, I don't think this has ever happened before, accused me of plagiarizing an IRB protocol. They were after me. They were after me because I had shown that my protocol or our protocol worked and save lives and that I was having much better outcomes than their incompetent doctors. They were going after me. Obviously, that paper was retracted, which I think was fraudulent. It was illegal. It was immoral because what we had in the paper was the truth. I think this emphasizes the power that the hospital systems have, and these other forces.

Then as I said, when it came to MATH+, I was showing good outcomes. The hospital then tried to stop me using this protocol, as I said. I was put in this position that all I could use was remdesivir. The first week I went to work after this ban, I had seven patients with COVID and all seven died because I was basically put in a position that I wasn't able to treat my patients. I spoke to my legal advice and they said, "Well, I should try and sue to allow them to reinstate my protocol, get temporary injunction to allow me to practice." We went to court and the very day I went to court, a letter arrived on my office basically accusing me of a whole host of crimes. At that time, I didn't know what it is. It's called sham peer review.

What hospitals do to get rid doctors that are inconvenient to them or want to tell the truth is they basically falsify a number of accusations. And they accused me of seven most outrageous things, including I was forcing nurses to give patients medications to which they were allergic. Can you imagine something as outrageous as that? I think you would have to be completely moronic to actually think that a doctor could ever do such a thing. They claimed I was forcing nurses to put the medications down the NG (nasogastric) tube. These were outrageous accusations and there was no documentation. There was no names or patient records or anything to support these outrageous claims, and based on these outrageous claims, they suspended my hospital privileges immediately. I was found guilty. There was no due process. I wasn't allowed legal representation. They basically stopped me practicing medicine based on these false accusations. I, at that time, didn't know what was going on.

But I recognized subsequently, it's a process called sham peer review where hospitals invent accusations against doctors and the system is such that because you don't have due process,

you're found guilty. You're assumed to be guilty. You can lose your license and your privileges and they get away with it and you're not allowed legal support. I then went to a hearing, which was indeed a kangaroo court. It was me — I wasn't allowed legal representation — with about 25 hospital people. They knew the previous charges were completely bogus. They did what sham peer review does is they changed the focus. They didn't focus on the previous terrible crimes that I had committed. Now they basically said I was a horrible individual. I was promoting a atmosphere of retaliation, distrust. I had angered people. I had annoyed people. I was just an awful human being, which was somewhat surprising to me because I'd never had a patient complaint in my entire clinical career, ever, a single patient complaint.

I'd never had a complaint from a medical student. I'd never had a complaint from a resident. I had never had a complaint from a nurse. All my evaluations were glowing. Suddenly I was this awful horrendous human being that was creating distrust in the hospital. They went out of the way to not reinstate my privileges. They reported me to the National Practitioner Data Bank. When you get reported to the National Practitioner Data Bank, your name is there forever and it makes it almost impossible to get a license again in any state. The hospital essentially ended my career based on fraud, falsification of data, deceit, dishonesty and unethical behavior. They essentially ended my career. And here I was and I had data to prove it that in my ICU, under my care, the mortality in my hands was at least half of my colleagues.

That was irrelevant. They had to get rid of me because I was challenging the system. Essentially, I was forced to resign because they have enormous power and influence. The medical school did not support me and collaborated with me. That essentially ended my career. I suppose there is another piece to this awful saga. After resigning in March 2022, there was an internet troll who basically claimed that my vitamin C study was a fraud. Basically, he sent a letter to Chest, where the journal, was published and basically I was told we have received a message raising concern about the research reported in the Chest article for which you are-

Dr. Joseph Mercola:

That Chest article was published in 2017 or five years prior to that.

Dr. Paul Marik:

Yes. This is five years ago. Just coincidentally, no one had raised any objections. It was published in 2017. Now, suddenly in 2022, when I'm questioning the whole narrative, the scientific validity of my paper is questioned. The journal says I must take this allegation seriously. The allegation was within five minutes of reading the study, it became overwhelmingly clear that indeed research fraud was committed and the data was fabricated. There's simply no other explanation for this than fraud. This person wrote to the journal and accused me of scientific fraud, which was completely absurd. I responded to the journal very professionally. I actually still had my data. I provided the data, I provided the IRB approval, Institutional Review Board. The protocol was approved both by my medical school as well as the health care system. I provided all the data.

In September 2022, I received a letter from them, which said, "After a thorough review of the statistical methods and facts of the case, no further action will be taken in response to these allegations." Chest cleared me of these allegations. However, it goes on. "However, during the

course of our investigation, we received a new allegation." There were now new allegations regarding the methodology in our paper, which they said would violate the journal's ethical policies, if true. Basically, what they said is review of the institution's records yielded a discrepancy in a number of patients meeting the inclusion and exclusion criteria. What they were now claiming – this was an additional claim after the initial claim was dismissed, basically saying that I had cherry-picked the patients. I had manipulated the data. There's only one place that this accusation could have come from, only one source.

Chest did not reveal the source of the allegation and have never done, but you put two and two together and there's absolutely no question of doubt where this allegation came from. This allegation came from Sentara Healthcare system because they could in some fashion put together the data. There's no question that the Chief Medical Officer, Dr. Michael Hooper and Sentara had again wanted to discredit me, disprove me. This is the third time now they're going after me and raised this issue with Chest. Again, this went on from September 2022. I was absolutely convinced that much like the Journal of Intensive Care Medicine, the editor would not show scientific integrity and would have our paper retracted. However, I was really surprised that a few days ago – this is April 3, I actually received a letter from Chest in which they basically said they found insufficient evidence to confirm all of these allegations.

Essentially, we were vindicated. What they did want us to do was to make two small changes to the methods section. The results stayed the same. The conclusions stayed the same. Basically, they just wanted a clarification in the methods section, basically stating, one, that the patients, which I said were consecutive, were not consecutive. I think anyone who undertakes a clinical trial, will know it's almost impossible to enroll in consecutive patients. Even if you have full-time study investigators, it's really an impossibility. Even in the best-designed randomized control trials, the enrollment rate is 20% to 25% to 30%. They had to say something. It's really inconsequential because as they said, it really didn't change the outcome. Then they wanted to say that we said we treated patients with 1 gram every six hours and they wanted to say, "We targeted 1 gram every six hours," which again just means that although that was our goal, sometimes the pharmacy didn't comply exactly within six hours.

These were really inconsequential changes. In a way, they validated our study. They vindicated me. They vindicated the protocol. I was really pleased that Chest actually drew a line in the sand and said, "You know what? We're going to look at the data. We're going to look at the signs and we're going to stand for the truth." Although, Chest had dragged their heels and weren't that responsive, I'm really appreciative to Chest and the editor for standing up for the truth. Unlike the previous editor who basically committed fraud because he allowed our paper to be withdrawn based on false allegations. That's this awful saga as best I can tell you. Clearly the health care system was targeting me and I think it was the health care system and probably their supporters, and just because I went against the narrative. As you know, if you challenge the narrative and show that your treatment is actually efficacious, safer and cheaper than that being promoted by the CDC, the NIH, the federal government, you are an enemy of the state and they were going to do whatever they could to take me down.

Dr. Joseph Mercola:

Well, thank you for sharing that and giving us the update as to the current status. I'm also curious if you care to go into some of the personal aspects of this with respect to your health. Because not only had you bought the conventional narrative hook, line and sinker for patient care, but for also your own health care. I think prior to COVID, you had developed the metabolic illness and suffered with diabetes. I just wonder if you could describe your process of understanding that what you were doing wasn't working and then you embarked on an intervention which essentially allowed you to regain metabolic flexibility, lose, I don't know, at least 50 pounds or so and I believe you're not diabetic at this point, Type 2 diabetes. If you can expand on your personal health journey as a result of this experience?

Dr. Paul Marik:

Sure, Joe. Obviously, what happened with COVID is it shown a bright light on corruption, deceit and dishonesty that had been there for decades, 30, 40 years, but none of us had seen. Once I started looking at protocols to treat COVID patients, I discovered that much of what we've been taught at medical school, much of what the journals publish is false, fraudulent and perpetuated by Big Pharma. Diabetes and metabolic dysfunction are part of that. If you believe the narrative Type 2 diabetes is a progressive metabolic disease, it'll result in complications, cardiac complications. You're going to lose your legs. You're going to have kidney disease, and that the only treatment is basically expensive pharma drugs. That is a progressive disease and that is completely false. It's a lie. This becomes important because it's projected that by the end of this decade, half of the world's population are going to be obese and over 20% to 25% will have Type 2 diabetes. The implications are enormous.

The bottom line is Type 2 diabetes is a metabolic disease. It's a metabolic disease due to bad lifestyle and really bad eating habits. Really bad eating habits. Us, Western people, I used to follow this. We eat all the time. We snack all the time. We basically become – this is part of the food industry's goal. Food basically has addictogenics in them. Glucose processed food, starch becomes an addiction. Most of us are glucose addicted and it's, in fact, more addictive than cocaine. It creates this vicious cycle of insulin resistance. If you've insulin resistance, it prevents leptin and the other hormones acting on your brain, so you're continually hungry. If you continually hungry, you eat more, it causes more insulin resistance. It causes this vicious cycle of overeating carbohydrates. Let's be clear, processed food and carbohydrates are toxins to the body. There is no requirement that the human has to eat carbohydrates.

While there are essential proteins and essential fatty acids, there are not essential carbohydrates. The methods propagated of low fat, high carbohydrate. This myth started in the 1960s with Ancel Keys, Ph.D., propagating that saturated fat was bad, promoting vegetable oils. Indeed, the uptake of vegetable oils and carbohydrates went up exponentially. If you go to the stores now, you'll see everything is low-carb – sorry, is low-fat. It's low-fat because fat has been stigmatized. If it's low fat, it must mean that it's high in carbs and it has high carbs and vegetable oil. What I did is I changed my diet. Firstly, I started intermittent fasting. I've got to the point now where I eat once a day and remarkably, I'm not hungry the rest of the day.

I started eating real food. Real food, not processed food. Not carbohydrates. I've significantly reduced my intake of carbohydrates. I try to avoid carbohydrates. By changing my diet and lifestyle, which is a simple thing, and in fact intermittent fasting is not difficult. At the beginning

it takes a bit of time to get used to, but once you are used to this, you don't have this terrible hunger. It's easy to do and there are lots of ways of doing it. Actually, I'm off my diabetes medicine. My fasting glucose is down to 100 where it used to be like 150 or 160. My hemoglobin A1C, probably the best marker of diabetes, went from 7.1 to 5.6. I've demonstrated, personally, that if you change your lifestyle, eat a diet that we were designed to eat, the diet of paleolithic people. We weren't meant to eat five or six times a day.

Many Western people spend 14 hours a day eating. And what do they eat? They eat processed foods and foods high in carbohydrates. If you go back to basics, the way our body was designed, you eat fewer meals with nutrient-dense food, not processed food. Probably the worst food on the planet is breakfast cereal, which is nothing more than sugar and processed carbohydrate, which is fed to our children. It's a toxin. Through this journey, I have changed my lifestyle. I've changed the way I eat and hopefully we can help other people. Then, what I also discovered is that there is an ancient Chinese herb — it's called berberine, it's been used for 3,000 years — which is probably the most effective diabetic medication there is. It's very effective and this has been demonstrated in really good, well-designed trials. The reason most people don't know about it is you can't patent berberine. Can't patent it, so no one can make money from selling berberine.

Therefore, there's no financial incentive in promoting it. It's cheap. It's over the counter, you can get on the internet. The combination of changing my diet, changing what I eat, changing how I eat, taking berberine, I've basically cured my diabetes and speaking to many people, there are many people that have followed this path. Again, it attests to the deceit and dishonesty of the medical system. They benefit from people being chronically ill, from chronically taking medications because that's what generates their income. Actually, for the healthcare system, I've saved enormous money because you spend less money on food and no money on medication and I'm not going to develop, hopefully, touch wood, all these diabetic complications.

Dr. Joseph Mercola:

Well congratulations on your program in reversing your diabetes. It's a pretty profoundly impressive story. I agree with 90%, 95% of what you said, and used to agree with everything. Through the years, I've refined some important components that I think would be useful to share on some of the points that you mentioned. You mentioned that there's — well, two big points, is that there are essential fatty acids. I'm actually in the process of writing a paper, we'd be submitted to *Nutrients* as review for omega-6 fats. I'm pretty convinced that that's a misnomer, that the data does not support that omega-6 are essential fats. It was an aberration that was done a little over 100 years ago that this study was published and it's just persisted in the literature. I don't believe they are essential. It's sort of a moot issue because it's impossible, virtually impossible to not get omega-6 fat if you're eating food.

The central core of what you said is the time-restricted eating, massively important, massively important. The complication though is that if you have a situation like we're overweight and had [inaudible 00:55:02] diabetes. It's going to work phenomenal. Restricting carbs is really, really helpful, but it's a short-term intervention. It's like how vitamin C or ascorbic acid is really useful for treating sepsis, but you don't want to give someone vitamin C, a gram, 2 grams every six hours for the rest of their life. No, it's a short-term intervention and when you treat the problem then you shift. The issue is as I see it, that you don't really want to restrict the time-restricted

eating into one meal a day like you're doing now. Certainly, less than 12 hours, but once you've achieved metabolic flexibility as you have, you want to extend the eating window to no less than four hours a day. And the older you are, the more important this become to probably range between 6 and 12 hours a day and not the same every day. You can mix it up. Gives a little bit of variety and variability in there. And-

Dr. Paul Marik:

Yes, can I interrupt you? I agree with you. Originally, I did eat one meal a day. I've now increased the window. I agree with you. Once I achieve what I achieved I now increase the window to about four to six hours. So, I do-

Dr. Joseph Mercola:

You may even want to go more than that too. I would not go below four to six hours for sure. The other thing is that the carbohydrates you mentioned, carbohydrates are not essential. There's no RDA for requirements. That is true, your body can live without carbohydrates, but they can't live well. Assuming you're metabolically flexible, if you're not getting enough carbohydrates, there is a requirement for it. If you don't eat it, your body's going to make it. The way it makes it is it liberates a hormone, which you know in high doses is a problem. It's called cortisol. That can lead to increased inflammation and that cortisol causes your liver to embark in a process gluconeogenesis, which makes glucose. The complication of having your body liberate cortisol is you have inflammation and that is not good.

You really want a certain baseline of carbohydrates. In fact, I'm embracing this so much. I have about 200 to 300 grams a day from healthy carbs, that the central part of what you said is true, you don't want to have any processed foods and this includes processed sugar. The culprit that I think is mistakenly targeted is carbohydrates, but it's very specific. It's processed sugar. We haven't had since 1970. It never existed before 1970, which is high-fructose corn syrup. Why? Because that is not just sugar, it's starch from the corn that is not filtered out in the high-fructose corn syrup, but it's not mentioned in the label of ingredients. It goes as undigested starch, it gets digested and broken – it isn't broken down. In fact, it's fuel for the bacteria in your colon and the bacteria produce endotoxin.

It's just a nightmare mess of inflammation. You can have healthy carbs primarily from healthy fruits and raw honey, but you don't want any high-fructose corn syrup. I said raw honey because many of the honeys out there are made from high-fructose corn syrup. You have to be really, really careful and make sure it's raw, pure honey. I think if you do that, it's the refinement that you transition to once you've regained metabolic flexibility as you have, and many people do are successful with this, but the mistake that I see being made all the time, including the one I made, is to think that low-carb for the rest of your life is just the best thing out there. I think you're going to long-term run into complications with it.

Dr. Paul Marik:

Yeah no, I agree. I think that the bottom line is to limit the duration of eating. Eat within a window, maybe 10, 12 hours. I think the most important thing is to eat real food. If it looks like-

Dr. Joseph Mercola:

Yes, couldn't agree more.

Dr. Paul Marik:

If it looks like food, it's food. If it comes in a box and has a label and is processed, it's certainly not food. As you say, I think high-fructose corn syrup is toxic. The fructose gets converted into fat in the liver. It's really toxic. I think it's just getting back to basics, eating a healthier diet. Eating what is natural. Blueberries, strawberries, grapefruits are really healthy fruits that are high in anthocyanins. They do have some fructose and glucose, but it's all natural. I wouldn't completely avoid starches. It depends upon your degree of metabolic flexibility. What happens is that as you start this journey, you become more metabolically flexible. Your body reacts much better to glucose and you can release insulin. Your insulin sensitivity improves. Your ability of your pancreas to release insulin improve. It's as you say, you can be less restrictive in the way you eat.

Dr. Joseph Mercola:

Then life becomes more enjoyable too. I wanted to dive now into a question I had. You invited me to speak on one of your podcasts about near-infrared sauna. In fact, the way we first met in person was in an event in Tampa last year, it was on vitamin C and we were both speaking. We had dinner and I introduced you to the red light – well, near-infrared sauna and you became intrigued with it, so much so that you wanted to see the literature, which is what I really respect about your approach is that you really want to dive deep and understand it from a physical science perspective. I'm wondering if you actually integrated that into the protocol you have for COVID and treatment of long COVID.

Dr. Paul Marik:

Yeah, absolutely. Thank you for that introduction. At the beginning I was a little bit skeptical, but the reality is there's an enormous body of science to support this. I think if something is valid, it will be out there. If you actually do a MEDLINE search in the National Library of Medicine, you'll find over 6,000 publications on photobiomodulation. It's truly astonishing. Really what it is, is harnessing the power of the sun. The sun is there and I know that you go for a walk in the sun every day. Absolutely, there's enormous data on the curative powers of the sun. In fact, in 1918 during the influenza pandemic, what they did in Boston is they took patients who were in the hospital, they took them outside in the sun, they called this open-air therapy and they showed the mortality decreased from 40% to about 13%. There's data now going back over 100 years attesting to the power of the sun. Obviously most of the sunshine is near-infrared and near-infrared has enormous health benefits. What people may not know is near infrared penetrates quite deep through the skin, maybe 9, 10 inches, and it has enormous biological properties. These have been proven. It's anti-inflammatory, it energizes the mitochondria, improves your metabolic dysfunction.

It's really important. There is a study which looked at people who are sun-averse. Some people are absolutely scared of the sun. What they showed is that if you avoid the sun religiously, it increases your all-cause mortality. Your risk of dying goes up significantly if you risk the sun.

Dr. Joseph Mercola:

Surprise.

Dr. Paul Marik:

Obviously, the answer is get sunshine like you do. The benefit is it's free until the Big Pharma can find a way to patent sunshine. It's free, and going for a walk in the sunshine is such an important thing. You get exercise, it's good for your mind and body and you get infrared. Now obviously you live in Florida, so the problem is people who live in an igloo or near the North Pole, that's not conducive to going outdoors. You actually can purchase infrared lamps, one in particular that mimics sunshine and you can expose yourself to near infrared every day and you do this indoors.

That's what I do. It's part of my protocol. When I sit working or watching the TV, I expose myself to near infrared. It's difficult to know what I'm doing has made the most benefit, but it's a package. It's a lifestyle change. Because obviously, Neolithic man walked outdoors. He didn't spend indoors in a cave and he was exposed to infrared. He was exposed to sunlight. He was exposed to blue light during the day and at night, as you know, light is really bad at nighttime it switches off your pineal gland and melatonin. You really want to replicate the way that we've evolved. Sunshine during the day. Eating sparingly during the day. Eating saturated fat and then at night, you can sit around a campfire. Campfire actually makes red light, which is infrared and it doesn't switch off melatonin. And at night you want to be careful switching off your pineal gland. It's really about getting back to basics and I think you are one of the leaders in this lifestyle change.

Dr. Joseph Mercola:

Thank you. One important component of the near-infrared exposure that I really didn't appreciate until recently is that it actually makes 95% of the melatonin your body and it's produced in the mitochondria, which is exactly and precisely where it should be because that's where most of the oxidative stress is created, in the electron transport chain to produce ATP (adenosine triphosphate). It's a beautiful, beautiful system, but you just got to understand it and get out in the sun whenever you can. A lot of people are concerned about the danger of premature wrinkling and skin cancer and sunburn. How can I miss sunburn? Well, it turns out that if you avoid all processed foods, which are loaded with linoleic acid or omega-6 because they're so cheap, that is what causes the sunburn and the skin cancer and the wrinkles. It's the excess linoleic acid that is being oxidized by the ultraviolet radiation in the sunshine that is causing the damage. It's not just the UV, the UV your body needs and can use to make vitamin D, of course, but if you don't have the high doses of linoleic acid embedded in your skin, that most people do, then you're not going to get that damage.

Dr. Paul Marik:

Absolutely. I agree with you.

Dr. Joseph Mercola:

Right. Thank you for that little diversion and I just would like to end it with, to see where you're at personally. You described the sham peer review process you went through and the hospital's

essentially terminating or removing your ability to be permanently employed in the conventional medical system. I'm wondering what you're doing now to put food on the table.

Dr. Paul Marik:

Yeah, that's a good question. I need less food, so that's a benefit. Basically, my focus now has shifted. I work for the FLCCC, which I founded, and my goal now is to empower patients, empower people and health care workers to a better life to treat many of these diseases. Fortunately, I have reached retirement age, so I do have a little bit of resources and I do get a stipend from FLCCC for which I'm grateful, so I manage. You don't need a lot to get by. You don't need a house with 14 bathrooms. You only need one bathroom and one bath and one bedroom and you don't need six cars. One car is fine.

Dr. Joseph Mercola:

A kitchen. Can't forget the good kitchen.

Dr. Paul Marik:

Yeah, no. I have a good kitchen and I have a good bathroom. Those are the essentials. You don't need a lot to live by. In a way, maybe I've become a minimalist and so I'm happy with what I'm doing. I've seen the light and my goal is to help as many people as I can. I think that gives me enormous satisfaction knowing that I can help people change their lifestyle to improve their health, their happiness and their well-being.

Dr. Joseph Mercola:

Terrific. If people wanted to know more about what FLCCC does, can you tell them how to get more information, the places they can access that?

Dr. Paul Marik:

Yeah, the best is to go our website, which is FLCCC.net. There, you can download a whole bunch of protocols, how to prevent COVID, how to deal with influenza. There's a protocol on intermittent fasting, good foods and bad foods. We have the diabetes protocol. Actually, I'm working on a new protocol, which I'm really very excited. It's going to take a little bit of time to do, is the metabolic approach to treating cancer and the enormous number of repurposed drugs that are available to treat cancer. Because much like diabetes, patients with cancer can empower themselves. I'll tell you about a remarkable study. Cancer is a disease that touches everyone. I'm not sure there's any family that hasn't directly or indirectly. There was a peer-reviewed paper in a prestigious medical journal that was a randomized controlled study. Exactly what the ivory tower people want, that looked at three simple interventions to reduce the risk of cancer. Three.

Basically, these were vitamin B, your favorite, omega-3 fatty acids and home exercise and not smoking. They showed that these simple interventions reduce your risk of cancer by 50%. Isn't that important? There are some other things I would add to the protocol. Melatonin, actually, is very important in preventing cancer. There's really good data that people who have low melatonin levels have much higher risk of cancer, particularly breast cancer. Nighttime workers who have a disturbance of their circadian rhythm are much higher risk of getting cancer. In fact, night shift working is considered a Type 2 carcinogen. There're simple things people can do to

empower themselves to both reduce their risk of getting cancer and if they have cancer, they can work with their oncologist in an integrative, adjunctive way, which will allow a reduction in the doses of toxic chemotherapeutic drugs. I think this is a really exciting area of endeavor.

Dr. Joseph Mercola:

Dr. Thomas Seyfried from Boston College was a pioneer in that area. He's written books and papers on this too. I'm wondering if you're using some of his work.

Dr. Paul Marik:

Oh, yes. His book was actually impetus of me going down this path. His book is brilliant. He is a true scientist. I'm absolutely astonished by the depth and breadth of his research. Once you read his book, it's perfectly clear that this is a metabolic disease and it can be controlled by metabolic intervention. I think he is a pioneer and for me, he's changed the complete direction. This is not based on hearsay or snake oil medicine. This is based on really high-level scientific investigation. He's a pioneer and it really is his work, which gave me the springboard and the encouragement to follow this path.

Dr. Joseph Mercola:

Good guy for sure. I've interviewed him a few times. Well, congratulations. You keep up the great work in persevering and I'm glad you transitioned to a place where you can reduce your stress because you're not being harassed by the medical system. Congratulations, also, for vindicating yourself from the allegations of the troll that tried to get your paper retracted. It looks like things are going in the right direction and I'm really glad for that. Happy that you are now metabolically flexible and will be with us for a few more years because having diabetes and 50 pounds overweight is not a good prescription for living a long life.

Dr. Paul Marik:

You say something really important. Stress, I think people don't appreciate how bad stress is for the body and persistent cortisol levels. I have a continuous glucose monitor and I can monitor changes in glucose and when I am stressed, it does a terrible thing to my blood glucose. Doesn't matter what I eat. I think people need to develop methods of dealing with stress. Relaxation techniques, stress mitigation techniques, I think are really important. Part of it is diet. Part of it is the sun. Part is infrared, but as you say, I think mitigating stress is so important.

Dr. Joseph Mercola:

Well, you keep up the great work and I'm sure we'll talk again soon.