The Rapid Mass Deployment of COVID-19 Vaccinations and Its Possible Biological Effects on the Population: A Special Interview With Stephanie Seneff, Ph.D.,

By Dr. Joseph Mercola

Dr. Joseph Mercola:
Welcome everyone. This is Dr. Mercola helping you take control of your health, especially in these perilous times. And we're joined today, again, by a recurring guest because she's so darn good, Dr. Stephanie Seneff. She has been associated with MIT (Massachusetts Institute of Technology) for not one, not two, not three, not four but five decades and has four advanced degrees from this institution. And she's a senior research scientist out there. And since 2008, she's devoted most of her brilliance into health issues, specifically focusing on glyphosate and sulfur. But we are so beyond fortunate because in the last year she re- vectored her amazing ability to dig out the details and find these puzzle pieces and put them together on the COVID vaccine.

Dr. Joseph Mercola:
What could be a more appropriate topic than this? And she has written a paper that was just published last week and the name of the paper, I'll let her say it because it's not in front of me, but it's the best paper I've read on the vaccine. I think it's more than likely the best paper ever published on the vaccine. It's so comprehensive and thorough, and it took her six months to write it. It was rejected a number of times, it finally got published. And it's just amazing. We're going to go dive deep into this and you are going to be fascinated, just beyond fascinated, what she's uncovered. It’s beyond amazing. So with all that intro, welcome and thank you for joining us today.

Stephanie Seneff:
Thank you so much for having me, my pleasure.

Dr. Joseph Mercola:
All right. So gosh, so much to dive into. I'll let you take a start because I've got like about 50 points I want to go over.

Stephanie Seneff:
I know it's very hard to know where to start. I mean, for me personally, just when I saw that they were going to just unleash this vaccine on the entire world and just basically get everyone to believe that this is safe, effective, it's just the only way we can get past COVID and just to do this, to have developed this incredibly new technology so quickly, and to skip so many steps in the process of evaluating, it's an insanely reckless thing that they've done. And I just really needed to know. My instinct was, “This is bad” and I needed to know. And so I really dug into the research literature by the people who've developed these vaccines and then more extensive research literature around those topics. And it looks to me like I don't see how these vaccines can
possibly be doing anything good. When you weigh the good against the bad, I can't see how they could possibly be winning at this point from what I've seen.

Dr. Joseph Mercola:
And I couldn't agree more. And we've just had some very recent confirmation of that impression. You shared an article with me today before we went on that was published by America's Frontline Doctors by a research scientist who has over 100 peer-reviewed studies published showing that for anyone who gets the vaccine who's over 60 during the first 14 days after the first injection, the deaths are 15 times higher than those who aren't vaccinated. That is extraordinary. And then there was another study, which we'll link to in this article that shows that the deaths after vaccines are implemented, that reviews it country by country, and after every time that was implemented, the death rates increased except for a few countries. And you've wisely understood that was because these countries weren't using glyphosate. So give me your take on that before we dive in deeper into what your actual review paper shows.

Stephanie Seneff:
Yes. I mean, I immediately suspected glyphosate when I started to see COVID-19 back in April, because I knew that I've written a book on glyphosate called “Toxic Legacy.” And I have an entire chapter in that book on the immune system. Glyphosate, I believe, is a train wreck for the innate immune system. So when your immune system is weak, your body has to overreact to the virus. It can't kill the virus. And so it ends up basically shooting guns and having collateral damage and wrecking your tissues. And you get into this cytokine storm kind of situation where you destroy your lungs and you can't cope. And it's not really the virus, it's the immune reaction to the virus that's killing you. And that's because your immune system's too weak. If you have a strong innate immune system, I believe you wouldn't even get symptoms from COVID-19.

Stephanie Seneff:
So I think then you look at the statistics on which countries are hit hard and just can't get ahead of this virus, they're clearly the countries that use a lot of glyphosate and that are developing biofuels based on glyphosate-exposed plants. So I think that's a critical piece of the puzzle as well. Glyphosate in the atmosphere, especially in cities or on highways where people are burning bioethanol and things like that in their vehicles, I think glyphosate getting out into the atmosphere, people are breathing it. And so now you're getting a direct attack on the lungs’ immune system, which makes you very susceptible to COVID. So I've written a lot about that whole topic as well but that's not our topic today.

Dr. Joseph Mercola:
Yes, indeed. So just to further support and expand on the innate immune system, certainly restricting your exposure to glyphosate by consuming organic foods, which typically are free or have much lower levels in glyphosate. It's just hard to get free because it's so pervasive in the environment but optimizing your vitamin D levels and becoming metabolically flexible are two simple things that don't have to cost you anything. In fact may save you money. You get vitamin D for free, especially in the summer, just go outside at solar noon in your swimsuit. If you go out with full clothing, it’s not going to work. Then just eat six-to-eight-hour window, time-restricted eating. So the innate immune system what's going to do it, we don't need a vaccine. We do not
need a vaccine. We both believe, at least I believe and I suspect you'd too, that vaccines will kill more people than the disease.

**Stephanie Seneff:**
Yes. And in fact they will make the disease worse. This is something we wrote about in our paper. And it was based on our study in the U.K. of a cancer patient who was treated for 101 days for severe COVID and stayed in the hospital for a 101 days, kept in the isolation room because he was spreading the virus the whole time. They were feeding him antibodies that were from people who'd recovered from the virus. They'd caught the virus and recovered, they gave this guy the antibodies and they didn't work. And this is actually really, really critical. Then they monitored his version of the virus over time. And when he died, a particular strain of the virus became dominant in his body. And that strain had something like 12 mutations in the spike protein. So he had basically figured out how to get around those antibodies that were being delivered to him to evade the antibodies.

**Stephanie Seneff:**
And so that viral strain is now more robust against the normal antibodies that were making against this specific spike protein that's in the vaccine. I think the vaccines are doing the same thing. Anybody who's taking chemotherapy, they'll have a suppressed immune system, anybody who's got autoimmune diseases and just various weakened immune system people, vaccinated and in fact, they've shown that most of them don't make antibodies. Like in the study, I think only something like 17% actually produced antibodies but those are the dangerous ones, the ones who produce the antibodies. And then when they get sick, those antibodies don't work because their immune system is so sick.

**Stephanie Seneff:**
They do the same thing this guy did in the hospital, they produce a new variant. And when you see like in India, all these new variants coming out and causing all this trouble, U.K. had the problem, Brazil, these are all places that use a lot of glyphosate by the way. So I think that you have a lot of immune-compromised people in a country where glyphosate is destroying your immune system. And that gives you tremendous opportunity for the virus to mutate its way out of a jam. And then the vaccine's going to accelerate that process because we're vaccinating immune-compromised people left and right.

**Dr. Joseph Mercola:**
Yes, indeed. So with all that intro, let's dive into your paper, which you start out with the fact that most people, I guess, understand that this is a novel vaccine, or as you term in the paper, an unprecedented vaccine. An unprecedented vaccine is one for a disease that never had a suitable vaccine, and other examples would be HIV (human immunodeficiency virus) and malaria. So why don't you review for us the statistics, the projections for an unprecedented vaccine from time of conception to time of delivery and the predicted success rate, which will blow your mind.

**Stephanie Seneff:**
Yeah. I suppose I have to get to the paper to get the details but it's 12 years and then it's something like 2%, right?
**Dr. Joseph Mercola:**
Yeah. Overall going through phase two, three-

**Stephanie Seneff:**
Then you go through all the phases, very small percentage.

**Dr. Joseph Mercola:**
[inaudible 00:08:52] likelihood of success, 2%.

**Stephanie Seneff:**
Yeah. It's just after 12 years, 2%. And we basically it did in maybe what? Maybe you could say one year.

**Dr. Joseph Mercola:**
Less than a year, less than an Operation Warp Speed.

**Stephanie Seneff:**
Yeah. I know. And then we just skipped a bunch of steps and we don't know anything about long-term because we can't study it. It hasn't happened yet. And now millions of people are being vaccinated.

**Dr. Joseph Mercola:**
Hundreds of millions.

**Stephanie Seneff:**
Hundreds of millions of people are being vaccinated. It's mind-boggling.

**Dr. Joseph Mercola:**
Probably billions eventually.

**Stephanie Seneff:**
Yeah. And the way we're going. And we'll find out 10, 15 years from now when people start getting prion diseases and crippling autoimmune prion diseases, neurodegenerative diseases at younger ages and more prevalent. I think that's what we're going to see. I think it's driving us towards – and of course blood problems, we've seen that already. Hemorrhaging, blood clots, heart failure, brain problems. I mean, it's just a nightmare. And I can see how it happens. I mean, basically the vaccine is so unbelievably unnatural and they have a single-minded goal, which is to get the body to produce those antibodies to the spike protein. And then they do everything they can to rig it and modifying every step along the way towards that goal. And so they've redesigned – the RNA has been manipulated. It's not natural RNA because it has these methyl-pseudouridine on it.

**Dr. Joseph Mercola:**
Methyl-pseudouridines. So that is a good point. There's no question. Because you would think that this is a spike protein is what they're giving the people instructions to make themselves. You would think they use the identical messenger RNA, but because it's so perishable, this is a totally modified messenger RNA to give the signal to your body to produce. So odds are not good that it's going to produce something beneficial for you.

**Stephanie Seneff:**
And when you think about-

**Dr. Joseph Mercola:**
Well, talk about that because there's like that's the only one that methyl-pseudouridine [inaudible 00:11:02] was a nucleotide and once you explain how that thing goes because not everyone is as literate as you in molecular biology and genetics. So go over that and some of the genetic substitutions and the other substitutions they're making in messenger RNA.

**Stephanie Seneff:**
Yeah. They're making the messenger RNA that's abnormal, they're making the protein that's abnormal and they're making everything abnormal. And the goal is to keep it alive. And so normally if you get injected with RNA, you have enzymes in your system, in your tissues that will immediately break it down. That's why it has to be stored at a cold temperature. Your body knows, “I got to get rid of this. I don't want this. This is bad.” So now what you do with the vaccine is you make sure you can't get at it. You rig the vaccine. So you make these things that look like – and I think it's LDL particles that they're trying to imitate. You and I had a bit of a discussion beforehand. They're trying to make these things look like natural LDL particles. Then there's the lipid and they have these very strange lipids. So the lipids are very abnormal, very weird. I've never heard of them before. They have complicated names. So we wrote about it in the paper. They mix the RNA-

**Dr. Joseph Mercola:**
They're not natural lipids or fats.

**Stephanie Seneff:**
They're not natural but they have some cholesterol in there. And that's probably just to help it look like a natural LDL particle so that your body will say, all the cells will take it up. It doesn't even – it's not being taken up by the ACE-2 receptor, the way the spike protein, it's not being taken up the same way that the virus is being taken up. It's a totally different mechanism that brings it into all the cells basically. It can take up LDL particles and inject it into the muscle. So you've gone past all the mucosal membranes. Usually your virus is going to come into the lungs or maybe by the skin possibly, I don't know or oral, any kind of cavity where there's mucosal system, that's going to hit the virus first, the virus is going to have your natural mucosal system respond to it and clear it if you're a healthy person.

**Stephanie Seneff:**
And that's the end of it, but we never get a chance to do that. Even the healthy people, you're just getting it shot right into your muscles, past all the barriers, and the muscles go crazy. They see
this awful toxic thing, and they don't know what to do. They start sending out all kinds of alarms. They bring in all the immune cells and then the muscles are busy making this protein and the immune cells are taking up the protein and carrying it into the lymph system. And this is, I mean, a really interesting paper that I read about these RNA vaccines. They were tracing what happens to the RNA once you inject it in the muscle. It doesn't stay in the muscle. It goes into them. It gets into the swollen lymph nodes underneath your arm. The armpit lymph node gets swollen. That's usually a symptom of a breast cancer.

**Stephanie Seneff:**

And people have been saying, "Oh, don't worry. If you've got swelling under the arm, don't worry. Don't get your breast cancer test. You're fine. It's the vaccine." I mean, well, if it's something that's related to breast cancer, what is the vaccine doing? It's causing the same symptom, who knows? Right? And then it goes from there into the spleen and that's where big trouble happens. And I was so fascinated by that. They're very proud that it goes to the spleen.

**Dr. Joseph Mercola:**

Let's hold off on this spleen thing for a bit because we're-

**Stephanie Seneff:**

We're rushing ahead. There's so much to say.

**Dr. Joseph Mercola:**

I want to focus on the basics so people get this, because again, you're just so brilliant that you say something in a sentence or two, and it's just like it's going to take many people a long time to understand this. So I just want to slow it down. And let's go – you mentioned that it increases antibody production to the spike protein, which is called humoral immunity, but there's also cellular immunity or the innate immune system, which you referenced earlier. So help us understand what really helps give the body protection. Just give us a brief overview of the immune system insights and how it's more likely that your innate immune system is going to defeat this thing than the humoral immune system. Full basics of the vaccine.

**Stephanie Seneff:**

Well, that's what I wrote in my book about the glyphosate and the immune system. I have this chapter and I started out by showing that the innate immune system is actually very powerful. And if you're healthy, it can clear viruses without ever producing a single antibody. Antibodies are a second-tier effect when your innate immune system fails. And it's going to fail if you inject a vaccine because it never even got a chance to start because it didn't go into the lungs. And your body thinks, "Oh my God, the innate immune system must be shot to hell, I better do something." So your body's way overreacting to something that isn't true. And they also made this spike protein. So they made a different version of the RNA. I mentioned already those methyl-pseudouridines. Every single uridine in the vaccine RNA is changed to this methyl-pseudouridine, which your body doesn't know how to break down. So that slows down. Next time-

**Dr. Joseph Mercola:**
Let's stop there because a lot of people don't know what uridine is. So let's get into basic genetics. Uridine is a substitution for thymine, which is a nucleotide that's used in DNA, but in the RNA, like this virus, they don't have thymine, they have uridine. And expand anything else that help-

**Stephanie Seneff:**
And it's one of four things. There are the four nucleotides that make up the famous DNA code and uridine is one of four. And then you have this particular sequence that codes for the specific protein and every three letters codes for an amino acid. And those letters are redundant. So because there's only 20 amino acids, there are 64 codes. So for example, glycine, the first and second have to be G that's the [inaudible 00:16:19] and the third one can be anything to code for glycine. So they also did something else, which I was just really amazed. They took every chance they could to change an A or a T into a C or a G, they did it.

**Stephanie Seneff:**
And they did that because they realized that when proteins have a lot of Gs and Cs, they are much more likely when – I'm sorry. When RNA has a lot of Gs and Cs, it's much more likely to be able to make protein. It makes a lot more protein, something like a 1,000 times as much if it's got those Gs and Cs. So they said, "Well, what the hell? We'll just change all those As and Ts to Gs and Cs because we want to make lots of this spike protein." It's total manipulation.

**Dr. Joseph Mercola:**
Wait, let me modify that, untested manipulation.

**Stephanie Seneff:**
Untested.

**Dr. Joseph Mercola:**
Completely untested, except on the process of doing the greatest human experiment in recorded history with this vaccine.

**Stephanie Seneff:**
Right. And then on top of that, they changed the protein. So they said, “Well, this protein it has two different ways it folds.” And once it matches this ACE-2 receptor, it binds to it. And then after that, it sort of snaps into a different shape and goes right into the membrane like a needle. It goes into the membrane. It fuses with the membrane. The virus – a protein, this spike protein. And that's a normal thing that it does. And so what they said – they said – and then once it fuses, it's actually hidden from the immune system. There's like this part they want you to get antibodies. They're like obsessed with it. And when it closes up, the immune system's antibodies can't get to it.

**Stephanie Seneff:**
So they're like, "Okay. Well, let's just change the protein so that it doesn't do that." So they basically figured out that if they stuck a couple of prolines in there, replaced a couple of amino
acids in that fusion domain with proline. Proline is a very stiff amino acid that doesn't move. It makes things very inflexible. So it locks it into this open state that says, "Hey antibodies, come get me." So they're delighted with that, right? The total goal is to make antibodies. So they leave that protein open so the antibodies can see it but that also means it sticks on the ACE-2 receptor, it doesn't go anywhere. It can't go in.

**Stephanie Seneff:**
So you're going to get all these spike proteins being made by these immune cells that are being loaded up with this RNA and those spike proteins are going to stick to ACE-2 receptors and not leak. That's going to suppress ACE-2 and that's how you get a lot of these problems. You get pulmonary hypertension, you get ventricular heart failure, you get stroke. And so we're seeing those things as side effects of the vaccine. And I think it's because that protein is binding to the ACE-2 receptors and disabling them.

**Dr. Joseph Mercola:**
Yeah. We're definitely going into the protein because that's a big, massive surprise that you unleashed in your paper. But before we get there, I want to focus more on the mechanics of this vaccine because the messenger RNA, the highly modified untested messenger RNA they're putting in the vaccines is so perishable that they don't only have to keep it cold, but they have to encase it in this lipid membrane.

**Stephanie Seneff:**
Yes. That's another one.

**Dr. Joseph Mercola:**
The size is under 40 nanometers. That's sort of the critical threshold where it essentially goes like a hot knife through butter, goes into every cell in your body easily because of its size. So help us understand what are the consequences of giving this signal to produce these spike proteins? Remember, this is a huge part of this. This is not a regular vaccine. This is an untested gene therapy that they're giving your body instructions to make the spike protein. So it's engineered in a way to get in every cell in your body and what is your understanding because there's no test on it? So you just have to make educated guesses. And there are very few people who are as qualified as you to make one. But how long do you think it's going to remain intact sending instructions for your body to make this unknown, dangerous spike protein in your body? Could it be days, weeks, months, years?

**Stephanie Seneff:**
I know. I mean, that's an unknown question of course. And they didn't have any answers. They were talking on the order of six months, I think in their paper that it could survive for six months. I mean, we don't really know. They've done such a good job of keeping it from breaking down. And the other really worrisome thing and I've talked a lot about in the paper, we can go into more detail about that but there's potential for it to become part of the DNA and then it will last forever. I mean, you get it into your stem cells, let's say.

**Dr. Joseph Mercola:**
There's a lot of prep work to get to that point, though. So let's hold on.

**Stephanie Seneff:**

Yeah. We can leave that off for now. But the other thing is that they put that PEG in there and also those lipids are cationic. Cationic lipids are in involved.

**Dr. Joseph Mercola:**

Wait, people don't know what PEG or what cationic is. So just slow down-

**Stephanie Seneff:**

Polyethylene glycol.

**Dr. Joseph Mercola:**

We're not talking to research scientists.

**Stephanie Seneff:**

Yeah. Polyethylene glycol. And they figured out that that was something that would help to keep it safe. I mean, the whole thing is make this ball that's so impenetrable that the enzymes can't get to it and can't wreck that RNA before it gets inside itself.

**Dr. Joseph Mercola:**

And I believe you stated that the PEG was being used as an adjuvant similar to aluminum in regular vaccines, because there's no aluminum in this vaccine, but it's the PEG that's [inaudible 00:21:30].

**Stephanie Seneff:**

Right. And now I actually think it's the cationic lipids. And we got into that-

**Dr. Joseph Mercola:**

Explain what a cationic liquid is.

**Stephanie Seneff:**

And I mean, both the PEG and the cationic lipids, but the cationic lipids are pretty outrageous because they’re positively charged lipids. I mean, usually you have these phospholipids in your membranes that are negatively charged because of the phosphate. And these cationic lipids, they figured out that they would cause an immune response. So I think that's a critical piece of the puzzle that gets you that initial immunity, because they always have trouble with these vaccines. As you know, they put aluminum in them to try to get the immune system to notice there's something bad here. And they couldn't put aluminum into these vaccines. I suspect it might've wrecked the RNA. I'm not sure why, but they absolutely were not willing to consider aluminum. But I think they figured out if we make these cationic lipid membranes, positively charged, it's the opposite of what the natural lipid membrane is, the cells hate that.

**Stephanie Seneff:**
I mean, positively charged lipids are extremely toxic to the cells, to their membranes. And so the cell just starts screaming to the immune system, "Help me out. Help me out. I'm dying here". I mean, basically is how I would say it. It launches an immune response, which is what they need. They need an initial immune response to get those immune cells in there. They need the immune cells to pick up the spike protein that's being now produced. It comes into the cells using the natural endocytosis process where you bring it into the cell’s digestive system and then as it gets acidic, then magically it opens up and lets that RNA out into the cytoplasm where it immediately starts making a protein. It's all rigged to set up to do that.

**Stephanie Seneff:**

Another thing they change, they put this big poly-A tail on it. They put a head, they put a tail, they make it look exactly like a human protein ready to go. That's also very abnormal for that protein, for that RNA. It's just an extremely manipulated version of the spike protein RNA aimed at pretending that it's a human protein and the cell gets to work making this protein doesn't know better and it sticks it out on its membrane and then the immune cells pick it up. They pick up the protein and take it inside, and then they carry it into the lymph system.

**Stephanie Seneff:**

So it starts out in the muscle. The RNA starts out in the muscle where you injected it and then the muscle cells take it up and then the muscle cells start making spike protein, and then they start displaying it on their surface. And then the immune cells take up that spike protein and they think, “Oh, this isn't really bad,” take it into the lymph system, to the armpit, that lymph gets swollen. They've actually traced it through. They've done other experiments. With RNA technology they've shown, eventually it really makes its way quite quickly into the spleen and it stays there for a long time.

**Dr. Joseph Mercola:**

Now, is this the spike protein or the messenger RNA or both?

**Stephanie Seneff:**

Both. I think that the immune cells are picking up the messenger. Once they come in, they start eating the messenger RNA as well. So they pick up the messenger RNA, they carry it into that. It's probably mostly the messenger RNA that they're carrying in but then they're busy making protein along the way. So they start displaying the protein on their surface. Those immune cells need to display on their surface in order to get the other immune cells that produce the antibodies to see it. So there's all these different immune cells that have different roles but it's the dendritic cells and maybe the macrophages that are initially going into the muscle, picking up the RNA, taking it over to the lymph system, traveling through the lymph system to the spleen and piling it up there. The spleen was the highest concentration of all the organs they looked at and the liver was second, spleen and liver.

**Dr. Joseph Mercola:**

Is this animal studies or human?

**Stephanie Seneff:**
Animal studies. And it wasn't this vaccine, but it was a messenger RNA vaccine. So it was the same concept. And I found more than one paper that talked about that in all the papers, including by the way, the other vaccines, the ones that are based on the DNA vector. They also go to spleen. So I think they like it when they see that it's going to the spleen because you have these germinal centers in the spleen that are really focus groups for making antibodies. So these dendritic cells are in these germinal centers in the spleen, and then they bring in the B-cells and T-cells, and those guys are the ones who make and perfect the antibodies because you need to go through a whole training mode to get the antibodies to be exactly matched to that particular spike protein. And that happens predominantly in the spleen because that's where all the action is taking place.

**Dr. Joseph Mercola:**

Well, that is terrific. I mean, not terrific for all, but thanks for helping us understand the details of this because it's not widely known. I mean, this information [inaudible 00:25:52]. This is really groundbreaking insight into what they launched on us for the last six months. So I think we can probably go – there are so many different points but we could probably go to the point where you wanted to go about the gene editing. In fact, I was accused by some research scientist who was debunking my interview with Judy Mikovits actually, who I’m interviewing next week saying that the vaccine is a gene therapy and he said, "Mercola needs to go back and study. Just take some refresher courses or something, this is not [inaudible 00:26:34]."

**Stephanie Seneff:**

Yeah. And it was fascinating to meet Judy. I mean, I, of course, knew Judy's work and she talks so much about the reverse transcriptase as part of the HIV, these retroviruses, that’s her thing. The retroviruses provided-

**Dr. Joseph Mercola:**

Let me just say that reverse transcriptase is what causes the body to turn the RNA back to DNA. So I mean-

**Stephanie Seneff:**

That's exactly what it does. It does a reverse transcription. So there was this long period of time in which we had the mantra that transcription is DNA to RNA, to protein, that's basic biology, DNA, RNA, protein. But then we realized, in fact it was David Baltimore, Ph.D., at MIT back in the 1960s. It was part of the '60s and '70s-

**Dr. Joseph Mercola:**
You probably met him, didn't you?

**Stephanie Seneff:**
I actually was in his laboratory. I spent one year in graduate school in biology working in his laboratory. I feel really upset with myself that I dropped out to raise a family and I gave up, but I went back to get a Ph.D. not in Biology, but I spent one year in his lab and he won the Nobel Prize for the work that was going on there at that time. And it was reverse transcriptase. It's these retroviruses. And so Judy and I are good friends and we're excited. We want to try to bring her stuff and my stuff together and do the same story. And I think COVID-19, and these vaccines is helping us a lot to do that. So it turns out, and I didn't know this until I started digging into these vaccines that we actually have plenty of reverse transcriptase in our own cells. I hadn't realized that. We have plenty of it. And it's these LINEs and SINEs that are able to take our RNA back to DNA and to put that DNA back into the genome.

**Dr. Joseph Mercola:**
All right. Well, wait, stop there. I would imagine 99.99% of people don't know what a LINE and a SINE it.

**Stephanie Seneff:**
Yeah, long interspersed – I always had trouble remembering what they are — long interspersed nuclear elements. I think that's right. Long interspersed and then short interspersed nuclear elements, LINEs and SINEs. They're really amazing. I mean, it's just astonishing and I saw a paper with-

**Dr. Joseph Mercola:**
And these are sequences of the nucleotides, right?

**Stephanie Seneff:**
Yeah. These are actually pieces of DNA and they make up a huge percentage. I mean, it’s really surprising, like I think LINE 1 – there are various numbers of them and I think LINE 1 is 10% of our genome. I mean, they're a huge amount of stuff in our genome as concerned with these LINEs and SINEs. And most of the time they're allegedly inactive and people were kind of puzzled, “What is it these things do?” And they're very weird. I mean, they fold DNA backwards and stick it back in different. They make clones. They sort of grow the DNA. I mean, they do crazy, crazy stuff. It's really wild science. I find biology so fascinating because it's just so mysterious. But when people have, for example, Alzheimer's, they get multiple copies of that gene. The amyloid beta protein gets duplicated all over the place in their genome.

**Stephanie Seneff:**
They get [an] extra genome. They get like a big fat genome with extra copies with different variations in those copies. And they do that through RNA. So you basically have a whole mechanism. It's an evolution. It's the mechanism by which we evolved probably. The primary, I would guess, is through taking the DNA, turning it into RNA, mutating the RNA because RNA mutates much more easily than DNA does. And then putting it back into DNA, sticking it back into the genome. This is a known process that's associated with cancer and with neurological
diseases and all these nasty diseases have this property that they activate these LINEs and SINEs and start finding. They're trying to look for other alternative solutions for the protein to fix the problem, I suspect. And the problem has to do with things like glyphosate in the environment. I mean, things are so sick and the body's trying to find another way around the problem by mutating the proteins. It's a process that we use to deal with environmental toxic chemicals that we're confronted with generally.

**Dr. Joseph Mercola:**
So the end result is that this messenger RNA could actually be transcribed and converted back to DNA by these LINEs and SINEs in our body, which is essentially a reverse transcriptase endogenous within our own cells or organelles. And then this DNA can then be integrated in to our DNA, be transferred down genetically so truly really genetic editing.

**Stephanie Seneff:**
Yeah, that's really basic thing. Yeah. And I sent you that article about the sperm, which I was just so blown away when I found that sperm was-

**Dr. Joseph Mercola:**
Tell us about that.

**Stephanie Seneff:**
That was just amazing because it was a complete story and the title was something like, “The sperm can do this.” It was basically taking messenger RNA, external messenger RNA. Now that could be from a virus or from a vaccine, taking it in messenger RNA, converting it to DNA and then producing what's called plasmids. And so the sperm do this actually, whatever messenger RNA that they come up with when they're doing their thing, they make all these plasmids out of this messenger RNA that are now DNA. They convert it to DNA, put it into these little pellets and they release those plasmids. And the amazing thing was that during fertilization there's one sperm that kind of gets surprised that all the sperms that are there are releasing these plasmids into the environment around the egg and the egg is taking them up.

**Stephanie Seneff:**
So basically the sperm are handing over to the egg all these plasmids that have these nuggets of DNA in them that they got from RNA that they've picked up. And so they can up the RNA that's in those vaccines and put it into those DNA plasmids to give them to the egg. And then the egg hangs onto those plasmids and it can put it into all the cells as it grows and spreads some around over the whole body so by the time the child is born, it's got all these plasmids and there was a code to make this spike protein. I mean, in theory, this is totally doable. And now that child is going to not have any antibodies to the spike protein. It's going to think it's a human protein. Its immune system is going to be trained that this is a natural protein you don't need to have antibodies to it.

**Stephanie Seneff:**
And so if that child gets exposed to COVID-19, their immune system won't react. Exactly how sick they'll get or whether they'll get sick at all, I don't know, but their immune system won't
react and they'll be able to carry that virus for their entire life, it seems to be, and then pass it on down to their children as well. And then those plasmids can also get integrated back into the genome. So eventually you could have somebody who's got passing onto their offspring a human genome with a spike protein built into it. That is not impossible. And I'm sure it's very rare and maybe we won't ever see it, I don't know, but there is that disease that the cows were getting. I wrote about it in the paper. That's also really, really amazing because it comes very close.

**Stephanie Seneff:**

It was a viral diarrhea infection that's been a problem with the herds of cattle. And what would happen is a baby calf would be born that was thinking that the protein of that virus belonged to the calf genome. And the calf would think that because it had been integrated into the calf's genome and then the calf would carry the virus and spread it to all the cows. So they became aware that you'd have these killer calves that would be born and then all the cows would get sick. The adult cows would get sick with the infection that the calf was carrying and unable to clear. So I don't see why the same thing couldn't happen with COVID that a baby is born, who has this humanized version of that protein, and then catches the virus, and then it spreads it to the entire population.

**Dr. Joseph Mercola:**

They would be super spreaders.

**Stephanie Seneff:**

Yeah. And they basically killed these calves. When they found these calves, they killed them with respect to the cows because they couldn't afford to infect the entire herd with these calves, with the virus, if these calves they were happy to carry. So it's really fascinating. I mean, it's interesting to think about how the virus goes through this whole process. First, it's new to the population. It causes all this disease and then maybe eventually there's something in that virus that's needed, I think, and potentially it gets to be really wild science to speculate on these possibilities but it's trying to get some kind of protein into your system that can help you, for example, cope with glyphosate. I mean, I think that's a real possibility.

**Dr. Joseph Mercola:**

So it's easy to understand once this DNA for the spike protein is integrated into the actual DNA that they would escape antibody production or humoral immunity. But do you think that if you were exposed to the SARS-CoV-2 virus with respect to the COVID-19 vaccine, but if you think if you were exposed to the virus and had this genetic transformation that it would also escape innate immune protection?

**Stephanie Seneff:**

What I wonder, and I wish I could answer this, if I were a human who absolutely didn't mind this virus, that I thought it was fine, so I don't react to it and I let it grow, then what happens? I mean, do I get sick? And so to what extent is the illness the consequence of the immune response, rather than the virus itself? We don't know that really because people say, “Oh, the real problem here is the overactive immune response.” People say that over and over about COVID. People are dying of the immune response to COVID, they're not dying from the virus. The virus is not
killing them. It's the immune response to the virus that's killing them. So if you don't have an immune response, I mean, what happens? I don't know. I don't know. Nobody knows.

**Dr. Joseph Mercola:**
It certainly hasn't been studied and so it's stuff for speculation at this point but that is one of the major reasons why this vaccine is such an enormous problem because we have no clue what the long-term consequences are. We don't even know what the clue with the short-term consequences are, other than it doesn't look good and that more people are dying collectively than if they hadn't been vaccinated.

**Stephanie Seneff:**
Yeah. I mean, there's that study that I just sent you this morning. I just found this morning, I haven't had a chance to look at it closely, so I don't know, but it was quite an interesting data analysis where they showed in Israel, where they've got very high vaccination rate and you mentioned, I guess, in the beginning of this of this talk where they were dying with much too high rate right after the vaccine. It's was actually-

**Dr. Joseph Mercola:**
It was 15 times higher for those over 60 in the first two weeks.

**Stephanie Seneff:**
Yeah. I suspected that too when I read about that paper because they were talking about right after the first vaccine because you don't have any antibodies yet. So you've got that vaccine going on making spike protein. It could be a decoy because when the virus comes in, you've got all this extra spike protein, your immune system is fighting your own spike proteins. It doesn't notice there's these real ones over there. It could be right. It's just a decoy that prevents your immune system from fighting the real virus. So I think there's a real vulnerability in the week after you get vaccinated, especially the first vaccine when you haven't built those antibodies yet. And we saw some of these in nursing homes in various parts of the world where nursing homes had tremendous death rate from COVID-19 shortly after they vaccinate everybody. There was a handful of those that hit the news in the U.S. and then I think Italy, I forget exactly where, but did you read about those or-

**Dr. Joseph Mercola:**
I don't recall those.

**Stephanie Seneff:**
Yeah. There's just a few cases of specific nursing homes where the virus happened to come in at the time right after they got vaccinated and then lots people got sick with COVID and they had a very high mortality rate.

**Dr. Joseph Mercola:**
So I want to get into the actual potential toxicity of the spike protein [inaudible 00:38:37], which is a pretty amazing part of your paper. So why don't you expand on the details of that, because it
really gives you a different perspective on exactly what it's doing. Because remember, that is what this vaccine is, it's instructions to your body to become a factory to make spike proteins.

**Stephanie Seneff:**
Right. And that's all it does. It doesn't do the whole virus, it just does the spike protein. And that's this version of the spike protein that doesn't enter because it's screwed up. It's messed up its ability to fuse with the cell because of those two prolines. So it goes and sticks onto the ACE-2 receptors and knocks them out. And they have done studies where they only expose the person to the spike protein, probably a rat – animal studies where they only expose them to the spike protein and they showed it was toxic in the brain and it was toxic in the blood vessels. So it's causing immune reaction all by itself that is damaging to the tissues. And it's basically a toxic molecule. And I think it's toxic possibly because of its being a prion protein. And that's a part we wrote at the very end. It's kind of an interesting story with the paper because we heard about this guy Clausen [inaudible 00:39:54] had this article like he thinks it's a spike protein.

**Dr. Joseph Mercola:**
He's been a researcher in vaccine for a long time.

**Stephanie Seneff:**
Yeah. And he was worried about it being a prion protein. And so Dr. Greg [Nigh] and I have talked about, "Oh, I wonder if we maybe should put something in on this." And we looked around and we thought, well, maybe it's a little too speculative maybe we'll just leave it out. And then in one of our rounds of review, I think it was the third round, we had a new review. We actually never got rejected, we just got, "We need more modification." We've got three rounds of reviews, six reviewers and it was all the same journal and nobody ever rejected it, but they were always, "We'll see how it is." It's like it needs modification.

**Dr. Joseph Mercola:**
My last paper had six reviews. Essentially minor rejects, it’s not a rejection, but, “Revise this six times.”

**Stephanie Seneff:**
Major revision, minor revision, that kind of thing. Well, you did six times, we did three times, but it was six reviewers. And I appreciate them because they helped us make it a better paper. But it was in that third round of review they said, "Hey, you got to talk about the prion thing." So then we started rummaging through the literature again trying to get the prion story and I was on fire and I still feel right now that all of these papers I grabbed and I didn't have time to read them, just kind of get the essence of it. And the story is amazing there. And I'm going to do more research on it. I don't know enough yet, but it looks horrendous to me. I think it may be the most worrisome thing. We already, of course, also have the antibodies. I need to do two things. We'll do the prions and then we'll go back to the antibodies. But I think that's another major reason.

**Dr. Joseph Mercola:**
To look on what you can do to help prevent this, which is quite [inaudible 00:41:24].
Stephanie Seneff:
But I mean the autoimmune disease. So there's two big things that are going to happen in the future. They're going to take time. So we're not going to see it immediately. And of course we're not going to blame the vaccine because rates will start going up for these horrible diseases and we won't know why probably-

Dr. Joseph Mercola:
They won't be linked. No one will link them. At least-

Stephanie Seneff:
They won't want to that's for sure. Yeah. So the prion and then the antibodies, because the protein resembles a lot of human proteins. That's a huge issue there as well, but let's do the prion first. It's so fascinating. I've been really fascinated by prion protein. So I already knew quite a bit about them and I even knew for example, that that's just... So first of all, there's a prion disease, CKD, Creutzfeldt-Jakob disease, which is the human version of mad cow, which is that disease that was made famous in the UK.. because of all that problem with mad cow in the calves. And so that was due to this PrP protein. We have PrP, all the animals have a prion protein, which they call PrP that has different ways to fold. So it's just like the spike protein, the spike protein conforms that folded version that goes into the membrane or it can be opened up because of those two prolines keeping it open in its non-membrane state.

Stephanie Seneff:
Now that's very dangerous because the prion proteins typically are in the membrane and they form these alpha helixes, this particular kind of structure that so wound up structure in the way they fold. The way proteins fold really influences how they work. And the prion proteins produce these alpha helixes that go into the membrane and they have an essential role to play in the body but we can't figure out what it is. I mean, it's really fascinating. People don't understand what these things are doing but they know they're essential. When it misfolds, the prion protein goes into the cytoplasm. It's a soluble form that forms what they call beta sheets and these beta sheets, if you get a lot of them in the cytoplasm, they'll glom together and make these polymers.

Stephanie Seneff:
And they're like oligomers. So multiple beta sheets of different prion proteins all sticking together and making this big oligomer thing that is the toxic form of the protein. And eventually it can precipitate out as these fibrils. So you have the membrane version with the alpha helix, the beta sheets making the oligomers and which is just multiple versions of the protein all stuck together in the cytoplasm, and then you have the fibrils that precipitate out. And that, for example, Alzheimer's has amyloid beta. That's a prion protein that is associated with Alzheimer's and has the autonomous plaque is this precipitated amyloid beta. And then there's alpha-synuclein, that's associated with Parkinson's disease. And then there's TDP-43, which is associated with ALS or Lou Gehrig's disease. So you have all these horrible neurodegenerative diseases that each one is tied to specific prion proteins.
And so the spike protein is a prion protein that this guy, Howson, said so and there's also this pair of, Tetz and Tetz, I think it is that they wrote a paper that's been published showing that many viruses have these membrane proteins that look like they're prion proteins. And then they have a second paper that's not yet published. It's not peer-reviewed, but it's on the web in one of those preview sites and where they talk about this particular protein being a prion protein. So we have stuff coming out right now where they're suggesting this is a prion protein. Now I know that prion proteins have a unique signature, which is called a glycine zipper signature, which is a pattern in the amino acid that's a GXXXG, meaning there are two glycines and they're spaced by three amino acids. And those three can be anything GXXXG. And so for example the prion protein-

**Dr. Joseph Mercola:**

GX represents another nucleotide, right?

**Stephanie Seneff:**

Yeah. Any amino acid. It could be any amino acid.

**Dr. Joseph Mercola:**

So that's an amino acid that's GXXXG.

**Stephanie Seneff:**

Yeah. GXXXG. And the Xs could all be Gs so it could be GGGGG, that would be fine. So it's not G it's anything in between. And so the scrapie prion protein is magnificent. And it has this huge, huge sequence all in a row of GXXXG, GXXXG like about, I don't know, 12 or 15 of these things all in a row. So that's very clearly a prion protein. Amyloid beta is more subtle. It has four prions. Four of these glycine zippers but the amyloid beta, that's associated with Alzheimer's and the spike protein has five of these zippers. And one of them is right in that domain that got messed up by those two prolines. So that means, I think, those prolines are going to make this spike protein much more likely to cause trouble as a prion protein that it would have without those prolines. The modification that they made for the vaccine, I believe it's going to make it worse as a prion.

**Stephanie Seneff:**

And of course if prion proteins get in trouble when there's too many of them, what happens is the cell responds to stresses by upregulating, producing more of this PrP, for example, or any of these. Like if the alpha-synuclein gets upregulated in the spleen, in those cells, when they're stressed and of course this vaccine stresses them enormously and the alpha-synuclein which is a prion protein can then buddy up with the spike protein is being produced like crazy. The vaccine makers wants it to make as much spike protein as you possibly can. So when you get all that spike protein in the cytoplasm of these immune cells, they're going to have a problem with a prion reaction. And it's going to combine with the alpha-synuclein that's also upregulated. The whole thing is going to be – they're going to have to be very stressed. They're going to make these little pellets out of that.

**Stephanie Seneff:**
And this is all known. I mean, there are papers that talk about all of these things not with respect to this vaccine or not with respect to COVID-19, but with respect to prion diseases that these stressed cells make these little pellets, which releases exosomes. It releases exosomes that are packaged up with these prion proteins from this spleen. So the papers are showing that the spleen, and in fact, those germinal centers in the spleen that the vaccine makers are so proud that that's where this stuff goes and that's where all the action happens. Those same germinal centers are a primary source of the prion proteins that eventually get taken up the vagus nerve and delivered to the brainstem nuclei. And that's how you can get Parkinson's disease, for example. So you get this alpha-synuclein packaged up with this prion protein that's the spike protein, sent out as exosomes traveling along the vagus nerve to the brainstem nuclei to the substantia nigra where the Parkinson's disease happens. And then those cells there pick it up and get in trouble. They get sick and you get Parkinson's disease.

**Dr. Joseph Mercola:**

Yeah, fascinating. So these exosomes are like the nanoliposomes that the messenger RNA has in case and they're about the same size and they rapidly penetrate almost every cell in the body, but particularly concentrated in the tissues or the areas that you mentioned?

**Stephanie Seneff:**

Yeah. They've been doing... I mean, of course I've been reading all up on exosomes lately too because they're so fascinating. And that's another thing where I overlap with Judy because Judy's been talking about exosomes as being very much like viruses. They're kind of like viruses. So there's a whole – I mean, they have RNA in them, they have DNA in them, they have mitochondria in them. They mean, they're very fascinating. These exosomes transport all kinds of stuff. So I think when a cell is stressed and in fact, if it's dying, for example, when it's dying, it makes even bigger things, but they make all these different exclusions, these sort extracellular vesicles of various sizes. And the exosomes are the smallest ones, I think, that there's all these various sizes of these extracellular vesicles that are made by a cell under stress.

**Stephanie Seneff:**

And I think they're saying, "Okay. Guys, we've got some stuff here that I need to give you, I need you to send a signal out about my situation by packaging up all this stuff that's inside me and shipping it out." So you're getting somebody else to deal with it and in many cases sharing things of value like mitochondria. So they package up mitochondria and release them in exosomes. I mean, it's really fascinating. There's all kinds of stuff inside these exosomes, but there's a particular kind of exosome that is packaged up with these prion proteins. And they think that's how Parkinson's happens. They've got it all written up with this spleen centers producing these exosomes that then travel along the vagus nerve to – they've shown that if you cut the vagus nerve, then you reduce the risk of Parkinson's disease.

**Stephanie Seneff:**

So they've really shown that that's a channel by which these exosomes travel. They travel along the nerve channel into the brain. And then they cause a lot of trouble in the brain once they get there. So I mean, it's fascinating, fascinating science. We still don't understand a lot of it and we don't really know even why these prion proteins misfold. I mean, there's so much we need to
learn, but it looks to me like it's a setup here. They're really inviting this kind of thing to happen with these vaccines where they're focusing on those germinal centers. And those are the very same place where these prion proteins often get started.

Dr. Joseph Mercola:
Yes, indeed. So thank you for that excellent summary. And I'm just going to repeat that with my perception and you can correct any mistakes I've made. But to me, this is the most groundbreaking, headline-making news of recent past few months. And of course it will be ignored, in fact, probably actively censored that the vaccines that are being offered to hundreds of millions of people are actually instruction sets for your body to make a toxic protein that will eventually wind up concentrated in your spleen, that sends out the prion-like protein instructions in these exosomes to sensitive areas in your body and targets then that will lead to neurodegenerative diseases. I mean, that is just headline-making news. And it won't get the attention it deserves.

Stephanie Seneff:
Yeah. And worse than that, I've actually shown that these exosomes can get released from the lungs. So that's how you can have-

Dr. Joseph Mercola:
Okay. The spreading, that was the next step.

Stephanie Seneff:
Yeah. That seems to me. Like I heard about this — I know people are saying they were not vaccinated but they hang out around vaccinated people they start getting weird periods. I mean, that's pretty — it's sort of like, “Oh, this can't be true,” right? That's got to be fake news. But the fact is, if you are a person who's producing these exosomes from your spleen and shipping them out, there's no reason why you can't ship them out to the lungs. And in fact, they've shown experimentally that those exosomes do get released. Exosomes get released from the lungs.

Dr. Joseph Mercola:
But just to be clear, what's being shared or spread is the spike protein which in itself is toxic. It's not the SARS-CoV-2. So this is not an infection, it's this spread or shedding of a toxic protein.

Stephanie Seneff:
Yeah. And it could be combined with alpha-synuclein as well, because if those cells have been upregulating alpha-synuclein and then they got this prion mess and they package it up in those exosomes and ship them out. So it could be really very trigger happy for prion disease. So if you're breathing it in, you could be getting increased risk, it seems to me. I mean, it sounds really farfetched, but it's not. It just looks like it could happen from just the logic of what goes on in biology. It could happen that you would breathe in these exosomes containing these misfolded prion proteins, which are not good for you. And exactly what happens when they go into the lungs, I don't know. I have no idea.

Dr. Joseph Mercola:
No one does. It's never been studied, but you can only speculate like much of this.

**Stephanie Seneff:**
I know. It's a lot of speculation that has to be at this point because we haven't done the research.

**Dr. Joseph Mercola:**
Intentionally.

**Stephanie Seneff:**
I know.

**Dr. Joseph Mercola:**
Which really brings this whole point as to if they really believe that this was the best thing to save people's lives and prevent a catastrophic decimation of the human race, which it isn't in any way, shape or form, then if they believe that though, they would have freely shared this information on how to make these vaccines with other countries, the poor countries, which can't afford to pay for these vaccines. But yet, if they were given instructions, they could make it themselves and provide it at a less expensive rate. But Gates specifically has avoided sharing the intellectual property that will allow these countries to do that and only restrict it to the countries that can afford to pay for it and give them tens of billions of dollars of profit. I mean, it's speculated that Pfizer alone will make between $20 billion and $30 billion this year alone. And this is not 2021 enormous profits, it's going to be continuously. These are going to be just like the other vaccines.

**Stephanie Seneff:**
Well, that's the thing too, because they're forcing all these mutations. And so therefore they're going to have to have a new version and the good news is they know how to just make a different spike protein. Once they get the formula, they just make a different one. So they're very happy about that. They just roll out a new vaccine. O”kay, everybody line up again, get your double shot.” I mean, every year, every six months, I don't know. But however long it takes for the virus to mutate its way out of a jam, which it's going to do repeatedly because the virus is very good at mutating.

**Dr. Joseph Mercola:**
Yeah. So the few other things I want to discuss and what is the autoimmune reactions that you [inaudible 00:55:02].

**Stephanie Seneff:**
I'm glad you brought that up because I don't want to forget that that's really important because that's been and there has been theoretical studies and then they've done studies in the lab to confirm that. And it's really quite interesting because there are many different sequences in that spike protein that are similar to sequences in human proteins that are known to be associated with all kinds of different autoimmune diseases. And so there was a theoretical treatment that showed that there were these similarities by looking at the actual amino acid sequence. And then
there were specific studies where they showed that they bind. So in other words, we have a similar sequence, you get an antibody to that sequence in the virus protein and then that antibody goes and sees a human protein that has something that looks similar like it needs glasses. It's a little confused and it sees, “Oh, this looks like a match” and it binds to that instead.

**Stephanie Seneff:**
And that's how you get auto immune disease. It's called molecular mimicry. It's very well-known that when you produce antibodies, you always have a risk of producing auto antibodies and they can cause serious diseases. Well, the amazing thing is that they found in – so one study showed there were these similarities with all these different proteins and then another study showed that it actually binds to specific proteins that we know are associated with all kinds of autoimmune diseases and I can list some of them, for example, trans-glutaminates which is linked to celiac disease. The antibodies to the spike protein bind to trans-glutaminates. That means it can cause celiac disease. There's a protein that's involved with Hashimoto's thyroiditis, which is an autoimmune thyroid condition, that protein also binds to the spike protein.

**Stephanie Seneff:**
There's one associated with lupus that binds. There's proteins associated with the platelets. And that's how we're probably getting this attack. They think the immune attack on the platelets that causes precipitous drop of the platelet count and then you bleed to death from a hemorrhage in the brain, that's been happening to people. Johnson & Johnson vaccine of course had that big issue but the mRNA vaccines have a lot of cases as well in the side effect reports of bleeding because of a tremendous drop in platelet count because of antibodies to the platelets. And then there are also antibodies to the mitochondria, antibodies to the nucleus.

**Dr. Joseph Mercola:**
Let's talk about the platelets because that's an important one. I thought that autoimmune reaction was a result of the response to the PEG, the polyethylene glycol rather than-

**Stephanie Seneff:**
Well, that's a different one. That's anaphylactic shock. That's also – thanks for bringing that up. Anaphylactic shock due to PEG but this one with the platelets is due to the autoimmune reaction attack on the platelets.

**Dr. Joseph Mercola:**
From the spike protein.

**Stephanie Seneff:**
Yeah. Probably from recognizing the similarity between these platelet antibodies and the spike protein is what they think. I mean, they're not sure but it makes sense and it supports with the data that it actually binds to these platelet proteins that are linked to antiplatelet antibodies. So it's all very amazing actually.

**Dr. Joseph Mercola:**
It has killed a lot of people, there's no question.

**Stephanie Seneff:**
I know.

**Dr. Joseph Mercola:**
It's a different type of stroke. It's relatively uncommon with hemorrhagic stroke. It's ischemic stroke from clotting, but this is the exact opposite now.

**Stephanie Seneff:**
It's so weird because you get simultaneous multiple clots throughout your body as sort of disseminated intravascular coagulation combined with tremendous drop in platelets and then hemorrhages. You've got both hemorrhaging and clots going on at the same time, which is quite unusual. And I think it's like a toxic reaction to heparin. So it's a very strange, a very rare form. That's why they know it's caused by the vaccine because it's happened too often right after the vaccine to be something that would happen by chance.

**Dr. Joseph Mercola:**
The generic term for it is the ITP, idiopathic thrombocytopenic purpura.

**Stephanie Seneff:**
Thank you. That's right.

**Dr. Joseph Mercola:**
So wow, that was quite a bit. So now that everyone is depressed, especially if they've gotten the vaccine, we have to offer some ray of hope on what they can do because it took me two hours to read your papers. It's only 42 pages, probably 38 if you exclude the references, but it took a full two hours. It's just fascinating. This is not a quick 15-minute read. And we're going to have a link to that paper on this article.

**Stephanie Seneff:**
Yeah. I have the name here, “Worse Than The Disease: Reviewing Some Possible Unintended Consequences of mRNA Vaccines Against COVID-19.” You can see that here.

**Dr. Joseph Mercola:**
Yeah. That's the thing. In medicine, we have this – it's not uncommon, there's a double negative that's so common in medicine to have the treatment be worse than the disease. And I'm glad your paper addressed that. But it also offered some things of hope and it didn't go into the specifics I would've liked to. I would've liked to been a mini co-author contribution of this one but the pearl that you dropped for those who were astute enough to catch it is that there is hope that your body does have an intrinsic capacity that it was born with to take care of this. And what is that capacity? It's called autophagy. Autophagy is two Greek words combined together. “Auto” means self and “phagos” means eat. So it's, self-eating, it's not apoptosis, it's not destruction of the cell, it's removal of damaged proteins that needs to be eliminated to prevent from causing
complications. So you brought that out and just the lights went off. And I saw that because there are two powerfully effective strategies to upregulate autophagy really, and they work tremendously. Do you want to know what those are?

**Stephanie Seneff:**
Yeah. I imagine one of them is periodic fasting.

**Dr. Joseph Mercola:**
Periodic fasting. Some people can do it. Eighty percent of the population being overweight and probably close to 40% being obese, they could do that fasting and do really, really well. But for those who aren't, there is a process called time-restricted eating. And even if you are obese, you're not going to go right to fasting and you got to do it slowly because you're just not going to be able to tolerate. So time-restricted eating is when you're restricting your eating window to six to eight hours.

**Stephanie Seneff:**
I do that. Yeah, I've learned that from you and I skip breakfast and I have lunch like at 1:00 and then dinner at 6:00.

**Dr. Joseph Mercola:**
Yeah. Perfect. Perfect. So you get smaller, that'll do. And there's one other strategy that will really, really help. And that is sauna because sauna upregulates heat-shock proteins. This is mechanism of action. And most people understand that that's the mechanism. They studied it, but they don't understand how heat-shock proteins work. Heat-shock proteins work by essentially refolding proteins that are damaged. And if they – about one-third of the proteins that your body makes are damaged as soon as they are produced. So this is a big issue. This is why I do sauna every day.

**Stephanie Seneff:**
Especially with glyphosate, by the way.

**Dr. Joseph Mercola:**
Especially with glyphosate, it could make it worse and probably even more than one-third. But in addition to refolding them, it has this sensing mechanism that the protein is too damaged or too destroyed that it targets it for destruction, a type of autophagy. So there are two powerful ways, daily sauna. I would say work your way up to 170 degrees Fahrenheit for 20 minutes.

**Stephanie Seneff:**
Wow.

**Dr. Joseph Mercola:**
Yeah. And that's right-
You do that every day?

**Dr. Joseph Mercola:**
Every day that I'm home comfortably and I'm unable to do it but-

**Stephanie Seneff:**
That's fascinating. So the heat actually sort of loosens up the protein and allows to just somehow-

**Dr. Joseph Mercola:**
No.

**Stephanie Seneff:**
It recognizes-

**Dr. Joseph Mercola:**
[crosstalk 01:02:39], it causes your body to create heat-shock proteins. There's dozens of these different proteins.

**Stephanie Seneff:**
In response to heat, you get these proteins that then apparently like to clean things up under heat situations. I always wonder why the heat triggers those proteins but then there's a question of “Why does it trigger those proteins?” There's always a lot of questions you can ask about biology.

**Dr. Joseph Mercola:**
Yeah. And it actually simulates a fever so that if you actually have an infection, like an upper respiratory infection or even COVID, that it would help your body destroy that virus. It's an [crosstalk 01:03:12].

**Stephanie Seneff:**
Actually, that's a good point because the virus is susceptible to heat. And that is the critical time just a little bit beyond your normal human fever, a regular temperature is when the virus starts to fall apart. So that's true for the SARS-CoV-2.

**Dr. Joseph Mercola:**
Yeah. I think this is one of the most important health practices people can engage in because it will actually help your body in so many ways. But it's obviously a bit costly. Typically, saunas are a few thousand dollars or maybe even more but if you have one of your house – I wouldn't use a commercial sauna like in a gym or something because when you're sweating, you're detoxing and eliminating a lot of toxins that are fat-soluble. So unless they were really assiduously cleaning it regularly, which [inaudible 01:03:55] toxins in there.

**Stephanie Seneff:**
That's a good point. That might be a problem in there.

Dr. Joseph Mercola:
But it does help your body detoxify. Especially if you're heavy, you're going to store these fat-soluble toxins and then your body excretes them.

Stephanie Seneff:
It makes sense actually just the sweating, right? It makes sense.

Dr. Joseph Mercola:
Yeah. It's powerful. And in Finland where they did the studies, they found an overall 40% decrease in overall mortality, 40%-

Stephanie Seneff:
Wow. That's amazing.

Dr. Joseph Mercola:
That's [inaudible 01:04:21] cardiac heart disease. So it's crazy not to take advantage of this. Once you have it, it's basically free, you have to shower and clean up afterwards, of course but to sweat – when I go in there, I sweat in about a quarter water [crosstalk 01:04:36] every time.

Stephanie Seneff:
Wow. That's amazing.

Dr. Joseph Mercola:
At least a quarter, I lose 2 or 3 pounds.

Stephanie Seneff:
Wow.

Dr. Joseph Mercola:
It's good though. And you feel so good when you get out of it and especially jumping in the water. So those were the pearls to give you hope and what you can do and should be doing anyway because even if it doesn't do anything against this, which we don't think is – we know it's going to activate the autophagy so it'll help you not only if you had the vaccine, but even if you didn't because of this viral shedding process that you referred to and probably sharing [inaudible 01:05:07].

Stephanie Seneff:
Yeah. Right. I know. We have to worry about being near people who have had the vaccine. Spike protein shedding, that's a really interesting concept. And whether it's true or not, we don't know if anybody's researched but it's certainly provocative. And of course, organic diet, sunlight.
We mentioned that earlier that those are so crucial. And I think a high-sulfur diet. Sulfur is very important for the immune system.

**Dr. Joseph Mercola:**

Yes, absolutely. So, wow. Here's the other thing that you had put in there that was a bit at the end. That was an, “Oh and by the way,” so there's an – again, this whole production commercialization of this vaccine is a process. So ideally they’ve got this highly genetically modified messenger RNA that's encased in this nanoliposome PEG is what they're intending to do. But the unintended consequences of the commercialization of this product is that some spike proteins, fragmented spike protein don't make it into that nanoliposome, they're actually circulated into the diluent or into the liquid that it's encased in. So why don't you go into that and tell us about potential complications of that fragmented protein being injected?

**Stephanie Seneff:**

Well, I mean, I was really shocked and Greg figured this out and read that the version of the protein of the vaccine that they used in the trials was carefully constructed with this expensive technology that it makes the DNA in a way that doesn't involve any kind of cells. And they made a much more reliable version of pure DNA, pure RNA without any contaminants but then once they had to mass-produce it, apparently they've used a different method to make the DNA and involves growing bacteria and culture, I believe is what they said. And they give these bacteria – they modify their genome to have this spike protein in it. And then they have this way of teaching them to make lots of it because they can sort of activate that gene and have these microbes make lots and lots of spike DNA. They're trying to get the DNA by proliferating the microbes.

**Stephanie Seneff:**

And so then they have to isolate the DNA from a much messier situation. And then they get much less-reliable versions of the DNA, and then they get much less-reliable versions of the RNA, and the RNA has many more fragmented versions and even possibly some double-stranded RNA. So there's this like a much messier consequence of the version that was used in production compared to the version that was done in the laboratory for the trial experiments. Greg Nigh found something that talked about that. And if that's true, I mean, that's really shocking too because they never actually did the trials on the same substances that they're putting together in the vaccine. And if you get this RNA that's only partially coded, then what happens? You make all these partial strings of short chains of parts of prion protein. It's a prion protein but I mean the spike protein. So you have all these different short chains of spike proteins in there and the claim is that those don't matter but who knows?

**Dr. Joseph Mercola:**

It's untested but it's safe.

**Stephanie Seneff:**

Yeah. It's just mindboggling how many different things we don't understand about these vaccines and what they can do. And there's also the herpes, I don't know if you remember the herpes simplex.
**Dr. Joseph Mercola:**

Yeah. It increases resistance of herpes. Yes.

**Stephanie Seneff:**

Yeah. So people getting shingles after the vaccine and that's a sign that you've weakened the innate immune system. So I think it's an overproduction of TNF alpha that actually interferes with interferon alpha, which is what you need to keep the herpes in check. So when you get the vaccine, it takes away your ability to keep herpes in check, which is a sign that your innate immune system is weakened. And of course, I've seen that with the flu vaccine. There's a study that showed that people who got – this was a controlled study where the people who got the flu vaccine had a fourfold increased risk of syncytial virus over the next year. Fourfold because their innate immune system was weakened. And I believe every time you get any vaccine, you're basically driving your immune system towards the adaptive immune system. It's all about making antibodies.

**Stephanie Seneff:**

And the immune cells actually become less capable of the generic immunity that you need to fight off everything else. If that's true, that means that people who have been vaccinated are going to be less resistant to the strains that are coming out that have mutated their way out of a jam. So the ones that are not sensitive to the specific antibodies and have been perfected against that one version of the spike protein, those guys are going to have a field day on the people who have been vaccinated because they're not going to be as capable of fighting off those mutant strains as the ones who have not been vaccinated. I'm predicting that.

**Dr. Joseph Mercola:**

Yeah. So I wanted to go back as we summarize things. We said initially that this is classified as an unprecedented vaccine. And those typically require 12 to 15 years before they go into commercial production to prove the safety. This vaccine was produced in less than one year. So the studies haven't been done. We have no idea, no concept, no clue. The paper you wrote is really probably the finest one to-date on summarizing the theoretical likelihood of adverse outcomes. And it's this likelihood because the studies are – we're compiling the data and the initial data, we've only been in six months folks, it's does not look good. Most of the countries who've had the vaccine, the death rate went up immediately. It spiked. You can see it's going down and we'll have a link to the video that shows us dozens if not a hundred different countries where it's introduced and it goes up.

**Dr. Joseph Mercola:**

So they did some studies obviously, a few months or trials. I'm not sure how you classify human trials, phase two and three. And in those trials they did – we didn't discuss this, but I wanted to mention it now because I forgot it. And that they conflated. We projected that unprecedented vaccine success rate should be about 2% or so. But we have a 93% to 95% success rate or effectiveness rate in these early trials from Pfizer and Moderna vaccines. So what is that, though? It is a conflation or confusion between absolute risk and relative risk. So the relative risk is 93%, 95% reduction, not in likelihood of catching the disease, not in having herd immunity,
but in having decreased symptoms. Decreased symptoms is the only thing it showed but that was still a relative risk.

**Dr. Joseph Mercola:**

If you look at the absolute risk, it was only 1%, which is crazy. So we're doing this vaccine with virtually no benefits, no downside, no one has looked. And the second paper you sent, which we're going to have a link to from the America Frontline Doctors talked about this is the risk-to-reward ratio, enormous risks, unbelievable risk, increased risk of death, these prion diseases, neurodegenerative diseases, complications, miscarriages and virtually no benefit. It doesn't pan out unless one thing: you're a stockholder or the owner directly of the vaccine companies or Bill Gates, who's invested heavily in them. That's the only way this thing makes sense, the only way.

**Stephanie Seneff:**

I know. It's amazing, isn't it? I still feel like I'm in a surreal time. I just can't quite understand that this is actually taking place. It doesn't make sense to me.

**Dr. Joseph Mercola:**

This is a dystopian novel on steroids, unquestionable.

**Stephanie Seneff:**

Exactly. It's sort of mass hysteria, right? They've managed to convince people that this disease is so fearful that whatever you can do to stop it, you have to do it and you have to do it for the good of your country. They're telling you, “If you don't even think you need the vaccine, never mind, get it anyway for everybody else, right?” There's just so much pressure.

**Dr. Joseph Mercola:**

And it gets more egregious as the time goes on. So just a few weeks ago, even though pregnant women were in none of these things fake studies and even in these fake studies and you probably know, but I forgot to mention that they got rid of the control group. They said, “Oh, this vaccine is too good, we can't have a control group. It would be unethical to do that.” So they eliminated the potential for ever finding out any differences between the two groups. But then three weeks ago, the CDC (Centers for Disease Control and Prevention) said pregnant women should be vaccinated. And we know 30% increase in miscarriages.

**Stephanie Seneff:**

That is so incredible. I remember even when they first released it, they said, "Well, if you're pregnant, we haven't studied on anybody who's pregnant but if you want to get it, that's not a problem. Go ahead and get the vaccine." I'm like, “Are you kidding me?” They haven't even studied on anybody who's pregnant and you're telling me to get it? I don't understand. I don't understand how people can listen to this kind of advice.

**Dr. Joseph Mercola:**
Well, it's primarily through the propaganda but it is reprehensible malpractice. And the individuals responsible for implementing that recommendation should be jailed and have their license permanently removed.

**Stephanie Seneff:**
I agree.

**Dr. Joseph Mercola:**
It's in violation of the Nuremberg Code. Absolutely is. There's no question. It's illegal and they're getting away with it. But even on the same level, the same level. Fauci just said last week that the goal is by the end of the year to have this for everyone down to 6 months old.

**Stephanie Seneff:**
I know. It's scaring me. They keep on bringing down the age. Now it's 12 years old.

**Dr. Joseph Mercola:**
And these kids have virtually no risk of having any complication.

**Stephanie Seneff:**
It's so insane. I just can't fathom how we got to where we are today. I just can't understand.

**Dr. Joseph Mercola:**
Yeah. It is. And the majority of the people will think that we're nuts and that we're conspiracy theorists, but we're not. We're telling people the facts and we will be vindicated. There is not a micro doubt in my mind the truth will eventually surface when unfortunately, millions of people will have to die before. This is another interesting fact, just to summarize this thing, is that swine flu vaccine – you were around certainly when it happened late '70s, there was no liability insurance, that didn't happen until 1986. So in the late '70s, the government provided the liability and they recommended everyone to get it. They gave it to 48 million people, 48 million of those 53 people died, 53, and they shut the program down. Lots of people got Guillain-Barre syndrome. They paid out three and a half billion dollars worth of damage. They shut it down with 53 deaths. Today, as we're speaking mid-May, we have over 4,000 reported deaths to the virus database. And it's known that the virus database is only showing between 1% and 10%. So that 4,000 could be 40 to 400,000 deaths.

**Stephanie Seneff:**
I know. It's just amazing.

**Dr. Joseph Mercola:**
And it's still not shut down. In fact, it's the exact opposite. We want everyone, pregnant women, 6-month-old kids to have this vaccine.
It's just unbelievable. I mean, it's just mind-bogglingly unbelievable. I don't understand what's going on inside people's heads, I guess, other than making a lot of money and technology. I mean, they think if they can get us to accept this vaccine, there's all kinds of other mRNA technology products that they've got in the wings. They're so excited about the potential.

**Dr. Joseph Mercola:**
Vaccines are a very clever way to earn revenue because there is, as we mentioned, no liability, there's no way they can ever get a bill from a lawyer for damages done from this vaccine. They're permanently immune to prosecution, permanently, no liability.

**Stephanie Seneff:**
That's just incredible.

**Dr. Joseph Mercola:**
It's like the perfect drug. Any drug they make there's potential harm and damages that frequently results in billions of dollars of lawsuits and damages and awards. So anyway, we can go on and on about this but I want to summarize with some hope that your body was born with a powerful tool to eliminate this and protect you. And it's called the innate immune system. So even if you've gotten a vaccine, you want to upregulate as much as possible because we don't know. The studies haven't been done. We won't know for years, if ever. So you want to do things like optimize your vitamin D, 60 to 80 nanograms per milliliter in the U.S., 100 to 150 nanomoles per liter, outside the U.S. And the only way you know is to test it. You can't guess, you got to test. You would get it for free if you'd go outside in your bathing suit close to solar noon, that'll work almost everywhere in the summer.

**Dr. Joseph Mercola:**
So do that or swallow vitamin D 8,000 units a day, do time-restricted eating and then do sauna regularly. It is crazy not to do sauna, especially now that we know there's toxicities from these spike proteins and you want to upregulate the heat shock proteins and have your body remove them from your body. And there are no studies on this obviously, it's too darn new, but there's every bit of reasonable common sense that suggests that this will help mitigate that. So even if you haven't gotten the vaccine, you're exposed to people who have, because it's a – I don't know what the numbers are. I think it's two-thirds of the people over 60 in some counties is like almost a 100%.

**Dr. Joseph Mercola:**
I mean, they've manipulated and brainwashed and propagandize people to the hilt. They've convinced them that they need this not worthless, it's worse than worthless because it's about to kill so many people. So anyway, you're going to be exposed to these spike proteins, not the virus or the spike proteins for those who've been vaccinated because they're shedding these exosomes. Very, very clear but don't be confused, it's not shedding the virus. There's a distinction there, an important distinction. So anything you want to add to that summary because – well, first of all, before I offer you the chance to finalize your comments is just extreme gratitude, appreciation, not for myself, but every one of us for taking the hard work, six months of diligent hard work to research. I know what it's like to go through those tests. It is a pain, but it's kind of fun because
they're like a treasure hunt but for doing that and providing us with this massive incredibly important piece of information.

**Stephanie Seneff:**
Yeah. Well, thank you very much. It certainly was a labor of love because I'm just so concerned about my children and my grandchildren. Everyone's being pressured to get it and families are being tortured by different people having different opinions about the vaccine and fighting with each other. I mean, it's just caused a tremendous amount of stress among so many people across the globe. And I really hope that – I hate to say this, that it needs to get bad in order to get better because it takes a huge amount before they finally recognize that it's not working. And I don't know at what point they will but that's what needs to happen. We need to recognize that it's not a good idea and that we need to stop it. And we need to do that immediately, in my opinion, but we'll see what happens.

**Dr. Joseph Mercola:**
Okay. Well, thanks again. And hopefully we'll have you back really soon with Judy Mikovits and discuss.

**Stephanie Seneff:**
Yeah. That'd be fun.

**Dr. Joseph Mercola:**
That three-way conversation will be really intriguing. So I'm really looking forward to it and hope she can join us soon. So that would be great.

**Stephanie Seneff:**
That would be wonderful. Thank you.