

Rip Esselstyn:

I am thrilled to welcome back to the podcast Dr. Michael Greger, one of the top rockstars in the plant-based movement. He is, of course, the founder of Nutritionfacts.org and he is also the author of the wildly, insanely books How Not to Die and How Not to Diet in which he lays out in depth the science behind the benefits of a whole food plant-based diet.

Rip Esselstyn:

Today we're going to talk about his new book, How to Survive a Pandemic, which obviously, could not be more timely. Surprisingly, most people have no idea that Dr. Greger's medical background is actually in infectious disease and he even wrote a book back in 2006 on pandemic planning and preparedness. His quarantine was spent revisiting that material and presenting the latest most seminal science amidst all the noise and nonsense that currently surround us.

Rip Esselstyn:

Notice when it comes to the global health of our planet, every one of your choices have a profound impact. Dr. Greger and I discussed measures to protect yourself now and in the future along with ways that we can stop the emergence of pandemics in the first place. This, of course, includes the disastrous implications of our current animal agriculture practices. It wouldn't be a conversation with Dr. Greger if we didn't dig in to other nutrition facts so quite literally, buckle up your seatbelts for this one. He is a man who walks the walk and talks the talk quite literally.

Rip Esselstyn:

If you're going to watch this episode on our YouTube channel, you'll see him walking on his treadmill the entire time. Don't get dizzy. So with that, let's wind him up and put him to the test, Dr. Michael Greger.

Rip Esselstyn:

I want to personally invite you to join us and the wildman, Dr. Michael Greger and host of all the other rockstars who are upcoming online Plant-Stock Weekend from August 14th to the 16th. This live weekend extravaganza is going to be packed with science and practical application and is a chance for your whole household to learn together and cook along with us as we give you a front row seat to all the talks and a backstage pass to the Esselstyn family farm. And if you're busy and you can't watch it live, hey, no sweat. Video access will be included with your ticket for a year after the event. Visit plantstock2020.com today to learn more.

Rip Esselstyn:

All right. I am here Season two of the Plant-Strong Podcast with Dr. Michael Greger. You, my man, have the hugest heart of a hero, you are Mr. Nutritionfacts.org. You are Mr. How Not to Die, How Not to Diet, How to Survive a Pandemic. It's truly amazing to me the brand that you have created over the last, really, I think, what four, five years with How Not to Die. It is phenomenal. And so huge congrats to you on all your success and all the people that you're reaching with your message.

Dr. Michael Greger:

Thank you so much. I feel the same about you. I'm just glad to be on the team.

Rip Esselstyn:

Oh, jeez Louise. So How Not to Die on the cover, you had the green leafies. So I think it might have been kale, right?

Dr. Michael Greger:

Actually, I think it's mustard greens.

Rip Esselstyn:

Mustard greens, good.

Dr. Michael Greger:

Yeah, yeah.

Rip Esselstyn:

I never have enough mustard greens, okay. That's what I'm going to do tonight.

Dr. Michael Greger:

They actually started out trying to give me some bullshit lettuce. I was like, "No, no, no, no, no."

Rip Esselstyn:

No, no. Not enough nutritional integrity there. What bout

Dr. Michael Greger:

[crosstalk 00:04:34] cruciferous.

Rip Esselstyn:

Cruciferous baby. And then How Not to Diet, you got berries. You got a bunch of berries on the front, right [crosstalk 00:04:40] How Not to Diet. For How to Survive a Pandemic, now remember I don't have that in hardback. I got them right behind me.

Dr. Michael Greger:

Oh nice.

Rip Esselstyn:

But the Pandemic, I got in my Kindle and I can't make out, what are we talking there? What kind of virus is there?

Dr. Michael Greger:

It's a whole bunch of wonky looking coronaviruses.

Rip Esselstyn:

They are.

Dr. Michael Greger:

[crosstalk 00:05:09] Yeah, yeah. It does, it does. It's first book, eat this. Second book, eat this. Third book, stay the hell away from me.

Rip Esselstyn:

Yeah, for sure. Tell me, why did you move away from the How Not to Die brand. Why was it how not to die from a pandemic?

Dr. Michael Greger:

That's actually what it was started out. It started out as How Not to Die from Pandemic but the publisher thought it was too morose. And I thought they'd be the ones who wanted to ... I mean they're all the branding stuff. I don't care what the hell we call it. I just wanted the information to get out there. It was more important for them not to sound so, you know. Definitely, in this time of corona that survives sounds a little more lifting as any pandemic book can be. But if you crack it open, it's not exactly beach summer eating reading.

Rip Esselstyn:

Oh, I cracked it open. It is intense, man. I'd love to dive into that in a sec. So How Not to Die, you dedicated to your grandma. How Not to Diet, you dedicated to your mom who you say is the source of everything that's good in your life. Is she still alive, Michael?

Dr. Michael Greger:

She is still alive, upstate New York where all the best people are, of course.

Rip Esselstyn:

Oh yeah!

Dr. Michael Greger:

And yeah, Binghamton.

Rip Esselstyn:

Fantastic, fantastic. And then How to Survive a Pandemic, you dedicated, help me if I'm not pronouncing his name correctly, Li, right?

Dr. Michael Greger:

Li Wenliang, yeah.

Rip Esselstyn:

Li Wenliang, and can you tell me why you dedicated it to him?

Dr. Michael Greger:

Yeah. He was actually one of the first whistleblowers in China. He's an ophthalmologist at Wuhan Central Hospital. And he saw these cases come in from the seafood market, the SARS-like pneumonia virus. They used to call it the seafood market pneumonia virus until we figured out what it was. And he sent a private message to his colleagues saying that, "Watch out, there's this new respiratory pathogen

out there. Take care of yourself. Take care of your families. Take care of your fellow patients and colleagues." He was actually called before the local government agencies and silenced. In fact, was threatened for disturbing the public order and spreading rumors. If he had his message, his warning to the world gotten out, we may very well have averted this entire pandemic and been able to extinguish it at its source but because the Chinese government covered it up, the world didn't know about it for many more weeks.

Dr. Michael Greger:

And very tragically in his case, he was kind of one of the early heroes in all this. Then 39 days after he sent that message out to his colleagues, after contracting the very virus he was warning people about, he was dead at age 33, a family man, very tragic. I felt that we needed to pop up that heroism. We need more of that in the world. If there's every a time for transparency and for global unity and for standing up and protecting each other, now is the time.

Rip Esselstyn:

Amen to that. So at 33, he seems like he was very young and not in kind of a vulnerable group or demographic to die from that. I mean, is it because potentially he took in a large amount or something like that?

Dr. Michael Greger:

Well, it's possible they weren't using the PAPP protective gear because they just really weren't sure at that point. But look, young, healthy people are dying. It is however, very rare. So under age 50 without these comorbid conditions, without these underlying disease conditions, the risk of death is one in a thousand from this virus but as we know in this country, not having underlying risk factor diseases is a bit of a rarity.

Rip Esselstyn:

Yeah. No kidding. So the last time that I saw you in person, we just escaped, didn't we?

Dr. Michael Greger:

You really escaped. I remember we're in the airport.

Rip Esselstyn:

So just to give people a little bit of background, you and I both were on the Holistic Holiday at Sea Cruise ship. It was February 28th, I believe. I saw you for the first time as we were getting to get off the ship. You actually were already taking precautions. You had your purple gloves on.

Dr. Michael Greger:

Yeah.

Rip Esselstyn:

Didn't have a mask on yet.

Dr. Michael Greger:

Not yet.

Rip Esselstyn:

Yeah. And my phone was on the fritz. It had a virus, right? And so you're like, "Man, you know what, let's ..." and I wanted to catch this early flight to the airport. So anyway, you were kind enough to ... We caught an Uber. We got there. I literally was the last person on the plane. It was phenomenal but since then, we're now-

Dr. Michael Greger:

We're just adrenaline junkie. You don't give yourself enough to ... I know you. You're like trying to play the victim here but you're like, "Okay, okay. Three, two, one, go!" And then you're sprinting!

Rip Esselstyn:

It's exciting. It is exciting. Living on the edge, baby. So we're five months in. We're five months into the the coronavirus now.

Dr. Michael Greger:

Six months in.

Rip Esselstyn:

Six, thank you. Six, six, how do you see this unfolding?

Dr. Michael Greger:

It's the new normal. In fact, I wrote in the book which was published a few months ago. It's out next month August in physical copies but I was saying, it's not going away in the summer. People are saying, "Oh, it's going to ..." No, no, no. They don't know what they're talking about. And indeed, we're still, as Fauci says, knee-deep in the first wave. It's not going anywhere soon. We're far from reaching herd immunity, so called herd immunity, which is the only thing that really puts a stop to pandemics. Vaccines as much as operation warp-speed would have us think there's going to be a vaccine by the end of the year, it's not going to hit the general population until probably early second half the next year.

Dr. Michael Greger:

So it's a matter of really hunkering down in the new normal. And I think most importantly, critically reflecting where did this virus coming in the first place and is there anything we can do to prevent even greater infectious disease threats in the future?

Rip Esselstyn:

And you bring up a great point because from everything that I've seen, it doesn't seem like the root cause of these pandemics is hit the mainstream media yet and they're not connecting the dots. What is it going to take?

Dr. Michael Greger:

Yeah, yeah. I mean this is something that I actually spent the first half of my professional life studying on emerging infectious disease. And that's how I got into Oprah. That's actually most of my published writings and the peer-reviewed scientific literature. It's actually on infectious disease not chronic disease. I was shouting this from the rooftops over a decade ago as were my public health colleagues but no one was ready to listen. So that's why I shifted over to chronic disease but heart disease only

been the number one killer every single year for the last hundred years from 1919 to 2019. And the reason it wasn't the number one killer in the United States for longer than that is because we had a pandemic in 1918.

Dr. Michael Greger:

I knew another pandemic was coming but until then, until people would actually listen, I just said, "Well, let's just fall back on the the leading killer that people will listen to." And so that's why I switched over to chronic disease, heart disease but of course, now what we're learning with this infectious disease threat, these are the same diseases. The chronic diseases, high blood pressure, type 2 diabetes, heart disease, obesity. This is the same chronic diseases that are enhancing our risk of being hospitalized and dying from this new infectious disease threat.

Dr. Michael Greger:

So it's really all one health. And so now is the time if there was ever a time to start taking care of yourself to start becoming active, getting better sleep, reducing stress, staying connected. Albeit, remotely from friends and family and starting to eat healthier, we should take this time, take this opportunity to really care about our health not only in the far future but right here and now.

Rip Esselstyn:

In your book, you set it up like this murder mystery detective story with this guy Jeffery Taubenberger, right, something like that.

Dr. Michael Greger:

Yeah.

Rip Esselstyn:

Who basically decides that he's going to find some victims oh that perished from the Spanish flu and by god, he does it.

Dr. Michael Greger:

Unbelievable, right? So this is the deadliest plague in human history. No war, no disease ever killed so many people in so short a time as the 1918 virus killing more people in a few months and AIDS has killed in decades, for example. Back then, we didn't even know what influenza was. We hadn't even identified the virus yet. Where did it come from? How can we prevent in the future? And he said, "Well yeah, but what do we have back then in terms of pathological specimens?" There's actually some. During the Civil War, Abraham Lincoln actually set up this army pathology unit to store the tissues from soldiers and it actually still exists in DC.

Dr. Michael Greger:

And so there were these little bits and pieces of virus in these little fixed slides of lungs from way back that period. But we really needed more tissue. And it's this really amazing story of digging up the victims frozen in the Alaskan permafrost. And they found someone, this woman who was obese enough to insulate her lungs-

Rip Esselstyn:

And she was nestled in between two skeletons.

Dr. Michael Greger:

Well, see there is a benefit to obesity in all this. So in the century when they dig you up to figure out what this COVID-19 thing was, you're going to be the one.

Rip Esselstyn:

There's a silver lining.

Dr. Michael Greger:

That's right but yeah, bottom line spoiler alert, it turns ... that it was a bird flu. It was a bird flu virus, a wholly avian virus that had jumped species and accumulated this unparalleled virulence. So it was killing about 2% of the people in effect, compare that to the 0.4% that that COVID-19 killing, so much deadlier virus. We think it was the trenches of World War I, the crowded restful unhygienic conditions where the virus could ramp up virulence and still transmit to others because when you have transmission from immobilized host, that's where you really get virulent viruses.

Dr. Michael Greger:

Normally, there's a mechanism by which viruses can't get too deadly because if they get too deadly, they won't spread as well. You want somebody sick but I mean someone just drops dead, then they can't kind of go out and infect all their village mates.

Rip Esselstyn:

Is that essentially what happened with MERS?

Dr. Michael Greger:

Oh ,so that's interesting. COVID-19 is the third deadly coronavirus outbreak in humans. There are others in pigs coming out of China as. First with SARS-

Rip Esselstyn:

Yeah, 2002.

Dr. Michael Greger:

And then two was this MERS, this Middle East Respiratory Syndrome where ... So influenza viruses originate in waterfowl and shorebirds like ducks, most human coronaviruses originated from bats but just like with the flu, we don't get flu from ducks because in ducks, the flu virus is actually a harmless natural intestinal waterborne infection. Only when it's transmitted into a land-based bird, a terrestrial bird like a chicken or quail does the virus has to mutate to find a new way to spread. Chickens aren't paddling around in the pond and what it does is it finds the lungs becomes a respiratory pathogen.

Dr. Michael Greger:

And so basically, we put chickens in the same kind of trench warfare conditions. Crowded, confined stress but by the billions, millions and we're ramping up the virulence of these viruses as well. The flu virus existed harmlessly for millions of years before the first person ever got a flu. It was only when we started domesticating ducks, bringing them in contact with land-based birds. This unnatural contact

where we're able to create the human flu. And similarly in coronaviruses, we don't get corona viruses directly from bats but through an intermediate species that allows the virus to mutate to better adapt to human beings.

Dr. Michael Greger:

The case of SARS, it went back to civet cat, which is this kind of cat prized for its flesh in India's live animal wet markets. In the case of MERS, it was bats to domesticated camels particularly in the Middle East and then from camels to people largely through saliva or respiratory secretions. And COVID-19, the leading candidates for the intermediate stepping stone species is bats to pangolins. These endangered scaly anteater creatures, again prized for its flesh and proposed medicinal qualities that allowed this virus to then jump to human beings.

Rip Esselstyn:

So they shut down the wet markets for a little bit. And from what I've heard, they've opened them back up. In your book you talk about how there are roughly 14 million people involved in China's kind of wildlife farming industry. 14 million people involved. I mean the the pressure that the government must have been under to open them back up, it seems a little bit egregious that they've already opened them back up.

Dr. Michael Greger:

When SARS hit in 2002, 2003, they similarly closed down these live animal markets because they've a figure that's where SARS was coming from. Yet months later civets were back on the menu. Had they continued their ban, we would not now be suffering the worst pandemic in a century. I mean the benefits of having an autocratic system of governance is that you can impose constraints on business that may not have been able otherwise. And right now, the ban on live markets continues in China. If you've seen photos of what's happening in markets, they continue to sell domestic animals. You can still have live bird markets but the ban on wildlife trading continues and exempted from wildlife is turtles and seafood. There's some other things, so you say, "Wait a second, I'd see these live turtles. They're still selling them." They're exempted but the pangolin trade has been shut down. The civet trade has been shut down.

Dr. Michael Greger:

Now, it may not be permanent. We have to continue to keep pressure on China but for the time being, we're relatively protected in that region of the world for new coronaviruses. What I'm most concerned about are these new influenza viruses going to the CDC. The leading candidate for the next pandemic virus after COVID-19 is the bird flu virus by the name of H7N9. Now that's a hundred times deadlier the COVID-19. Instead of one in 250 people dying, H7N9 has killed 40% of the people in fact.

Dr. Michael Greger:

So 1918, that was 2% fatality. I mean imagine a pandemic infecting billions where death is closer to a flip of a coin. But the good news is there's something we can do about it, just like shutting down these live animal markets can reduce our risk of killer coronavirus outbreaks, reforming the way we raise domestic animals for food may help forestall the next killer flu.

Rip Esselstyn:

It's an honor to work with sponsors and supporters who take an active role not just in the health of our planet, but also the health of our domesticated animals. Wild Earth is a sustainable pet food company with a mission to make dog food better and cruelty-free because I think you'll agree, our pets and our planet are worth it. No meat ingredients and no kennel animal testing means no animal cruelty of any kind. Visit the episode at plantstrongpodcast.com to claim up to 50% off your order.

Rip Esselstyn:

Well yeah, I mean when I think about the billions of chickens that we eat in this country alone and the horrific conditions in which they're living. What do you think the chances are that we can move beyond doing something as ridiculous as raising and killing all these chickens? And how far away do you think we are from cellular fermentation? We can actually grow the same muscle in a lab and now we don't have the threat of these pandemics.

Dr. Michael Greger:

Yeah. It's not just the numbers of animals being raised with the conditions. When we cram thousands of animals in these filthy football-field-sized sheds to lie beak to beak or snout to snout atop their own waste, it's just a breeding ground for disease. There's the overcrowding, the stress crippling their immune systems, the ammonia from decomposing waste burning their lungs, lack of fresh air, lack of sunlight. Put all these factors together, this really a perfect storm environment for the breeding of these so-called super strains of influenza. Bottom line, it's not worth risking the lives of millions of people for the sake of cheaper chicken.

Dr. Michael Greger:

And so there are certainly things we can do to reform animal agriculture. I mean they're the ones that could use a little social distancing themselves. So just providing straw bedding to pigs, so they don't have the immunosuppressive stress of lying on bare concrete their whole lives actually reduces swine flu transmission rates but I think you really nailed it in terms of let's take even a further step back. Say, "Wait a second, what we're facing now that we've had a taste, now that we've had a fire drill to kind of wake us up out of our complacency, a dress rehearsal of what pandemics look like and realizing wait a second, this is 0.4% a case fatality rate, eight, seven, nine, 40%, 100 times worth."

Dr. Michael Greger:

I mean as bad as COVID-19 has been and I don't want to minimize it, but look as bad as it's been, stores are still being restocked with groceries. The electricity is on. We got clean tap water still running. Doctors are showing up to work. I mean if this was really 40% chance of dying, well you could imagine, it could leave civilization in shambles. And so when the stakes are that big, then we need to change the way we're making stakes as you said, absolutely! We need to elevate this movement towards plant-based meats, plant-based egg products, plant-based milks.

Dr. Michael Greger:

I mean what was unthinkable 10 years ago, look at the dairy case these days. This constellation of new consumer options give people better choices and boom, we have major dairy corporations declaring bankruptcy in this country. And at the same time, what are the biggest meat packers in the world doing? Smithfield, Hormel, Tyson, Perdue, they're coming out with these plant-based lines. Plant-based burgers and meatballs and sausages and chicken nuggets or doing hybrid products where it's like half plant protein, half animal protein.

Dr. Michael Greger:

I mean this isn't like tofurkey. This isn't some niche vegetarian product. This isn't a meat case. Really trying to shift over but there's always going to be some people who are going to be like, "You're going to have to wrench that pork chop out of my cold dead hand," kind of thing. And for those hardcore meat-eaters, we have the choice that you just outlined this possibility. Well, wait a second, people are just eating the muscle. Why make the whole animal with all the parts that are dangerous like the intestines with Salmonella, e.coli. These are intestinal bugs, fecal bugs.

Dr. Michael Greger:

If we made meat without the intestines, you have to cook the crap out of the meat if there's no crap to begin with. It's perfect! Just think - If you raised meat without lungs, then you don't have to worry about brewing up new respiratory pathogens. We have the tissue engineering technology and we can already create like human ears and all sorts of things in medicine. So wait a second, why not use that same kind of tissue engineering to just in a sterile environment, make all the muscle meat you want?

Dr. Michael Greger:

And so the technology is there. What we haven't been able to do is scale it up to make it affordable. But that is certainly one of these options in the future. So look, people can eat all the meat they want without putting us all at risk for a pandemic, without contributing to global warming.

Dr. Michael Greger:

Now, from a personal health standpoint, it's still meat. It's still animal protein. And look, a lot of these plant-based burgers and stuff, these are highly processed. They had sodium. These are not health foods. Healthier certainly, but look from a personal health standpoint, it's your body, your choice. You want to go smoke cigarettes, go bungee jumping, do whatever you want. But when it comes to global health, when it comes to the risk of a pandemic virus where all of a sudden, risk goes from eating to breathing, well then what you eat actually makes a difference to me. Your personal decisions are humanity's personal decisions, actually impact our future generations, impact our children. In that case, we really do need to shift away from animal agriculture altogether.

Rip Esselstyn:

Absolutely. So tell me this, for everything you've learned, if somebody gets infected with the coronavirus, are they now immune from another bout?

Dr. Michael Greger:

That's what everybody's banking off, right? We are banking on the fact that vaccine would be effective. And that once you get the disease, your body can mount an immune response that can keep one itself immune at least in the short term. Unfortunately, what we're finding is that within weeks of contracting the disease, there's a critical decline in the antibodies that your body creates to attack this virus. And so it seems that our immunity is much more short-lived than we would like.

Dr. Michael Greger:

So for example, typical coronaviruses are a couple common cold coronaviruses. Just like there are mild flu viruses and then killer pandemic flu viruses, there are mild corona viruses. And for them the reason they cause the common cold year after year is because immunity lasts from four to five weeks. So you

get the cold and then four to five weeks later, it's like you never got the cold and you're completely susceptible to getting the cold again from these two common coronaviruses.

Dr. Michael Greger:

Now, there are some diseases like chicken pox where immunity is measured in the decades. Thirty years later you got chicken pox. Thirty years ago, your body's still pumping out antibodies. You're ready to attack but there's something about coronaviruses that just doesn't leave enough of an imprint. Now having said that, there are two different dimensions to long lasting immunity. This so-called memory immunity. One is those antibodies. The other are our t-cells, so called memory t-cells that can remember the virus and can provide a certain level of immunity. We have not yet had studies testing whether or not t-cell immunity drops like the antibody immunity.

Dr. Michael Greger:

So it's possible like with SARS, if you come back months later after SARS victims, their antibody response also dropped but they still had some pretty good t-cell immunity. There's still hope that we should get at least some immunity measured in weeks or months. In which case, we may have to get multiple vaccinations just like every year there's a new flu vaccine because the virus keeps mutating. And so it may not be kind of a one-shot solution and of course, the less immunity we get, the harder it is to eradicate this virus from the face of the planet.

Dr. Michael Greger:

And what these antibody titer studies also showed is that people with asymptomatic infections, people that really got off lucky and hardly didn't even feel it, they're the ones that really don't have a lot of immunity. I mean it just wasn't enough of a shock to the system that your body bothered to even be producing much response. And so it's people that really got sick that may be more protected but so someone who tests positive but really didn't even know they really got it and thinks, "Oh now, I'm immune," may not. It's still an open question.

Rip Esselstyn:

Have you been on an airplane in the last four months?

Dr. Michael Greger:

I have unfortunately.

Rip Esselstyn:

What are the precautions you take when you're flying?

Dr. Michael Greger:

Yeah, so I was I had a friend I need to take care of and it's really the worst place to be is a closed confined indoor space for long periods of time. It's really the riskiest exposure because primarily a respiratory pathogen. Now, airplanes actually have much better ventilation than any other enclosed space. And so what you do if you do have to be on a plane, of course, you have a mask on. Of course, you are making sure to sanitize your hands before touching your eyes, nose and mouth and you should have every one of those little air flow blasting in your face because that's actually HEPA filtered. So that's actually filtered air and so you're basically creating a wall of ventilation over your face and yeah.

Rip Esselstyn:

It's hard to social distance on an airplane.

Dr. Michael Greger:

Well, it's even worse now before. On my first flight out, there weren't packing people in middle seats at least. We have at least a foot or two but on the way back, Spirit Airlines man, we were packed to the gills. It was bad. I was in the middle seat. And in fact, let me see. I got back on Sunday. I am about going on day four. So I typically it start showing symptoms day four or five. So far so good and give me another 10 days and I'll be in the clear.

Rip Esselstyn:

Well, you look good. Our family, actually we're flying in about a week. And then we're going to be driving, making the trek to upper state New York for Plant-stock.

Dr. Michael Greger:

Got it.

Rip Esselstyn:

But we're going to quarantine for two weeks in Wisconsin.

Dr. Michael Greger:

Yeah, now driving is perfect. You're on your own. I mean you can only get this virus if the virus can get to you. Where's the virus come from? Other people. It's about distance, distance, distance. Really the data on masks is really quite poor. I still encourage people to use them. But originally, we were thinking it's just these large respiratory droplets that are coughed out or sneezed out or in conversational speech, little tiny droplets come out but it may actually be aerosol spread. Meaning such tiny drop is they actually waft in the air like little dust motes such that, that can go right around a mask unless it's tied to the face or through a mask.

Dr. Michael Greger:

Better than nothing, absolutely but we should not get lulled into a false sense of security by saying, "Oh, I got a mask on. It's okay if I go to the bar and hang out for a couple hours with people shouting over the music." Not a good idea.

Rip Esselstyn:

Yeah. I want to read something. It's towards the end of your book and you say, "I don't want to minimize the seriousness of the COVID-19 pandemic. Millions could die but a pandemic triggered by a bird flu virus could leave hundreds of millions dead." Now you have a quote. "An influenza pandemic of even moderate impact," Osterholm wrote, "will result in the biggest single human disaster ever. Far greater than AIDS, 9/11, all wars in the 20th century and the recent tsunami combined. It has the potential to redirect world history as the Black Death redirected European history in the 14th century."

Rip Esselstyn:

Like you just said a little earlier, this is the ultimate fire drill and we got to do whatever it takes to prevent another pandemic because instead of being like you said, .04% of the people dying, it's 30, 40%. We're talking a whole new ballgame.

Dr. Michael Greger:

Seriously, but it's almost too horrible to even contemplate and I think that's why public health leaders like Michael Osterholm at the Center for Infectious Disease Research and Policy who have been shouting over this for decades, it sounds like some apocalyptic Stephen King novel. Like it's just that couldn't happen but I think because people forget 1918, okay but now I mean I think people be like, "Wow, okay. I see how a virus can basically bring the global economy to its knees." But what if instead of just livelihoods, we were talking about the decimation of not one in a few thousand Americans but one in a handful. I mean it would really kind of end civilization as we know it.

Dr. Michael Greger:

And so that's why when we talk about things that just sounds so big, we're forming the food system. The food, that is the most profitable industry on the planet. Somewhere like trillion dollars. It's bigger than petroleum. It's the food industry is what we all have to eat. But if there was ever a time for us to fundamentally rethink how we're producing food, distributing food and what we're eating, this is the time to do it. Talk about silver linings, that could be really the silver lining is that this will wake people up enough that will really change course.

Rip Esselstyn:

All, right. I want to change course, speaking of changing course because I know we got about six minutes left before you got another appointment. I want to transition to How Not to Diet. That came out in 2019. You're dealing with a whole another pandemic there. The obesity, the epidemic that we got going on. This book is primarily all about weight loss, the most effective way to lose weight. My question to you, let's just cut right to the chase. What's the optimum diet for health and weight loss according to this book? Is there one diet to rule them all?

Dr. Michael Greger:

There is one diet to rule them all. And before I do the big reveal, we need to recognize that you don't have to be obese to set yourself up for severe COVID-19 morbidity and mortality, even having a BMI of 28, that's being 175 pounds of the average American height puts you at nearly six times the risk of a severe course from COVID-19. So the average BMI in the US is 29 so even being skinnier than the average American, you could have so much excess body fat that it puts you and nearly six times the risk of a severe course. So this is not like, "Oh, I have obesity. I'm going to get osteoarthritis and my knees aren't going to work. I'm not going to be able to play with my grandkids. I'm going to get diabetes."

Dr. Michael Greger:

And no, I mean yes all that but also, it's going to help you right now. And look, we're six months in. If you went six months ago, taking this opportunity. You're not eating out so much. All of a sudden you have some more control over your day-to-day diet over what's in your surroundings. People could really start getting healthy and it's not too late because the virus isn't going anywhere soon. Anyway, but getting to the science-

Rip Esselstyn:

Yeah!

Dr. Michael Greger:

With so much nutritional noise and nonsense these days, I wanted you there to find like just be an evidence based diet book. It's like thousands of studies digging up every possible tip, trick, tweak, technique proven to accelerate the loss of body fats. Give people every possible advantage basically from building off the weight loss solution from the ground up. And what is that optimal weight loss solution?

Dr. Michael Greger:

There is a study. I published it in New Zealand, so an abroad study where this was the study that showed more greater weight loss than any other comparable trial at six months, 12 months. Meaning every any other study that didn't put people on diet shakes or somehow restrict their calories or enforce some exercise regimen. The most effective intervention ever published in the medical literature in human history was a whole food plant-based diet.

Dr. Michael Greger:

And so one doesn't have to mortgage their health. Goal of weight loss is not to fit into a skinnier casket.

Rip Esselstyn:

Beautiful.

Dr. Michael Greger:

You can have the best of both worlds. The healthiest diet just so happens to be the diet best shown to reduce to the safest, cheapest way to lose weight. So I mean it's really the best of all worlds and looking forward to writing the next one.

Rip Esselstyn:

What's the most surprising thing that you learned in writing this book?

Dr. Michael Greger:

Oh my god, so much crazy stuff. I had no idea. Like the chronobiology stuff, probably the second biggest chapter after all the fasting stuff was this book on chronobiology, the effect of our circadian rhythms on our health. So for example, calories at night are more fattening than the exact same calories earlier in the day. You can have the same snack, the same food, you actually gain more body fat from food eaten at night compared to food eaten in the day. That's crazy. Like the calorie is not the calorie.

Dr. Michael Greger:

We should not be eating after 7:00 p.m. The fewer calories after sundown, the better. And it's not just body fat accumulation but it affects our blood sugar, affects our cortisone levels and on down to this and that. There's a new field of science that I really enjoyed learning about, and I couldn't wait to share with everybody.

Rip Esselstyn:

Breakfast, do we eat breakfast or not?

Dr. Michael Greger:

We need a big breakfast.

Rip Esselstyn:

Oh!

Dr. Michael Greger:

a bowl.

Rip Esselstyn:

Big bowl, yeah!

Dr. Michael Greger:

Really big! The more calories we can shove towards breakfast, the better way off we are metabolically. Yeah.

Rip Esselstyn:

Love it. You have these different ingredients for ideal weight loss, right? Right at the top, you have anti-inflammatory. In your opinion, what's the single most pro-inflammatory food Americans eat?

Dr. Michael Greger:

Okay. So the most pro-inflammatory food components-

Rip Esselstyn:

Component, yeah.

Dr. Michael Greger:

Trans fats, saturated fat and cholesterol and they're all found in animal products. And saturated fats and trans fats are also found in junk food made from kind of tropical oils. So basically avoiding animal foods and processed foods. So healthy plant-based diet is synonymous with an anti-inflammatory diet. And inflammation plays all sorts of roles, particular actually in the brain in terms of short circuiting the wiring that's actually was naturally meant to keep us thin.

Rip Esselstyn:

So I have a hypothetical for you. Dr. Greger, you've gotten kind of depressed during COVID-19 with all this sheltering in place. You've actually been shoveling in too much food. I know that's hardly possible if you're eating low calorie density food but-

Dr. Michael Greger:

You haven't seen me put away watermelon.

Rip Esselstyn:

But you've gained 20 pounds. You're going to your favorite grocery store. You're in the bulk section. You're looking at all the spices. They're running low. You can only get one spice to aid in your weight loss. What spice are you going to pick?

Dr. Michael Greger:

Oh god! All right. It would be between garlic powder and black cumin. So I mean literally just 1/4 teaspoon of garlic powder a day, that would cost two cents. A quarter teaspoon of garlic powder a day cause people to lose six pounds of straight body fat over 15 weeks and this is randomized control trial. You can put it in a little capsule. That's a teeny amount. This something called black cumin, not regular cumin. Again, quarter teaspoon a day. It also has other metabolic effects. That was another surprising thing. I've never heard of black cumin in my life.

Dr. Michael Greger:

And again, just these teeny little doses, which if you don't like the taste ... I mean it has a nice kind of peppery taste. I think you can put in a little capsule and take it that way and get these surprising benefits regardless of what you eat. And I got a whole bunch of those kind of little tips and tweaks.

Dr. Michael Greger:

That's a whole second half of the book. My concern is that people like skip the first half. Well, the healthy eating, right? And just go to like the bikini bod tips and keep drinking milkshakes and taking the garlic powder. I mean I felt like I had to include everything that's been proven in randomized control trials to accelerate the loss of body fat.

Rip Esselstyn:

It's absolutely exhaustive. It is phenomenal it really is. All right. Hey, I will see you, my man, August 14, 15 at Plant-Stock 2000-

Dr. Michael Greger:

I can't wait.

Rip Esselstyn:

And we'll resume this conversation, all right?

Dr. Michael Greger:

Sounds good. Looking forward to it.

Rip Esselstyn:

Hey, one diet to rule them all, baby!

Dr. Michael Greger:

That's right.

Rip Esselstyn:

Whole food plant-based.

Dr. Michael Greger:

That's right.

Rip Esselstyn:

See you, my man. Thank you. Peace, Engine 2, Plant Strong.

Rip Esselstyn:

Dr. Greger said it beautifully. If there was ever a time for transparency, global unity and for standing up and protecting each other, now is that time. The stakes are indeed high. So it's time to change the way we make the stakes. Let's treat the cause and take care of ourselves and each other. Our future does depend on the actions that we take now.

Rip Esselstyn:

Thank you as always Dr. Michael Greger. For more information on his body of work, I encourage you to visit nutritionfacts.org and make sure you register for Plant-Stock 2020 to hear even more from Michael and all of our experts, including Dr. Neal Barnard, Gene Baur, Dr. Michael Klaper and next week's guest Tracye McQuirter.

Rip Esselstyn:

The Plant-Strong Podcast team includes Laurie Kortowich, Ami Mackey, Patrick Gavin, Wade Clark and Carrie Barrett. I want to thank my parents, Dr. Caldwell B. Esselstyn Jr. and Ann Crile Esselstyn for creating a legacy that will be carried on for generations and being willing to go against the current and trudge upstream to the causation. We are all better for it.