



How to Survive a Pandemic

Dr. Michael Greger



How to Survive a Pandemic

Rebekah Kelley: Welcome to Humanized Podcast - Your Health Personalized. I am your host, Rebekah Kelley. Before I introduce our guest, I want to remind you to subscribe, to get all of our variety of casts – audio, video and transcription – at [HumanizedHealth.com](https://www.humanizedhealth.com). I'd also like to thank our lead sponsor, Village Green Apothecary at [MyVillageGreen.com](https://www.myvillagegreen.com) .

Our guest today is **Dr. Michael Greger**, a founding member and fellow of the American College of Lifestyle Medicine. Dr. Greger is a physician, New York Times bestselling author, and internationally recognized speaker on nutrition. He has videos on more than 2,000 health topics, freely available at [NutritionFacts.org](https://www.nutritionfacts.org), with new videos and articles uploaded almost every day. Dr. Greger has lectured at the Conference on World Affairs, testified before Congress and was invited as an expert witness in the defense of Oprah Winfrey in the infamous meat defamation trial. He is a graduate of Cornell University's School of Agriculture and Tufts university, School of Medicine. Three of his recent books, [How Not to Die](#), [How Not to Die Cookbook](#), and [How Not to Die At All](#), became instant New York Times bestsellers. His latest book, [How to Survive a Pandemic](#), was just released in May. All proceeds he receives from the sales of his book go to charity.



Thanks for being on the show, Dr. Greger. When I read your book, I was surprised by the pandemics you describe and their causes. You list quite a few that are ongoing. Do you mind walking us through that?

Dr. Michael Greger: The first half of my professional career was infectious disease. The reason I became so interested is that I did postgraduate medical work on an AIDS ward. Growing up there was no such thing as HIV. So where did this disease come from in the first place? That question really started me down this journey.

How to Survive a Pandemic

All of our major infectious diseases, historically, have come from animals. For example, tuberculosis is thought to have been acquired from the domestication of goats; measles, also from goats or sheep. Smallpox seems to have been a result of camel domestication. We domesticated pigs and got whooping cough, domesticated chickens and got typhoid fever, and domesticated ducks and got influenza. Leprosy came from water buffalo, the common cold from horses. I mean, how often did humanity have the opportunity to be sneezed on in the face by horses before we broke and bridled them? Until then, the common cold was presumably only common to horses.

That was 10,000 years ago. What has happened over the last few decades? We now have hundreds of new pathogens, emerging at a rate unprecedented in human history. And they are emerging from the same place, because we changed the way we interact with the animal kingdom. For example, the AIDS virus was blamed on the butchering of primates and the bushmeat trade in Africa; mad cow disease was because we turned natural herbivores into carnivores and cannibals. SARS and COVID-19 have been traced back to the exotic wild animal trade.

And our last pandemic, swine flu in 2009, was not from some backwater wet market in Asia, it was largely made in the United States on pig farms. Thankfully, swine flu only killed about a half million people. The next time we might not be so lucky.

Rebekah Kelley: Before reading your book, I wasn't aware about infection from animals. When COVID-19 came out, where did it come from? You mentioned bats and scaly anteaters. Low and behold, here we have more animal to human infection happening.

Dr. Michael Greger: As devastating as COVID-19 is, it may just be kind of a dress rehearsal for an even greater threat waiting in the wings of chickens. According to the CDC, the leading candidate for the next pandemic is a bird flu virus known as H7N9, which is a hundred times deadlier than COVID-19. Instead of 1 in 250 cases dying, 40% of the people that have been affected by this chicken flu virus have died.

How to Survive a Pandemic

The last time a bird flu virus jumped directly to human beings and triggered a pandemic, it triggered the deadliest plague in history, the 1918 pandemic. It killed 50 million people; and that one had a 2% death rate. What if we had a pandemic infecting billions of people where it was more like 40%?

The good news is that there's something we can do about it. Just like eliminating the exotic, wild animal trade and live animal markets may go a long way towards preventing the next coronavirus pandemic, reforming the way we raise animals for food, domesticated animals, may help forestall the next killer flu.

Rebekah Kelley: Where are the pandemics coming from?

Dr. Michael Greger: Well, the greatest concern for the next pandemic is coming from the way we raise domesticated animals. When we overcrowd thousands of animals in these cramped, filthy, football field-sized sheds, beak to beak or snout to snout on top of their own waste, it's just a breeding ground for disease. The sheer number of animals, the overcrowding, the stress which is crippling their immune system, the ammonia from the decomposing waste which is burning their lungs, the lack of fresh air, the lack of sunlight, put all these factors together and what you have is a perfect storm environment for the emergence and spread of super strains of influenza. These so-called factory farms are a public health menace. The bottom line is that it's not worth risking the lives of millions of people for the sake of cheaper chicken.

Rebekah Kelley: I know you said this could be a dress rehearsal. Hopefully we have learned lessons. What steps can we take to be the best prepared both as individuals and also as a community?

Dr. Michael Greger: Look, we may be one bushmeat meal away from the next HIV, one pangolin plate (the scaly anteaters) from the next killer coronavirus, and one factory farm away from the next deadly flu. But along with human culpability comes hope, right? If changes in human behavior can cause new plagues, then changes in human behavior may prevent them in the future.

How to Survive a Pandemic

So what does that mean? That means moving away from animal sources of protein. We've already had tremendous movement in this sphere. Major dairy corporations are going out of business because of a new constellation of consumer choices, and the same thing is happening in the meat aisle.

Now we have major meat producers like Tyson, Purdue and Smithfield, all coming out with plant-based lines of meat products. They are offering consumers choices. And, wait a second; they taste as good, have the same mouth feel and texture, are healthier for you personally, healthy for the earth in terms of greenhouse gas emissions, and healthier in terms of having zero pandemic risk. This is the kind of change that we're seeing coming from some of the biggest meat corporations in the world. It's really the kind of writing on the wall, which will help us get out of this precarious situation.

Rebekah Kelley: You mentioned in your book the importance of being kinder to animals. You talked about pig factory farms. The animals don't even have straw; their bodies are right up against cold slabs of concrete. As human beings, we know how important it is to be in an environment that is conducive and kind to our immune system. If we're doing this to our animals, there's no way that they're going to be strong and healthy in the event that they are animals that we are going to be eating.

Dr. Michael Greger: Right. And there is science to back this up. We need to give these animals some more breathing room. They're the ones who could use a little social distancing at this point! Indeed, the study you cited showed that measures as simple as providing straw bedding, so that pigs don't have the immuno-suppressive stress of laying on bare concrete their whole lives, significantly reduces swine flu transmission rates. So we should follow the advice of the Pew Commission on Industrial Animal Production or the American Public Health Association, the longest running and oldest association in nutrition and public health professionals in the world, which has called for a moratorium on factory farms. No more factory farms.

How to Survive a Pandemic

We don't tend to shore up the levees until after disaster strikes, but in this case we have to. Hopefully this is the kind of trial run we needed, the fire drill to wake us out of our complacency, or it could be much, much worse. Hopefully we'll start looking around once we reach our head above the sand with this current pandemic and realize we really need to find out ways for primary prevention. We must not just meet the impact of the pandemic, but prevent the emergence of the next pandemic virus in the first place.

Rebekah Kelley: What would you recommend for improving our immunity, like supplements or foods? In your book, [How Not to Die](#) (I absolutely love it, and have my copy right here), you're great about informing, educating and helping us understand what we need to do to make sure our system is running the best it can. What should we do in relation to the pandemic?

Dr. Michael Greger: Consider the underlying risk factors for COVID-19 severity and death. They are: obesity, type 2 diabetes, high blood pressure and heart disease, all of which can be prevented, arrested, and in some cases, even reversed with a healthy enough diet centered around whole plant foods. And you don't even have to be obese; just having a BMI of 28, can make you six times more likely to suffer a severe COVID-19 case. The average BMI in the United States is 29. So even being skinnier than the average American can leave you so much excess body fat that it can significantly increase your risk of hospitalization and death.

That's why this is the time to take better care of ourselves. Now we're not passing the donut shop on the way to work, and there aren't bowls of candy on everyone's desk or whatever your work situation is. Most of us have more control over our food environment now. So this is the time to clean out the pantry. This is the time to start that exercise program or that meditation program, or to get into a better sleep ritual. This is the time to take better care of ourselves because it won't only protect you right now against the current infectious disease threat, but down the road for chronic lifestyle diseases in the future.

How to Survive a Pandemic

Rebekah Kelley: Well, you're giving us a perfect example, as you are on your treadmill while you talk to me. You're not only just saying it, you're actually walking the walk!

If there were five things you could tell us to do, and obviously one of those things could be make sure that your fat ratio is not above 28, what would you say?

Dr. Michael Greger: Well, in terms of the current pandemic, it really comes down to distance, distance, distance. There is a lot of talk about masking and how effective masks are. My concern is that masks will make people complacent.

People may put themselves, with a mask on, in situations that they might not otherwise, like indoor, crowded, confined spaces with poor ventilation. That's really the most dangerous place to be during a pandemic, whether you have a mask on or not. Really the best way to reduce your risk is to put as much distance between yourself and those outside your bubble, as possible, mask or not, vaccine or not right now.

As frustrating as it might be, as much as we want to hug everybody, this is the time we need to maintain that social distance. The last thing anyone wants to do is to put a loved one at risk. Distance!

Then of course, taking better care of ourselves. This is the time to clean up your diet.

Rebekah Kelley: I should be on a treadmill right now, talking to you!

Dr. Michael Greger: There is a free app called [Dr. Greger's Daily Dozen](#), where I talk about some of the healthiest of healthy foods and I encourage people to fit it into their daily routine. You can start playing around with that.

How to Survive a Pandemic

Yes, exercise is important, not only for boosting one's immune system, but for helping you sleep. That sleeping alone will help boost your immune system. It's kind of a twofer: exercise and just not being sedentary. Prolonged sitting has adverse health consequences beyond just the lack of exercise. So if you can use a standing desk while you work or you're watching a TV or something like that, it can help reduce the risk of some of the leading killers. Heart disease has been the number one killer of men and women every single year for the last 100 years, from 1919 to 2019. But it wasn't in 2020 because of pandemic risk.

The irony is that we can actually attack both heart disease and pandemic risk together with the same diet. It may have the benefit of helping save the planet as well. That is a diet centered around foods from fields, not factories, foods that grow in the ground. These are our healthiest choices.

Rebekah Kelley: Be plant-based; that's going to help us out. Is there anything you'd want us to keep in mind as it relates to your book and the pandemic? As we look toward the future, what should we be doing?

Dr. Michael Greger: This is a new age of emerging diseases. There are now billions of feathered and curly-tailed test tubes, perfect places for new viruses to incubate and mutate; like billions more spins at pandemic roulette. We need to accelerate the shift away from animal protein. That can be plant based meats. They are kind of taking the markets by storm, from fast food restaurants to new options in the market meat case. Even getting more innovative, scientists are growing meat from muscle cells, with so-called "cultured meat." You're making meat without the actual animal. As long as you're making meat without the lungs, you don't have to worry about pandemic viruses!

As long as you're making meat without the intestines, you don't have to worry about fecal bugs, like E coli and salmonella. There already is "clean energy" – this would be a kind of "clean meat"! You could make as much as you wanted, and you don't have to worry about animal welfare issues or greenhouse gas emissions. It's much less energy intensive and water intensive.

How to Survive a Pandemic

In fact, Singapore is the first country in the world to actually allow the sale of cultured meat. It's actually being sold commercially now. Hopefully that will be yet another option to move the human populous away from raising animals for food, because that is the source of all viral pandemic disease.

Rebekah Kelley: It blew my mind when I read that. And now, when you go into the grocery store, there are so many plant- and nut-based products like oat milk, almond milk, macadamia milk, and all the different kinds of cheeses. I don't know anything about cultured meat, but there are definitely many plant-based options, even in some of the fast food restaurants.

Dr. Michael Greger: It's like the dairy-free milks. Now there's meat made from soybeans, meat made from wheat, meat being made from peas. If it's healthier, it tastes the same, and it's crispy, then we'll give it a try.

Rebekah Kelley: If we could wrap up the conversation, and you would say, all right, Rebekah, these are my top three to five things that I want to leave with everyone, what would those three to five things be?

Dr. Michael Greger: I encourage people – we have two very safe, very effective vaccines, at a blazing speed. I say in the book there's no way we're going to have the majority of the population vaccinated before this summer. But, we may actually beat that prediction, which just blows me away. We've never come up with a vaccine this fast for a new pathogen. We have data on its safety and efficacy now, so really it's just about the political will to get it available. If you have the chance, particularly if you are older or if have one of these preexisting conditions, you should jump at the at the chance. Hopefully with enough of us vaccinated, we can extinguish this virus.

The only way the virus spreads is if there are enough susceptible individuals for the viral sparks to jump from one individual to another. Immune individuals who can't get or transmit the virus act like firebreaks to slow the spread, or like control rods in the nuclear reactor to break the chains of transmission and achieve this herd immunity. That's the only way we're going to squash this pandemic. And the sooner the better!

How to Survive a Pandemic

Rebekah Kelley: What was your quote about isolating? "You can't get to the virus and the virus can't get to you."

Dr. Michael Greger: Yes. It's not spontaneous. You only get infected by other people, so as much as possible, stay away from other people. It's easier said than done. But for those who have seen it with their own eyes or had a friend or family come down with Co-vid , it can be really a devastating illness. You don't want to look back with regret, hurting someone else, or yourself being hurt. We really need to just stick with it. I know there's a lot of pandemic fatigue setting in. But we need to keep it up and get on the other side.

And we do that by distancing, primarily, and then herd immunity through vaccination.

Rebekah Kelley: Vaccination. Distancing. And is there a third?

Dr. Michael Greger: Taking care of yourself! Self care. So if you do get infected, you will reduce your chances of a serious case.

Rebekah Kelley: Well, Dr. Greger, thanks again for being on the show. We appreciate having you; it's been a complete pleasure. I'm such a big fan, and this has been a special treat for me.

Dr. Michael Greger: I'm so glad to be here. Keep up the great work. So glad you're doing this in podcast form!



[Subscribe](#)