

Fixing Healthcare Podcast Transcript

David A. Kessler

Jeremy Corr: Hello, and welcome to Season 4 of the Fixing Healthcare podcast. I am one of your hosts, Jeremy Corr. I'm also the host of the popular New Books in Medicine podcast and CEO of Executive Podcast Solutions. With me is Dr. Robert Pearl. For 18 years, Robert was the CEO of the Permanente Group, the nation's largest physician group. He is currently a Forbes contributor, a professor at both the Stanford University School of Medicine and Business, and author of the bestselling book *Mistreated: Why We Think We're Getting Good Health Care—and Why We're Usually Wrong*.

Robert Pearl: Hello everyone, and welcome to the fourth episode of the current season. In this our fourth season we focus on big ideas and the people behind them. Before we begin, let's remind listeners who want to know more about the current Coronavirus pandemic that they can listen every Monday night to our podcast "Coronavirus: The Truth through Apple and Spotify. Last week we talked about how the coronavirus with its disproportionate impact on African Americans has contributed to the intensity of demonstrations and protests. In addition, we highlighted the disturbing number of issues with the scientific research that has been published in leading medical journals on the virus and its treatment. This week we expand on both topics. You also can find additional information through the website RobertPearlMD.com on how comfortable people are with different steps specific to controlling the spread of the virus and the greatest threats to their lives the current Covid-19 virus pandemic.

Jeremy Corr: Our guest today is Dr. David Kessler. David was the commissioner of the Federal Drug Administration, the FDA from 1990 to 1997. During that time, he led the process to educate consumers about Nutrition fact on foods, regulate cigarettes and rapidly approval life-saving drugs against AIDS/HIV. He then served as Dean at the Yale School of Medicine from 1997 to 2003, and then Dean and Vice-Chancellor at the University of California, San Francisco from 2003 to 2007. He is the author of numerous books and most recently published "Fast Carbs, Slow Carbs." This interview was recorded in early March, as the coronavirus pandemic was becoming a progressively greater health threat.

Robert Pearl: Hello, David. How are you?

David Kessler: I'm well.

Robert Pearl: Excellent. Well thank you for being on the podcast and congratulations on publishing your newest book, "Fast Carbs, Slow Carbs: The Simple Truth About Food, Weight, and Disease." It follows you New York Times bestseller, "The End of Overeating," that you published in 2009 and your work as the FDA, the Federal Drug Administration, Commissioner from 1990 to 1997. This season of

Fixing Healthcare is about big ideas and big accountabilities, and you've had both across your career. For full disclosure to the audience, the ideas you present in your newest book, promoting a healthier diet and exercise, are ones that I applaud loudly. But before we talk about them in detail, I think it would be valuable for listeners to understand some of what you've achieved across your illustrious career.

Robert Pearl: At the end, I'm going to want to know how you're going to translate your ideas, medically proven approaches, to a population whose health is declining. I think the best place to start however, is back at the beginning. You obtained your medical degree from Harvard and while in medical school, you obtained a law degree from the University of Chicago. How did you do that? And why did you do that?

David Kessler: The real answer is writing a lot of tuition checks. So, both the law school and the medical school, I just saw that issues around healthcare were becoming increasingly complicated and I wanted to look at them through a broader lens. Now, ultimately when we took on things like tobacco, every experience, everything that I learned, I ended up using. Didn't know it at the time, but it came in very handy.

Robert Pearl: After medical school, you did your pediatric residency at Johns Hopkins. And at the same time you served as a political consultant. Same question. How did you do both and why did you do both?

David Kessler: It took a little more call at night. Snuck out a little in the day when to work on the Hill from the Senate Labor and Human Resources Committee, basically the Senate Health Committee. Wasn't political, there was always a history of staff that was able to go between both sides and did issues regarding the NIH, the FDA, and it just took a little more night call and was able to juggle that.

Robert Pearl: At that time you became interested in problems that you've pursued for decades since then, particularly around food additives and cigarettes. How'd you get interested in these two particular areas?

David Kessler: When I came to the agency, this is back in 1990, there were certain things that I knew I was interested in. I had been running a hospital in the Bronx. I was medical director of the Einstein Hospital, Einstein Montefiore. And certainly through the '80s while I was medical director, we confronted head-on in the Bronx the issue of HIV. I still remember the first case when my colleague Bert King, said to me, because Montefiore was running Rikers Island Prison Health Service, the case of a fever and lymphadenopathy and what was it that we were seeing. And so I went to FDA at a time where there was an epidemic. There was only one drug that was on the market. It didn't work very well, and by the time we left, we had basically more than a dozen agents and while none of them were a cure, they changed that disease from a death sentence to something that certainly you could live a productive life for many people with. Also at FDA, we did that Nutrition Facts panel, I'm happy to talk about that because I think

that's sort of central to the book. That experience, putting that on all packaged foods and really went to FDA and had no thoughts at the time of taking on tobacco. But one day somebody came up to me and said, "Commissioner, FDA regulates everything else if it comes in contact with the body, why doesn't the FDA regulate tobacco?" So we launched the investigation into the tobacco industry and over the next three decades led to the regulation of nicotine and tobacco products.

Robert Pearl: I definitely want to dive into a bunch of these issues you just mentioned, but first for background for the listeners, tell them what the FDA, the Federal Drug Administration, is and what the role of the commissioner who leads the FDA does and is expected to perform.

David Kessler: When I was head of the Food and Drug Administration, more than 10,000 wonderful scientists, statisticians, epidemiologists, engineers regulated 25 cents on every consumer dollar. Everything that we put in our mouths is all the drugs we take, cosmetics, medical devices, blood, the jurisdiction is vast. And unlike many agencies where there are multiple commissioners, FDA has one person who runs the entire agency. But the truth is that there are a lot of people who really, every day, serve this country, one person can't do it alone.

Robert Pearl: Since most listeners would never have guessed the magnitude of the work that the FDA does. They'd never think that it would extend into areas like the food from out of the refrigerator or at the grocery store or cosmetics they apply to their bodies, maybe you should tell them about some of the most important and difficult things you, I'll say, took on and achieved during your time as commissioner.

David Kessler: I'll tell you the story about the food label. Before we got to the agency, there really was no information that was on the product. And we had a designed the food label as you now see it and wanted to disclose information in an objective way. The food industry fought us tooth and nail. And I remember one day the Secretary of Agriculture came up to me because we wanted to do a uniform label between both the department of agriculture, which regulates all meat and poultry products, and the FDA that regulates everything else. You know the story of, "Who regulates a pizza." So if there's pepperoni on it, it's USDA. If it's a plain cheese pizza, it's FDA and we wanted to have one label for all processed packaged foods. And the Department of Agriculture, Secretary of Agriculture said, "I don't like that."

David Kessler: For whatever reason, whether he thought his products would not look very good on the food label with regard to fat content or salt, and he says, "And I'm taking the issue to the President." I said, "You're what?" He says, "Yep. I'm taking the issue to the president." So fast forward into the oval office, George Bush, the father, and Dan Quayle, the Vice President of the United States, Marlin Fitzwater, the Press Secretary, James Baker, the former Secretary of State who was Chief of Staff, Secretary Sullivan, HHS, Secretary Madigan, USDA.

And so you have six guys who've never cooked in their lives deciding the fate of the food label.

David Kessler: And we had been up and down the... I remember it was during the summer, it was August, we had some of vacation and we'd work with McDonald's. There's a paper tray liner that they put on the trays and we worked with them to have the nutrition facts panel on those tray liners. When the Secretary of Agriculture said, "Mr. President, the FDA has lost its mind. It's not going to make the entire food industry change its label. Take out that McDonald's place mat. Show it to the president and say, Mr. President, it was good enough for McDonald's, it should be good enough for the Department of Agriculture." And the president sided with us. And that's how policy is made in this country.

Robert Pearl: It's amazing insight into the workings and how the individual becomes so crucial in these ultimate decisions. I can't do anything besides stop right now and shift to modern times, to the coronavirus, COVID-19. What is the role of the FDA in helping our nation address this viral pandemic?

David Kessler: So it's intimately involved. It is responsible for all medical devices, all biologic products, all drugs. So think about it. Any vaccine comes within the jurisdiction of the FDA. FDA doesn't develop the vaccine, itself, but it certainly has to approve the vaccine. Any drugs that are used whether its emergency use authorization, its compassionate uses, its experimental uses, but all drugs, any antivirals would have to be approved by the FDA. And also any diagnostic kits that the FDA appropriately waived those regulations in the current instance. CDC was responsible for getting those reagents and those test kits out. It failed, we know that in a number of different ways, but FDA certainly has a big part of almost every aspect on the diagnostic and therapeutic side.

Robert Pearl: So would the decision about not allowing universities and private companies to develop the testing way back in early February have come under the purview of the FDA or is that all through the CDC?

David Kessler: We're still very much in the midst of this crisis. I think at certain point we will look back and try to sort that out. I certainly have questions about what happened and I don't think we have the whole story yet, why we lost a number of crucial weeks if not months in fighting this virus. I don't know the whole story, and I don't think anybody does. I think that's for sometime in the future once this is behind us. We have to make sure that it doesn't occur again.

Robert Pearl: So again, in terms of the role of the FDA and the role that you played, there's all of these treatments whereas the chloroquine that we've heard a lot about, or plasma from people who've recovered, would this also come under the purview of the FDA and the commissioner, or is this managed through other agencies in the government?

David Kessler: It's regulated by FDA. Now, the NIH is responsible for funding clinical trials and doing the research, working with the companies and universities to get the data. But once before they go market an antiviral or a vaccine it needs to be reviewed by FDA. But we changed the paradigm decades ago. We learned the lessons of HIV. We were approving drugs in the matter of days, maybe weeks when it came to HIV and there's no reason to believe that the agency wouldn't do the same as long as the data supports that the drug works and that we know enough information about the safety of the drug.

Robert Pearl: Having been the commissioner of the FDA, what is the role that you see for the agency not in just establishing the safety of a new drug, but trying to let consumers know whether this drug is significantly better than the currently available generics or other much lower priced medications?

David Kessler: It's an excellent question. The way the law is written, a drug has to be both safe and effective. It doesn't have to, under the law, be better than something on the market, right? So you have to show that your drug works. You have to show your drug works, for example, compared to a placebo. And you have to show that the drug is safe. Now, the way FDA deals with that, even though the law is not explicit, the fact is on the safety side, if a drug has more side effects or the same side effects and is not as good as something else on the market, it's hard to think how you could say that the risks are acceptable in light of the benefits. If it's worse and something else has better and that your drug has side effects. So it's a complicated question, but generally we don't require, Congress has never required, relative efficacy to be shown.

Robert Pearl: If a Stephen Hahn, the current commissioner called you and said, "What is the biggest advice you can give me based upon your time leading during quite a number of crises." What would you tell him?

David Kessler: The job is white heat. There are thousands and thousands and thousands of people who try to influence the agency's decisions and, today, you can see it play out at the highest levels of government. The administration trying to influence, get this drug to the market, approve this drug, do it immediately. And what you have to do is be willing to put your body on the line and allow the people of the agency to look at the data and to focus on the science and make the best decisions they know how to do. And your job is to protect that decision-making process.

Robert Pearl: Let me ask you one last question about the current COVID-19, and then we'll go back to your time as commissioner of the FDA, but it's hard not to ask this question having you such an expert on our show. Assume the vaccine is still a year away from broad implementation. How do you see this epidemic ending before that time?

David Kessler: Without a vaccine, you certainly have the hope for an antiviral before a vaccine. And then the question is what type of antiviral? Is it going to be an antiviral to treat this disease or prevent infection? It would be great to have a prophylactic

antiviral. And there are certainly a lot of clinical trials underway. There's anecdotal information right now. There's reason to hope that there ... may be an existing antiviral or a new antiviral will be able to demonstrate efficacy. But even before an antiviral or a vaccine, I've been thinking very hard about this question and the only answer that I can come up with of how to allow people to come out of their homes, out of the sheltering in place is widespread testing. And the basics of public health, contact tracing, but either serological or virological, we'll see where we are. We'll see what the antibodies really do.

David Kessler: If they're produced, do they confer immunity, clinical immunity, all needs to be shown but in the absence of a way to treat this virus or prevent this virus, the only thing we have is that we identify those who are infected, and we do that through widespread testing. So I think the answer is testing, testing, testing, and to do what China and South Korea and several other communities have done, identify those who are spreading the virus and protect others from that spread. It's worked for hundreds of years, that methodology. There's no reason that it doesn't work here. There's evidence already that it works as we're sitting here, as you're taping this. That's what we have, but it's going to be dependent on testing. And we know we're testing enough people at this moment

Robert Pearl: You have a history of taking on the big industries. Can you tell listeners a little bit about your struggles trying to reign in tobacco with the big manufacturers and the role of the FDA?

David Kessler: So tobacco, no doubt when we were at FDA, that was the biggest battle I think that we undertook. We went where no one went before. We went inside the industry to understand what the industry knew about the addictive potential, the addictiveness of nicotine, of how they manipulated the levels of nicotine, how they targeted young people and how they sustain the people's addictions for decade after decade after decade. And it really changed, I think how people viewed the cigarette. Certainly my parents, my grandparents' generation, smoking was something that was cool and adventuresome and something that you did to relax. And I think we changed how the cigarette is viewed from the way my parents and grandparents viewed it to what it really is, a deadly addictive product. And we see that reflected in the number of people who smoke.

Robert Pearl: And you were taken to the Supreme Court, I believe by the tobacco industry?

David Kessler: We asserted jurisdiction. President Clinton supported us. It went all the way up to the Supreme Court. We won at the trial level in North Carolina, we lost in the court of appeals and we lost in the Supreme court five-four. So we lost by one vote. But interestingly what happened was that Congress took our regulations and the enacted our regulations into law. It took some time, but that enactment really resulted even in an even stronger set of regulations because it was codified into statute. So many chapters, a lot of people involved took close to three decades from the start of the investigation to the enactment of the statute.

Robert Pearl: And the FDA, while you were commissioner, was asked to look at the safety of the silicone breast implant that plastic surgeons use. How did you think about that problem and reach a conclusion?

David Kessler: So, silicone breast implants we're being marketed and they were allowed on the market really through a loophole because they were viewed as similar to devices that came on the market prior to the Device Amendments in 1976. So they were considered pre-amendment devices. So they came on the market without any clinical testing. And over time, I mean, to think about it, you have basically an outer bag that's a polymer. And that bag, because it's a polymer, it has blebs and different areas of thickness and thinness and you fill it with liquid silicone. And you know there can be these sort of defects in the outer shell and you implant it in someone's body. And you just think for a second, what do you think is going to happen if you put silicone in a bag and you want to put it in for 10, 20, 30 years? But no one ever did the study and studied the... So we said, because we were hearing reports and the safety reports about risks, reports about these devices leaking and rupturing. And we said to the industry, you have to go back and do the clinical trials.

David Kessler: And as it turned out these devices not only don't last a lifetime, not only do they rupture and cause leakage of the silicone outside of the shell, we now have confirmed that in fact a rare type of cancer is associated with certain types of breast implants. It's not very common, but these devices carry real risks. And yeah, if they were being marketed without clinical trials, without us having that information. So now that those that carry these higher risks are off the market, then people can make informed decisions based on much more information than was available when we had to ask the companies to pull back on selling these and only do that under certain requirements for reconstructive surgery and do the clinical trials. So we've learned a lot over the last several decades.

Robert Pearl: As commissioner, you held the lives of tens of thousands and millions of individuals under your jurisdiction. When it comes to new drugs, fail to put them in place quickly enough, and people will die from the underlying disease. Put them in place, but have a significant complication as we saw with thalidomide, long before your time, and those complications impact people forever. How do you weigh this? How do you sleep at night? How do you approach this? Seems like it's a almost impossible task for anyone, no matter how large the agency, no matter how much expertise, at the end of the day, you've got to make the call. How do you do it?

David Kessler: In the same breath, reporters can write that the agency is either acting too fast and not taking safety into consideration or too slow and holding up important drugs. I think we've developed probably the most sophisticated drug regulatory system in the world. I think we are as fast as any country in the world and yet I have tried to maintain rigorous standards. That doesn't mean FDA doesn't a mess up. It does do that sometimes. We've got a primary responsibility for the safety of a drug. I mean, we have to recognize that ours as a country where we have a private system of drug development. Drugs are developed by private

companies. They are studied by private companies and universities. FDA doesn't test the drug. It doesn't develop a drug. FDA reviews the data. FDA is only as good as the data that comes in from the company and FDA tries hard, but the fact is FDA is not perfect. FDA doesn't get everything right.

David Kessler: FDA tries hard to look at the data. I think we've evolved a very sophisticated drug regulatory system, but the fact is this notion that up until the day a drug is marketed, it's unsafe. And then all of a sudden on the day that you market a drug, the drug is safe and forever more. That's just not the way it works. The fact is as you use a drug more is learned, and that's why the companies have responsibilities to make sure that they update the label with new information and FDA can oversee the regulatory framework, but the prime responsibility still rests with the manufacturer.

Robert Pearl: So let's move to your new book, "Fast Carbs, Slow Carbs: The Simple Truth About Food, Weight, and Disease." What made you decide to write this book at this time?

David Kessler: My own confusion to be honest. The difficulty over the years of maintaining weight. I would lose weight and I would gain it back. I would lose it, I would gain it back, and I never fully understood why. And that was a prime reason. So in part it was personal. It's also personal, I mean, in some ways because the recognition not only personal, but professional, you look at where we are as a country and the fact is the vast majority of people, some 87, 88% of us have some form of metabolic dysregulation going on. Whether it's inability to control weight or blood pressure or blood lipids or blood glucose, only 12% meet current guidelines with regard to those metabolic parameters and the effect of food on metabolic dysregulation, I became very interested.

David Kessler: I mean, look around the weight is without a doubt the key determinant of much of the current metabolic disease, which includes diabetes and cardio metabolic diseases. And I wanted to understand, I wanted to understand what was going on. I wanted to understand what was at the root of this metabolic dysregulation because something is clearly different over the last several decades with the skyrocketing incidents both pre-diabetes and diabetes and the cardiovascular and other complications associated with metabolic dysregulation.

Robert Pearl: What was the biggest insight that you gained in your research?

David Kessler: I think that the key culprit, and I didn't understand this. Even when we did the food label, I didn't understand what was the real culprit. And the fact is, if you look at the amount of processed carbohydrates that we are ingesting, we are flooding our bodies with an endless stream of glucose. Sure, I wrote "The End of Overeating," a book on fat, sugar and salt, but there was one key fact that I didn't focus on in that book, nor when we did the food label. Let me just give you, for example, imagine a Nutrition Facts panel. That's the panel on all packaged foods. Let me describe a food to you and tell me what you think that food is.

David Kessler: So you see on the top line, it says total calories, 300, and you look next to the line on fat, and it says 0%. And then you look at the line on sugar and it said, 0%. And you look at salt and it had some salt at some protein, but you look at the majority of the macro nutrients and it says, just total carbohydrates, 30 grams. What do you think that food is? No sugar, no fat, just some salt, protein, but mostly it just says total carbohydrates.

Robert Pearl: I would assume there would be some kind of, I don't know, corn product maybe, or some type of vegetable product, wheat product. I'm not sure. What is it?

David Kessler: It's a bagel. And what is a bagel? What is it made out of? I mean, it's starch and I had this concept, that starch was relatively inert. Yeah. I mean, it comes the flower, that endosperm of the wheat kernel, but the fact is the way that we have processed carbohydrates and you see that that wheat kernel that normally, that has that starch tightly packaged in that kernel, when that gets processed either as flour or in packaged foods, the processing machines exert great degrees of heat and mechanical forces and it shear on that starch granules, that starch is dispersed and it's almost pre-digested before we put it in our mouths. And when we when we ingest it, that starch is rapidly absorbed as glucose in the early part of the gastrointestinal tract.

David Kessler: And if you look at processed foods, it's not a bagel, it's not just a flower products or baked products. I mean, vast majority of processed foods are some 60% starch. And what we're doing is flooding our bodies with this rapidly absorbable glucose. And no one ever asked the question, what are the consequences of this never-ending stream of rapidly absorbable glucose in the early parts of our digestive system? When I was in med school, you can tell me what you learned, the gastrointestinal tract was somewhat of a tube. We didn't understand that the gastrointestinal tract was in essence the sensory organ that had hormones and now that there are hormones by which, if you eat foods that are so rapidly absorbed, so quickly absorbed in the early part of the GI tract, they never even get further down into the latter parts of the GI track that they stimulate these insulin stimulating hormones, but don't stimulate, right?

David Kessler: Because the satiety and fullness hormones are later on in the GI tract. And we've been flooding our bodies certainly with a never-ending stream of this glucose. And for those who are, I don't think this applies to everybody, the marathon runner may be different. Maybe about 10, 15% of the population, this may not have any effect, but for the vast majority of us who struggle with weight, that rapidly absorbable glucose and I don't think we know exactly the mechanism. There are a number of mechanisms, whether the food is so pre-digested that it just increases eating rate, that it just goes down in a whoosh, that it doesn't stimulate the satiety hormones, that it stimulates the insulin secreting hormones, but you see this cycle of weight gain, insulin resistance, obesity, you get caught in this cycle and once you're in this cycle that I think is only made worse by these rapidly absorbable glucose molecules by these processed carbohydrates. It's very hard to get out of that cycle.

David Kessler: And if you look at both the epidemiological data, I mean, there certainly is a link, certainly in people who struggle with their weight, the association between these processed carbohydrates and not only weight gain, but also the increased blood glucose, insulin resistance, pre-diabetes, and diabetes.

Robert Pearl: The prescription you provide to readers is a difficult one. You're asking them to give up some of the most pleasurable foods. You ask them to exercise at least 150 minutes a week and preferably 300 a week. You're telling them to lose weight, which is always a difficult and long process. No question in my mind that the science you provide is superb. How do you see psychologically, how do you see societally translating the work in your book to actually impacting the health of Americans?

David Kessler: Trying to sort through the noise, right? Because I think there's a lot of conflicting information. I try to put it down to three basic simple recommendations. One is to try to reduce or eliminate the rapidly absorbable, these fast carbs as I call them. So eliminate fast carbs, reduce the fast carbs. Two, and this I think is an extraordinary opportunity that we have to make as much progress as we made on health as we did with tobacco. If everyone could get their LDL down, that's your blood lipid, if we can significantly lower blood lipids, we can wipe out 70, 80% of atherosclerotic cardiovascular disease. We now know that LDL specifically, the LDL particles between you and I know it's called the Apo B markers on these blood lipid particles.

David Kessler: If we can lower everyone's LDL significantly, we can wipe out the vast majority of cardiovascular heart disease. And if you engage in moderate intensity exercise, you can get stay insulin sensitive. And that has enormous consequences for maintaining weight as well as metabolic health. So three simple rules, try to limit fast carbs, reduce LDL, exercise moderate intensity, that can dramatically change healthcare in this country.

Robert Pearl: If someone asked me for one word to describe Dr. David Kessler, I'd use the word crusader. Across your career you've taken on the cigarette industry, you've taken on many of the manufacturing companies. You've taken on the food processing industry. You have gone after, I'll say in quotes all of the bad guys. How did you become a crusader, David?

David Kessler: I never thought of myself as that. And I still don't. I still think of myself as someone who asks questions. Sometimes they're hard questions, they're questions we don't know the answer to upfront and going, looking at the evidence and trying to follow the evidence no matter where it leads. Whether it leads to addiction, whether it leads to significant disease consequences, it's about asking questions and following the evidence.

Jeremy Corr: Given your work on kind of taking on some of the stuff with the tobacco industry, what are your thoughts on medical marijuana and not just medical marijuana, but the legalization for recreational use. I mean, it seems like it's

done quite a bit for the states that it's been legalized in terms of a tax revenue standpoint kind of, what are your thoughts on that?

David Kessler: I'll leave it to others. I mean, in some ways, the public has made the decision and I respect the public view and the public sentiment and certainly I'm strongly supportive of decriminalization and the very inconsistent effects or disparities that drug laws have on different citizens. So I'm very sensitive to that, but I do, as a doc, I am concerned about the power, the pharmacological potency of the various components of marijuana on the brain. These are potent chemicals and I'm very concerned about the effects of marijuana on the developing adolescent brain.

David Kessler: Others have spent their lives studying it. I've studied it a good deal, but I think there is a real affect that perhaps just an association, maybe not causation. But I think that in a certain percentage, and I can't be sure what that percentage is, but it's real that there's an association between marijuana usage and psychosis. And that concerns me. I think there are drugs far less potent that are on the market that have many more warnings. And I don't think it is benign for everyone.

Jeremy Corr: In terms of the outbreak with COVID-19, when people look back on what happened, is it going to be one of those things where we were prepared and the current administration is doing a great job of leadership right now. Maybe they dropped the ball a little bit early, but one of the things I've seen in social media is that, of course, hindsight is 2020. If we would have spent all this money on getting test kits ready and everything like that early enough on, and then China was able to contain it on its own, the administration would have been criticized for spending all that money on all that preparation kind of. What are your thoughts on that concept of hindsight's 2020 and kind of what I'm talking about there?

David Kessler: I think there's some validity to that, but if you look, the experts had been warning about this for some time. In early January, mid-January when the infectivity and the lethality of the virus was demonstrated in humans and there was a community spread, there was a window to act. And there's no doubt in my mind that we did not act as soon enough or with an intensity that matched both infectivity and lethality of the virus.

Jeremy Corr: Do you think in five years time, we're going to be much more prepared or even 20 years time, much more prepared for another virus like this or do you think it's one of those things that 100 years, 50, 30, whatever that another major pandemic is just going to kind of fall back into our memories like the Spanish Flu did and we're just not going to be putting as much emphasis on preparing for something like that?

David Kessler: I think we have an obligation to make sure that to the extent that we're capable, that there is no repeat of what's happened here. I hope and pray that we make it out with the least harm but on the current episode where we all already have

seen the devastation and the tragic effect on many loved ones and I can't see how we can not have it affect us dramatically and that means taking every possible measure to make sure that we don't go through this again.

Robert Pearl: What would you say to the people that were skeptical that this was ever anything more than just a bad flu season?

David Kessler: I think the evidence is such that you just come to New York, you go work on the wards, you go into the ER, this is not like any flu season. The infectivity and mortality across a range of group of ages is such... This is very different.

Jeremy Corr: Robbie, what are your thoughts on what Dr. Kessler presented?

Robert Pearl: David has had a brilliant career and he is a humble man. His work at the FDA was groundbreaking and his insights into health powerful. As you noted at the start, the interview was recorded early in the coronavirus pandemic. Listening two months later, he was prescient in seeing the challenges this infectious agent would have and the difficulties we would encounter at identifying an effective drug or developing a successful and safe vaccine. And as he noted, we will need to re-examine the missteps of the FDA along the way.

His ideas on the hazards of processed food and his encouragement to each of us to look for opportunities to improve our health are solid and scientifically based. Two of the biggest risk factors relative to dying from the coronavirus are obesity and diabetes. The link between what we eat and a huge number of metabolic problems is well described in "Fast Carbs, Slow Carbs" and the evidence solid. Our nation would be wise to heed his recommendations.

Jeremy Corr: Listening to him, I kept wondering how different our nation's response might have been had David been commissioner of the FDA at the start of 2020. But of course, there's no way to know.

Robert Pearl: Please subscribe to Fixing Healthcare on iTunes or other podcast software. If you liked the show, please rate it five stars and leave a review. Visit our website at fixinghealthcarepodcast.com. Follow us on LinkedIn, Facebook, and Twitter @FixingHCPodcast. We hope you enjoyed this podcast and will tell your friends and colleagues about it. If you want more information on these topics you can visit my website: RobertPearlMD.com. Together, we can make American healthcare, once again, the best in the world.

Jeremy Corr: Thank you for listening to Fixing Healthcare with Dr. Robert Pearl and Jeremy Corr. Have a great day.