

Center for Humane Technology | Your Undivided Attention Podcast

Episode 38: You Will Never Breathe The Same Again

Tristan Harris:

Do you make better choices when you're racing around and filled with anxiety? Or when you're feeling calm and relaxed? Well, the way that you breathe can dramatically shape whether we're feeling anxious or calm. How might our experience with technology be different if it paid attention to how we're breathing? Today on Your Undivided Attention, we'll use our breath to explore how we might design more humane technology. And here to guide us through that exploration is journalist James Nestor.

Tristan Harris:

James is the author of the New York Times Bestseller, *Breath: The New Science of a Lost Art*, and in it he chronicles how humans have lost our ability to breathe correctly with sometimes grave consequences. And he reveals how making slight adjustments to the way we inhale and exhale can rejuvenate internal organs, halt asthma, and even straighten scoliotic spines. You're going to hear some bold claims that James himself was surprised to find evidence for. I'm Tristan Harris.

Aza Raskin:

And I'm Aza Raskin.

Aza Raskin:

And this is Your Undivided Attention. It's my great pleasure to have you, James, on Your Undivided Attention and I'm very excited to get to dive into the intersection of our work now on technology and the human humane side of things. This could be a story about breadth and that's what your book is, *The New Science of Lost Art*. But reading your book, I was left with the unsettled feeling of an even deeper underlying story.

Aza Raskin:

To me it read as the story of how we as human beings are products of environments, that fundamental parts of ourself can atrophy away within a generation. That something so core to our identity has our face can become deranged in ways that chronically reduce the quality of our lives and send us to the hospital without anyone really noticing. And that we're left playing a whack-a-mole game of trying to fix the system of downstream problems from asthma to diabetes, sleep apnea, memory impairment, lower mobility, childhood torment of braces and headgear, all because we don't understand root cause.

Aza Raskin:

And I think our listeners now can already hear the coming analogy of the cascading set of crises in mental health, extremism, polarization, mis- and dis-information, isolation, all created by technology, messing with our cognitive and information environment, atrophying parts of ourselves that we need and how a blindness or misunderstanding of human ergonomics can cause a downstream set of issues that seem completely intractable, but

Center for Humane Technology | Your Undivided Attention Podcast
Episode 38: You Will Never Breathe The Same Again

perhaps aren't if you can accurately diagnose root cause. James, welcome to Your Undivided Attention.

James Nestor:

Thanks a lot for having me.

Aza Raskin:

We would love to have you start by reacting to the above and getting a more in-depth walk through, the history and timeline that's led to this profound change in the human skull in just a couple of hundred years and the subsequent cascading consequences from breath to health.

James Nestor:

Well, this realization that you've had and that I've had in the past few years, of understanding that evolution is not this straight line of progress, it's not just about survival of the fittest. Evolution means change and life can change for better or for worse. And if you look at the human species right now we're developing traits that are in no way advantageous to our long-term survival. And scientists have been talking about this for at least 100 years as it relates to breathing, as it relates to our mouths, and still the majority of us don't even realize that having crooked teeth is not normal because everyone has crooked teeth, or having asthma is not normal about snoring or sleep apnea is not normal.

James Nestor:

But as you so eloquently explained, these things are so pervasive that we've accepted them as just these day-to-day problems. If you don't have them, you're the exception now. And so it's interesting to look back on this and understand how these shifts can happen in life and they can happen so quickly and that so many of the core issues that we're struggling to contend with right now are again related to that big change in our environment that has affected our breathing, it's affected how we look, it's affected so many other aspects of our health.

Aza Raskin:

Walk us through that in a little bit more detail to go from the abstract down to the concrete, what changed, what's going wrong with humans. Paint the picture.

James Nestor:

You know, when I first heard it about this, this was several years ago, when I was really booting up the research for this book. I went to a few different labs and I ended up at the Morton Collection at the University of Pennsylvania. They have one of the largest collections of pre-industrial skulls. And they took me into this room and it had all of these skulls from Africa, from China, from Europe, South America, U.S., Polynesian Islands, on and on.

Center for Humane Technology | Your Undivided Attention Podcast

Episode 38: You Will Never Breathe The Same Again

James Nestor:

They were all lined up row after row. They were all old, so this is before pre-industrial food. Every single one of them had perfectly straight teeth. They had this very prognathic forward-growing face, these powerful jaws. In a single generation of adopting an industrialized diet, teeth will start to grow in crooked. Robert Corruccini who studied this stuff for 30 years, published 250 papers on it, found about 50% of a population will have crooked teeth after the introduction of this industrialized soft sugary diet. After that it goes up to the next generation, maybe it's about 70% of the population. But four generations in you are, look around, that's what we are right now. About 90% of the population has some sort of mal occlusion or crookedness in our teeth.

James Nestor:

This happens through this food. We are not evolved yet to eat this processed soft food and without masticatory stress, especially in infancy, with breastfeeding and especially when you're young, instead of eating Gerber's, applesauce, soft foods, what did all of our ancestors do? They went from nursing to eating hard foods. And when you eat hard foods, all of that stress helps you build a stronger mouth, a wider mouth, that makes more room for straight teeth. That's why we have crooked teeth. Our mouths have grown too small for our faces.

Tristan Harris:

And what is the relationship between the evolution of our teeth and breathing, the subject of your book?

James Nestor:

There's another problem with having a mouth that's too small for your face. Not only does it mean you're going to have crooked teeth, but you also have a smaller airway. So that's the problem. Not only again has it affected our teeth, how we look, but it's affected our functioning, it's affected how we breathe.

Aza Raskin:

The next question is, what are the downstream consequences? If it was just how we look and all right, so our teeth are a little bit more crooked. What's the "so what" there?

James Nestor:

So what is if you struggled to do anything 20,000 times a day, it's going to wear your body down. Just imagine if your ankle were very lightly sprained or your toe was sprained or broken and you try to walk your 10,000 steps a day, how is your body going to feel? How's that leg going to feel? How's the other leg going to feel? And so breathing is something that we've become very good at just getting by doing, we can compensate very well. But that doesn't mean we're healthy.

Center for Humane Technology | Your Undivided Attention Podcast

Episode 38: You Will Never Breathe The Same Again

James Nestor: And so having the smaller airway makes you more susceptible to snoring and sleep apnea. It makes you more susceptible to respiratory issues because you can't breathe through your nose and when you can't breathe through your nose you can't filter that air. You can't purify it before it goes to the lungs so the lungs essentially become an external organ because they're exposed to everything in your environment. And it makes you much more susceptible to breathe too many breaths, to breathe these shallow breaths. And when you do that you cause this feedback loop with your brain, constantly sending signals to your brain, that you are stressed and you get spikes of cortisol and adrenaline and all the rest, that leads to that chronic inflammation.

Tristan Harris: Basically what you're saying is that the default way that most of us are breathing is driving chronic inflammation and stress?

James Nestor: In many ways, yes.

Tristan Harris: Maybe it would be helpful for people to hear how you personally got interested in this. I mean, why would you take this turn in your life to examine our breathing in our nose, in our mouth, in our lungs so deeply. Why did this perk up for you?

James Nestor: The real jumping off point was when I was sent on assignment to write about free divers. These are people who are able to master the art of breathing so well that they can hold their breath for 5, 6, 7, 8 minutes at a time and dive to depths far below what many scientists thought possible, 300 feet, 350 feet on a single breath of air. And once I started getting to know them and understanding what they did and how they did it, they were telling me, "Well, this is just really the tip of the iceberg with breathing. You can use breathing to do a bunch of other things. You can use breathing to heat your body up when you're cold, you can use breathing to heal yourself."

James Nestor: And all of this sounded like complete BS to me, but I spent several years talking with the leaders in the field, doing a bunch of research, accumulating hundreds and hundreds of scientific studies to find out that, what these free divers had told me was actually true. And so I realized my thinking was starting to change in a big way. And if you want to have a breakthrough first you have to have a breakdown and that's what was happening to my perception of this very simple, what I considered boring, unconscious act of breathing was really tying together so many different aspects of our health and our abilities and our true human potential. It was tied to our breath. And the ancients have known this for thousands and thousands of years. But the difference is now we have machines. We can measure this stuff, we can objectively see what's working and what isn't working.

Tristan Harris: I was wondering if you would just tell a couple of stories from your book around some of the insights about breathing and you talk about Katharina Schroth, I believe a German teenager. Would you be willing to tell us that story?

Center for Humane Technology | Your Undivided Attention Podcast

Episode 38: You Will Never Breathe The Same Again

James Nestor: Yeah. She was a teenager living in Dresden, Germany when she was diagnosed with scoliosis, the sideways curvature of the spine. And at the time she was given a brace and she was given a wheelchair and said, "This is your life. This is what we do for people with scoliosis, we'll see you later." And so she had different views of the human body's potential, and she understood that we have these two enormous balloons inside of our chests, right, and they're called our lungs. And if we take a very deep breath look what happens to the spine, look what happens to the entire body. It gets upright and straightens up.

James Nestor: So she developed something called orthopedic breathing, where she would bend her body in one direction and inhale into that lung, bend her body into another direction, inhale into the other lung. She kept doing this and after a couple years she breathed her spine straight, totally straight, she was fine. And so she went to teach this to hundreds and hundreds of other women with scoliosis. Teenagers, older women. Some of these people, hospitals had given up on them. They couldn't even look up, their spines were so bent. And I have pictures and videos of this on my website.

James Nestor: And she taught them how to breathe their spine straight. And she did this for decades and she was derided the whole time by the German medical community who said she was a quack and tried to stop her from treating people because she wasn't a doctor. But at the end of her life, she lived to be 91 years old, three days shy of her 91st birthday, she was awarded a medal by the German government for her contributions to medicine.

Tristan Harris: What I like about that story is there's oftentimes we view our internal state as permanent. And any ways in which we also use identity-based language like I am an anxious person or I am a depressed person. It also ties into a seemingly unchangeable reality especially when you use identity-based language. And I think whether it's with the ways in which we've degraded the ways our minds are fluttering around and inability to read books anymore, or all sorts of ways that we've warped our cognitive architectures, the idea that there is a way to clarify them by putting them back into some kind of purifying process.

Tristan Harris: I mean, I just think about the kids in South Korea who have done video game addictions and then they go to these stay away camps for a week and then they come back and they've actually made tremendous progress. It's sort of resetting their internal dynamics. You also give the example of tummo, a 10th century Tibetan Buddhist monk technique?

James Nestor: Mm-hmm (affirmative).

Tristan Harris: Would you tell us a little bit about that?

James Nestor: This is a breathing technique that's been around for at least a thousand years, it's been written about. And it's the ability for these Bön Buddhist monks to breathe in a certain way to allow themselves to heat their bodies up. And so according to legend they were able to sit in the snow overnight

Center for Humane Technology | Your Undivided Attention Podcast

Episode 38: You Will Never Breathe The Same Again

on a winter night and melt a circle around themselves and then get up and go back into the monastery and get on with their day.

James Nestor: For most of us this sounds totally impossible until this woman by the name of Alexandra David-Néel, a Belgian French opera singer anarchist took off and lived in the Himalayas in India for 14 years at the turn of the century, which was really unheard of for a woman at that time, for basically anyone at that time. And she learned this tummo breathing and she said, "It's nothing fancy, it's just a way of keeping warm and to keep the body healthy when you're hiking at these very high altitudes."

James Nestor: So, she wrote about this in various books but still nobody believed it. Until all of these hippies started going to India, and Tibet, and Nepal in the '60s and '70s and coming back with these stories and finally enough of these stories accumulated that Herbert Benson at the Harvard Medical School went out to Dharamshala in India, found the monks who were able to do this, covered them in sensors and found that they were able to do everything that the ancient legends had said. They were able to increase the temperature in their extremities once they were cold by 17 degrees.

James Nestor: And he placed them in this room, there's video available, and you can see them doing this. He places them in this room and they sit around in a circle and they each got a sheet and they put the sheet in water and the room was very cold, in the mid-50s, and within about half an hour they were able to dry the sheet just using their own body heat. And it turns out that this tummo breathing is not only a great way of heating the body up, it's actually a great way of healing of chronic maladies and this has been proven in a few different studies.

James Nestor: Right now Elissa Epel is looking into how this affects rheumatoid arthritis. And I've heard from dozens and dozens of people who have had chronic autoimmune issues that they were told were incurable are now no longer suffering the symptoms of these problems because they've been able to harness the power of breathing and harness their own body's ability to heal itself.

Tristan Harris: It strikes me there's two categories of our conversation. One is the way that by not being aware of how breathing is important we end up neglecting or invisibly harming other aspects of our nervous system, maybe even giving ourselves auto-immune diseases or all the other effects you've talked about. But the other side is more of the optimistic human potential movement side. Going back to my friend, Michael Murphy and founder of Epsilon, and really just this longterm exploration, what is the upper bound, what is the ceiling of the ability to alter your internal state?

Tristan Harris: And I think that ... Actually, just to share something personal, I mean, this is actually where a lot of the work on humane technology really came from, is the same inquiry that in the 1960s the human potential movement is really on. Because if there is such a thing as our external environment both really conditioning and setting up the menus of choices that our minds

Center for Humane Technology | Your Undivided Attention Podcast

Episode 38: You Will Never Breathe The Same Again

perceive is available for us for a moment to moment or conditioning the way we breathe or conditioning the way we use our attention, there's sort of two sides of concerns.

Tristan Harris: One is, are we neglecting some aspect of ourselves, that we are allowing to atrophy or allowing to degrade in some way, but then the other side is again not to explicitly be ... There's no techno utopian idea here, but there's more on the almost superhuman levels of clarity, of attention, of intimacy in relationships that there actually is wisdom about how to bring out in this case, in your work, the depth of what's possible just by doing very interesting new breathing techniques that are actually, what's so fascinating about the topic that you're bringing up is, they're adjacent to our moment to moment experience.

Tristan Harris: I mean, it doesn't take money to change the way you use your breath, you can simply just choose. And obviously being guided with a good instructor or something. But it's fascinating to think that adjacent to the day-to-day reality that we could be living every day, could be just a slightly different use, of whether it's our attention or our breath that could reveal a totally different transformational landscape of opportunities.

James Nestor: Yeah. And to me it's so crazy to think that we are just starting to understand where that ceiling of human potential might be. And for Westerners I don't think we're anywhere close to where Eastern practitioners have been. And to me I just find it so fascinating that we are getting these little windows into what we're capable of, but we just shake our heads and say, "Okay, anyway, back to email."

Tristan Harris: I think that similarity here between what you're looking at and what we're looking at is, there could be this organ that is fundamental to how we engage with reality, like breathing in air. And the idea that that organ, that literally is serves as the baseline layer for all the other ways that we interact in reality in our health, et cetera, that we could be doing it wrong and not know it and when you make this metaphor of the unfiltered air that's now going into our lungs because we're breathing through our mouths and not our noses, for example, I think about the unfiltered cognitive noise that is entering into our brain, that our brain is like the nose in your example.

James Nestor: I really liked that analogy you just made because on a physiological level that's exactly what is happening when we're breathing through our mouth versus breathing through our noses. If we breathe in a slow, rhythmic manner and we're breathing through our noses, our brains function better. And there's been numerous studies that have shown this. We're able to take control and use a lot more logic because the prefrontal cortex is more closely connected with the amygdala and the emotional centers of the brain.

James Nestor: And so the idea that we are constantly in this state of stress, we don't know why, we can't figure it out, I'm not saying it's all tied to our breathing,

Center for Humane Technology | Your Undivided Attention Podcast

Episode 38: You Will Never Breathe The Same Again

of course not, there's so many other inputs. But breathing is one of the main foundations of establishing proper health, establishing a way of thinking more logically, of calming your nervous system down so you can better navigate the modern world. And the fact that we have so many distractions bombarding us from all different levels right now and our brains and bodies aren't even able to function properly to handle those distractions, I think has really led to a bunch of chronic problems.

Aza Raskin: The thing that I'm hearing you say is that by better understandings of the substrate that we live off of our human bodies, it lets us do things that we did not think were possible and enhance human brilliances. And by not understanding or being blind it can cause severe damage and problems, both chronic and acute. One of the things I heard was by slowing down breath, there is a clock rate at which you breathe that changes the wisdom with which you show up in the world.

Aza Raskin: Just cool, it lets your prefrontal cortex do its thing, your amygdala gets down-regulated. We're able to pass through stress without it landing in your central nervous system. And the analogy immediately that comes to my mind is if you shallow-breathe you are much more prone to anxiety attacks and making fast impulsive decisions. Twitter, social media is the shallow-breathing of our societies, it's the fast impulse, it's keeping us from having a clock rate that lets us be wise.

Tristan Harris: I have a friend named Neema Morajevi who's worked in this company called Spire for the last decade which is actually about a quantitative... What do you call it? A quantified self-breathing sensor that monitors and tries to coach us into better breathing. And one of the things I remember him saying years ago was that, one of the things that's fascinating about breathing is that it both is unconscious but can be consciously controlled. It happens constantly unconsciously, it will just happen. It does have a shape to it but as soon as you direct your attention to it you can also consciously change what it's doing.

Tristan Harris: That's a very interesting unique process. It makes me think of posture, Aza and I used to joke that if you're ever in a conversation at a cocktail party and if you just drop in, and just drop the word posture, watch everyone just stand up a little bit more straight because you're just adding a moment of consciousness. And yet also notice that in both those cases, whatever consciousness you apply, there's a half-life to that awareness because what do you do you slouch right back into some other natural state and you probably around breathing do the same thing. And there's a sort of way in which we're being conditioned, increasingly by technology and just more broadly by our environment to have these unconscious processes not go in ways that would be most wise or most helpful for us or even when we're operating at our peak consciousness, but to go in this more limiting direction.

James Nestor: And that's the great thing about breathing. We've adapted to have this be an unconscious act that can just run in the background. But that doesn't

Center for Humane Technology | Your Undivided Attention Podcast
Episode 38: You Will Never Breathe The Same Again

mean it should always be running in the background especially if you're breathing improperly. The body's really good at compensating. It will keep you alive, but it can't keep you healthy if it's constantly struggling. And, with Spire or with any conscious breathing, be it a wearable or just an exercise you do, it's interesting to note we can't take control of our digestion or our heart rate just with our mind or our kidney function or various circulation. But when we take control of our breathing we can influence all of these functions.

James Nestor:

You can influence how your heart beats and it's as easy as taking a breath in, feeling your heart rate speed up and exhaling and feeling it slow down. That's not a placebo effect, that's basic biology. So our breath is intimately tied to our heart rate and if you can control that with breathing you can also control circulation and blood pressure as well and even brain function, it goes on and on and on. And this stuff sounds pretty crazy. It sounded crazy to me when I first heard about it but then if you think about how the human body works it makes perfect sense.

Tristan Harris:

This is really interesting to me and we often talk in our work about how technology is collapsing free will because it makes us more predictable in two different ways, actually. One is that to use Aza's words, when you're using social media it builds this more and more accurate voodoo doll-like avatar model of you so that it knows exactly what thing to put in front of you next that's going to cause a predictable behavior. Yes, you will click on that ad with 85% accuracy. Yes, you will watch that video on TikTok with 70% accuracy because we've just seen so many patterns. That's one side of the predictability, is it just actually makes better predictions about what you will do more so than you know about yourself.

Tristan Harris:

But the second side is that, by collapsing more and more of our choices into this predictable next video, next video, next video, we actually just become a simpler more domesticated, predictable kind of organism. We're not really the full-featured high-choice-making high-capacity for thinking really non-linear creative insights. That aspect, that higher aspect of human beings, goes away the longer we're in this predictive cycle. And one of the worries is that the more stressed you get using technology, almost the less access I have, to whatever we would call more free choice. Whatever we might call a higher dimensionality or a higher consciousness or some higher place from which to make choices or to act from or to even have new creative thoughts as opposed to just predictably having the next reactive thought that's really just reacting to the next from the last anxious or stressed place that my body has been in.

Tristan Harris:

In your book, you wrote Buddhists not only use breathing to lengthen their lives but also to reach higher planes of consciousness. Just to ground this in a specific example, is there a simple breathing exercise that would be a state change everyone could maybe experience just to get a sense, maybe comparing it to the ideal box breathing that you talk about in your book?

Center for Humane Technology | Your Undivided Attention Podcast

Episode 38: You Will Never Breathe The Same Again

James Nestor: Sure. People are going to be very disappointed by how achingly simple this is, but I've found that nature is simple yet subtle. Here's one, one of many. Here is what happens when you exhale more than you inhale. If you place your hand over your heart right now we're going to inhale to a count of about four and then we're going to exhale to a count of about six, or if it's comfortable for you to a count of about eight. We'll just try it now. Inhale 2, 3, 4, exhale, 2, 3, 4, 5, 6, 7, 8. Inhale 2, 3, 4, exhale, 2, 3, 4, 5, 6, 7, 8. You can just continue breathing that way.

James Nestor: That inhalation is associated with a stimulating, or the sympathetic nervous system. And when you inhale the heart rate speeds up and when you exhale the heart rate slows down. Guess what's going to happen when we're exhaling longer than we're inhaling? We are going to calm our bodies down and you can put a blood pressure cuff on and see what happens when you breathe this way after maybe a minute or two. You can also check your heart rate variability and see what happens when you breathe this way.

James Nestor: Most of us don't want to be down-regulating, we don't want to become sleepy. Just breathing a few of those breaths gets me extremely relaxed. We want to be balanced and so a great trick to use throughout the day is to breathe into a count of about five or six, whatever is comfortable for you and exhale to that same amount. This is called coherent breathing. And about 20 years ago Italian researchers brought in a bunch of subjects into the lab and had them recite the Ave Maria, the Catholic prayer Cycle of the Rosary with the Buddhist mantra, Om Mani Padme Hum. And they found that the respiratory rate in both of those prayers locked into that five to six seconds in, five to six seconds out, not only with those prayers but with dozens of others.

James Nestor: This is at a time before watches, before stopwatches or apps. People used prayer as this way to modulate and control their breathing. And when we breathe this way the respiratory system and the heart, other systems in the body, enter a state of coherence which is why this is called coherent breathing, more oxygen to the brain, lower blood pressure. You feel calm but also focused. So you don't have to pray to get these benefits but it's interesting that so many different cultures who likely weren't even in contact with one another had developed the same systems to breathe at the same rate. And so cool to me that we now have instruments that can measure this and breathing is so easy to measure that if anyone is apprehensive all you have to do is just try it out for a couple of minutes and see what it does to your body. And I think you'll be surprised, I certainly was.

Tristan Harris: I know in the breathing exercises I've done the extra holding for five seconds at the top and then holding empty for five seconds at the bottom, how does that change the dynamic? Because that actually, for me, that's the thing that has usually made a really profound and surprising difference in my state, is if I have those extra few seconds of emptiness on the top and on the bottom.

Center for Humane Technology | Your Undivided Attention Podcast

Episode 38: You Will Never Breathe The Same Again

James Nestor: Yeah. And these breath holds were also a part of all these different systems of medicine, these different systems of breathing, whether it was a Qigong or whether it was pranayama, whether it was yoga, whether it was different Christian prayers even had these breath holds. So what you're doing is you're helping the body to calm down even more. If you think about box breathing which is very famous now, it's a four-second inhale, four-second hold, four-second exhale, four-second hold.

James Nestor: What are you doing for three quarters of the time? You're holding your breath or you're exhaling. What's going to happen to your nervous system? It's going to calm down immediately. So breath holds are a way of accentuating that. What they're doing is they're allowing you to tolerate higher loads of carbon dioxide. Because as we exhale we released carbon dioxide but if we're holding our breath we accumulate carbon dioxide .and it's carbon dioxide that triggers the need to breathe, it's not oxygen, it's CO₂.

James Nestor: So by learning how to control that CO₂, you can allow for better circulation throughout your body because CO₂ is a very powerful vasodilator. It opens up all the capillaries, arteries in your body to allow more blood to flow. It's also interesting to note that, after about 30 seconds of holding your breath oxygenation of the brain actually increases. Because the brain takes blood from elsewhere in the body, it takes oxygen. And so there's so many different altered states of consciousness you can put yourself into by holding your breath, by purposely over-breathing, by breathing very slowly, because it's changing how the brain is working.

James Nestor: And that's how so many people are able to have these real breakthroughs in whatever is hanging them up by changing their breathing, controlling that breathing, purposely placing themselves in a state of extreme stress by breathing very heavily and then controlling that breath and reminding them that they're in control of their own stress. That, once you are able to turn it on, you're able to also turn it off. And that to me is one of the most powerful things once you get a hold of that and start conditioning yourself to do that.

James Nestor: When you are suffering from panic, when you're suffering from asthma, both conditions we know can be greatly improved by getting control of your breathing. Various, dozens and dozens of experiments and studies have shown this. Nonetheless, you have asthma, you're given a bronchodilator and you're given oral steroids. You have panic, you're given SSRIs, or you're given some other pharmaceutical.

James Nestor: I really think what would benefit most people is just to offer that choice, say bronchodilators, oral steroids, they work great, they work really, really well. But, they're not addressing the core issue of your asthma and if you stay on these drugs for too long there's a good chance that you're going to get osteoporosis. You're going to get auto-immune diseases and more, your asthma is going to get worse. We know that. So why not say, you can use these but there's also this other way.

Center for Humane Technology | Your Undivided Attention Podcast
Episode 38: You Will Never Breathe The Same Again

- Aza Raskin: It strikes me that the kinds of solutions that aren't breathing-based to panic attacks, asthma, fits the definition of an addictive solution. This is the Donella Meadows, systems thinker. She wrote in the book *Thinking in Systems* the definition of addiction, which is, "Addiction is finding a quick and dirty solution to the symptom of the problem, which then prevents or distracts one from the harder and longer-term task of solving the real problem."
- James Nestor: Beautiful. Wow, I've never heard that before. I heard from... I'm not going to name his name, I'm not going to say what institution he's from, but it was a renowned medical institution. And I was having lunch with this person and we got talking about, what if this society really did start cluing in and taking their health more seriously, taking preventative care more seriously. And we started painting this rosy picture and then this person sat back and he said, "We would have the biggest economic depression anyone has ever seen. And the reason is because about 25% of the U.S. population," these are his percentages. I think it's just a broad estimate. "Is tied directly into healthcare. And this entire industry is built upon people remaining sick. And when they get well and they stop using all of this stuff, people lose jobs." So he said that, the incentive is actually not to get people healthy right now, it's to keep stasis, to keep people as they are, because that is what is best for the economy.
- James Nestor: But we have this incredible technology in our brains, in our lips, in our lungs, that we can harness what we already have and use that and focus on that. But to me so much of this really comes down to will and want. If you want to do this then here's the information on how to improve your life. It really comes down to centering back into yourself, to centering back into how our species has survived for so many hundreds of thousands or millions of years. And we've survived for a reason, because we're extremely adaptable. Once you understand and acknowledge that adaptability, I think you can elicit some big change.
- Aza Raskin: James, thank you so much. Michael Pollan has that wonderful line, "Eat food, mostly vegetables, not much." And maybe for you it would be what could people do would be chew more, breath slow, mostly nose.
- James Nestor: That's pretty good. Or breathe, not too much.
- Aza Raskin: Mostly through your nose.
- James Nestor: Yeah, mostly.
- Aza Raskin: Mostly through your nose.
- Tristan Harris: Yeah, perfect. James Nestor is an author and journalist who's written for *Scientific American*, *Outside Magazine*, *The New York Times*, and more. His latest book is *Breath: The New Science of a Lost Art*. James lives and breathes in San Francisco. And we'll be hosting a discussion and Q&A with James

Center for Humane Technology | Your Undivided Attention Podcast
Episode 38: You Will Never Breathe The Same Again

Nestor himself at our podcast club in the next few weeks. For details, visit humanetech.com.

Tristan Harris:

Your Undivided Attention is produced by the Center for Humane Technology. Our Executive Producer is Stephanie Lepp. Our Senior Producer is Natalie Jones and our Associate Producer is Noor Al-Samarrai. Dan Kedmey is our Editor-at-Large. Original music and sound designed by Ryan and Hayes Holiday, and a special thanks to the whole Center for Humane Technology team for making this podcast possible. And a very special thanks goes to our generous lead supporters, including the Omidyar Network, Craig Newmark Philanthropies, and the Evolve Foundation among many others. I'm Tristan Harris, and if you made it all the way here, let me just give one more thank you to you for giving us your undivided attention.