

# **Breathe: The Simple, Revolutionary 14-Day Program to Improve Your Mental and Physical Health: A Special Interview With Dr. Belisa Vranich**

By Dr. Joseph Mercola

**JM:** Dr. Joseph Mercola

**BV:** Dr. Belisa Vranich

**JM:** It's hard to believe, but 9 out of 10 of you are breathing incorrectly and impairing your health. I'll bet you'd like a simple strategy on how to correct that. Hi, this is Dr. Mercola, helping you take control of your health. Today we are in for a real treat. We are joined by Belisa Vranich, who has written the book *Breathe*. She's a clinical psychologist for the last 17 years, and has developed a really effective strategy to help you understand how to integrate optimal breathing into your life. Welcome and thank you for joining us, Belisa.

**BV:** It's such a pleasure to be here, Dr. Mercola. I'm thrilled to talk about breathing any time, any day.

**JM:** Yes, indeed. You seem to be a stellar example of what can happen when you apply proper breathing techniques.

**BV:** Thank you. I'm pretty healthy, I'd say. Yeah.

**JM:** Yeah. You look it. Why don't you share with us your transition? You've been a psychologist for 17 years. Most psychologists who I'm aware of don't transition into using breathing.

**BV:** No.

**JM:** Why don't you discuss that journey? Because I think it would help frame, for our audience, your perspective on things.

**BV:** Sure. What happened is that one year in New York, I woke up and I had this dull throbbing pain in my jaw. I went to the dentist and found out that I was not only grinding my teeth, I was really just making my way. I was pulverizing them because of stress. They looked at my jaw. They said my jaw was fine. It was really just my response to stress.

Being someone who's sort of thrived on stress, I reached a point where it wasn't working for me anymore. I know you might have had that "Come to Jesus" moment where your stress isn't working. It's not filling you anymore. It's starting to hit you as far as your psychological health, your physical health. Something happens. For me, the finding out that I had to pay thousands and thousands of dollars to get teeth replaced and fixed and all kinds of things was my moment.

What most people do, they take a yoga class or have a stiff drink. I decided for the yoga class. I loved the breathing that we did in yoga. I mean I was just over the moon. I loved the words: the

khapalabati, the ujjayi, the sound of them. I loved doing them. When I left yoga, I went out and tried to see if I could find other classes that had to do with breathing. Most of them that I found were a little vague, as far as their scientific explanations of what was going on, although they were lovely.

I took classes with gong baths, in teepees, at Joshua trees, all kinds of wonderful places. I do love that sort of breathing as well. But coming from a science background, I really wanted to know why things were happening. I was that annoying person in class asking 8 million questions.

Anyway, long story short is that I found all types of breathings in sports, martial arts, birthing, singing, free diving. [I] put all that practical elements together and came up with the breathing class and the class I give now. I went back to my own patients where I had a lot of anxiety and depression with the patients I had. They had anxiety and depression, and it worked really well with them. They got to the point where they wanted to talk and they wanted to problem solve, but they also really wanted to breathe. They would spend chunks of the session really wanting to do breath work. That's how the transition happened.

**JM:** Wow. Thank you for explaining that background. I guess the other component of this is that you appear to be very fit. My suspicion is that you've been fit for most of your life. That might be somewhat surprising because as you engage in a fitness activity, you typically think stress, especially stress significant enough to result in bruxes or grinding your teeth, would be addressed by that, but it wasn't.

**BV:** No.

**JM:** Maybe you can comment on your engagement in those types of activities.

**BV:** I think you've seen this as well. It's that folks will go to exercise and do a frenetic amount of exercise to try to calm down. It's actually making them exhausted, but it's not necessarily calming them down. The sports that I was going to was martial arts, muay thai specifically. It was exhausting me to the point that I had to calm down. I had to relax. But it wasn't internal. I wasn't really working through whatever issues I had to work on.

My dysfunctional breathing had come from ballet and gymnastics when I was younger. The shape that you have to take, the posture that you have to take, in certain sports will kind of actually make your breathing worse. Usually when I have patients now, we talk about breathing and when their breathing started to change. I look at their posture, how they sit, what they do most of the day, but also their adolescence and what they did as a sport when they were young adults, because that can really affect how you hold yourself and the way you breathe.

**JM:** You actually wrote a whole book on this, which is *Breathe*. Imagine that. What a title for a book.

**BV:** Not very original, but yeah.

**JM:** No, but it's good. It's succinct and so classic. In that book, you make the statement that changing the way you're breathing can have an enormous impact on your cellular and your physical health. I'm wondering if you could expound on that because that should provide the motivation and the catalyst for people to continue listening and apply the practical tools that you've developed.

**BV:** Oh my gosh. It's the cornerstone of your health, really. I mean there are so many things that you can do for your health – your sleep, what you eat, whether you're addressing your emotion and your physical health. But if you're not breathing well, that's the cornerstone to your health. It's the very foundation of your health. You can do all sorts of other things. But what I found was there were so many other implications other than helping with anxiety and with depression.

I had patients come back and say, "My digestion has gotten so much better. My acid reflux, irritable bowel or back pain got better." All the good things that happen when you start breathing, I started realizing them, because I didn't know. I figured it was just for anxiety at that moment. But I realized that my patients kept coming back and saying, "I can think so much more clearly. I can sleep better."

All of a sudden, I had to educate myself about gastrointestinal (GI) problems, back health and things that I'd never known that much about, because they kept coming back and saying, "I feel so much better. My inflammation is down. My acidity has neutralized," all kinds of wonderful things that have to do with just the very foundation of your health.

**JM:** Maybe you can comment on how it impacts chronic pain, because it's not something that you would intuitively think that breathing has an impact on, but apparently it does.

**BV:** Especially back pain. Just to put it very simply, it's that you're in pain, you tense up, you breathe in a way that's more shallow. It makes the pain feel worse and you end up in this vicious circle where you can't get out of the pain. Your breathing follows the pain. You go around and around until you're taking medications you probably don't want to take for too long, or living in pain and it's affecting your mood and your relationships, and things like that. It's really about getting out of that vicious circle where you're breathing in a shallow way. It's making you tighter and the pain worse, and so on and so on.

**JM:** You've been doing this for a while now. I'm wondering if you could comment on your observations of the people that you've been teaching and sort of expand that as to what your guess may be for our viewing audience, with respect to how many of them are breathing in a way that you find unhealthy. I believe you've consolidated two different types, which are vertical and horizontal breathing.

**BV:** Exactly, yeah.

**JM:** Maybe you can start on that and you can expound.

**BV:** Nine out of 10. When I have groups of people, 9 out of 10 people are really bad breathers. There will be one that's usually a decent breather. They're an outlier. Maybe they've read the

book, maybe they just happen to be breathing alright, not necessarily horizontal, but they're not completely vertical breathers. Nine out of 10. It's really fascinating. To me, it's actually what got me in the journey. It's that I started looking at folks and saying, "Oh my gosh, the dysfunction isn't just here and there. It's not 2 out of 10. It's really 9 out of 10, or 9 1/2 out of 10." Most of us. Most adults, actually.

**JM:** Okay. Why don't you define what horizontal and vertical breathing is? Vertical is the one that most people are doing, 90 percent of people watching this.

**BV:** Yes. We've got vertical breathing, and we've got horizontal breathing. Vertical breathing is what most people do. It's what we see in advertisements. It's what we see our parents do. It's not your fault if you're breathing vertically. It's something you picked up over a number of years.

It can be dismantled, but what usually happens when you breathe vertically – you can actually do this now, where you sit up straight and you take a deep breath in and you fill all the way up and then you exhale, let it go. Inhale. Fill all the way up. Exhale. Let it go. What you'll find usually is that you feel like you get a little bit taller on the inhale, maybe your shoulders move up. On the exhale, you sort of settle down. That's a vertical breath. Unfortunately, it's anatomically incongruous.

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Just those words – anatomically incongruous – for me, summarize everything. Your neck and shoulders were never meant to be breathing muscles. You're not using the best part of your lungs. You're actually telling your nervous system that you are in a stressed out state. If you're not already in the stressed out state, it's going to actually make you more stressed out. Vertically, as you said, is the other sort of breathing, if I want to break it down in two very simple patterns. Horizontally is the way you see all animals on the planet breathe. They breathe and they widen where the biggest part of their lungs are.

**JM:** Most likely infants too, I would imagine.

**BV:** Infants and children. I don't usually use infants as an example because they have no choice. They can't breathe vertically even if they wanted to.

**JM:** Okay.

**BV:** If you look at kids sort of up to the age of five, it really is that way. If you ask a five year old to take a breath, they just widen like a little puffing fish, and they narrow and they don't mind that they widen in the middle. It's their deep breath. It's perfect.

You take a 10-year-old and you ask them to take a deep breath, all of a sudden it's completely changed. It's amazing. The 10-year-old will raise their shoulders, raise their arms, puff up their little chests and take this vertical, this apical breath, all the way up here. Completely changed. If it doesn't happen by age 10, definitely by age 15. But usually when you take children that are 10 and 5, just the difference is remarkable.

You'd think that the 10-year-old has gotten a better breath. What they're doing is really just mimicking their parents and what they see around them, as far as a good breath. It couldn't be further from the truth.

**JM:** Okay. We've identified the fact that the vast majority of people watching this are breathing dysfunctionally and impairing their health, diminishing their opportunity to really experience optimal health. Are there any other foundational pieces of information you want to explain before we walk into some of the interventions?

**BV:** I think longevity is definitely one of them. What's interesting about longevity studies is that you can look back to yoga and yoga philosophy. It's easy. Yoga philosophy will tell you that you can take short shallow breaths, quick breaths, and live a short life, or you can take deep, long, slow breaths and live a long life. It's an interesting theory, except for that there are actually wonderful studies that support it, empirical studies, as the Framingham study, as you know, where we see that the way you breathe and how well you breathe is such an important factor when it comes to longevity. For me, that you can change the way you breathe.

I can have someone come in and see that they're working, or you know, just talk and see that you're breathing in a vertical way where you don't feel as good, as well. You have certain symptoms. Change to a horizontal breath, feel so much better immediately, and the symptoms you came in for actually have them changed quickly and be working on your longevity at the same time, with one of those crucial factors that before you just really didn't know how to do or what to do with it. Longevity is fascinating for me.

**JM:** Yes, it is. Indeed. For many of us, that's a powerful motivating tool. From my experience clinically, that doesn't motivate most people.

**BV:** No.

**JM:** What motivates most people is pain and suffering or diagnosis of cancer. That's really going to catalyze their mode to action. When you integrate these natural principles, you don't have to get to those extremes. Not only does it improve longevity, but it decreases your risk for these chronic degenerative illnesses, especially if integrated with other healthy elements that we talk about all the time – exercise, eating the correct foods, exposure to light, sleep and all that.

Why don't you provide us with some basic strategies that you recommend or advise for people to address this dysfunctional breathing that we've acquired? Actually before we do that, why do you think that most of us – 90 percent is a pretty dramatic number – transition at the age of 5 to this dysfunctional breathing? Do you have any thoughts on that?

**BV:** Oh, absolutely. Think about it. You're 5 years old. You have this beautiful little belly breath. What happens around the age of 5 is that you go to school. You start sitting a lot. You know this. Your average American sits 13 to 16 hours a day, which is why you're not sitting right now. When they sit, their posture changes. Their posture affects their breathing up to 30 percent. That's the first thing that happens. You take a tumble. You start doing sports. You start being able to stand up, walk and run. You take a tumble.

The first time you hurt something in the middle of your body, you stop breathing through it because it hurts, so you go up to that vertical breath. Combine that with waist bands. Even teenagers are wearing compression garments and bra straps, things like that. Then, god forbid, somebody pokes you in the belly and calls you fatty. You start gripping the middle of your body. You start sucking in your gut. This is a very American thing, to suck in our guts and puff out our chests. It's a bravado stance.

Even if you're not pulling in your gut because you think it makes you look thinner, you're bracing because of anxiety. Think about it. That's actually a posture that most of us have very often. It's this braced middle, kind of a tight, everything around us from our armpits to our pelvis, tight. Because it makes us feel better. We feel like we're ready to run or to strike. The problem with all of those things is that it takes the breath and it pushes it up to here, to be a vertical breath. It's the only place it can go. That's usually what happens.

Luckily, the dismantling it is fairly easy, because somewhere in your body, you remember having breathed horizontally. Maybe not consciously, but I really believe that your body does remember that, huh, my diaphragm, which you have to get unlocked because it's usually a little bit locked up, breathing with my diaphragm makes me feel better. It's actually self-reinforcing, which a lot of health behaviors don't have those two elements. You're not going from having felt good doing something well, to feeling badly to be able to go back. You don't have that reinforcement, and that you feel good right away.

It's interesting to me that I work with public education campaigns for so long. We were trying to get people not to smoke, and make more eye contact with their infants and all sorts of things. It's really difficult to get people – you know this, you live this – to get people to change their health habits. Something has to happen [drastically] either to themselves – sometimes that's not enough – or to someone they love. With breathing, it's sort of fascinating because even just the knowing right now that a horizontal breath is better than a vertical breath, you're automatically going to change. It's almost like you can't unknow it all of a sudden.

Now that you know, “Hey. Let me think about this. The biggest part, the best part of my lungs, the most calming breath is from this part of my body? Hmm. This is not a good breath?” You automatically start changing because it does make you feel better and it's not magic or me or hearsay. It does make you feel better, you start doing it.

**JM:** Okay. With 90 percent of those in the United States having this dysfunction, I would assume this is also true for most Western cultures, but probably not for more primitive cultures.

**BV:** Exactly.

**JM:** Would that be your observation?

**BV:** Yes. It's because of this sitting and because of our culture of gut-sucking.

**JM:** Okay. Great. Your book is wonderful in that it has a whole variety of different exercises and strategies to address this. I would certainly recommend it for anyone who has an interest in this. I'm wondering if you could provide some overview of the practices that people can start to engage in to reverse this dysfunction.

**BV:** Sure. My favorite is called "rock and roll." If you're sitting, you can do it standing up or you can do it sitting. Standing is a little bit harder. But the first thing you have to do is actually relax your middle. You have to unbrace. It can make folks feel a little bit vulnerable to all of a sudden unbrace their middles, but that's what I want you to do.

I want you to take a deep breath in and actually feel as if the middle of your body is getting wider, which can be daunting. Don't worry. On the exhale, you're going to narrow it. If you're seated, what I want you to do is tip forward. Let your belly go. You can actually put your hands on your belly and let your belly drop into your hands. On the exhale, roll back, tip your hips underneath you, and put your fingers in your belly and give yourself a little squeeze.

Now, all these movements are exaggerated because in order to learn a new mechanical movement, you do the exaggeration. I need to say, don't worry. You don't have to look this ridiculous all the time giving a huge belly breath back and forth. The belly breath is not going to give you gas. The air does not go into your belly. It's just that your diaphragm that you've been probably squeezing for a decade or two, when you let your belly go, when you pop your belly out, your diaphragm follows by association. You start using your diaphragm more to breathe. On the inhale, you let your belly go. Put it on your lap. On the exhale, roll back and squeeze. This is the most important breath. If you do anything at all, this is the most wonderful one.

You can do it as you multitask everything, while you're on the phone, if you're on a boring meeting, if you're in the car, this rocking forwards inhale and exhale. If you're having a hard time visualizing that, one of the things I say is that it's a seated cat-cow. You can put your little paws up in front of you like this, and on the inhale, you roll forward, let your belly go – you're a cow. On the exhale, you roll back, squeeze – you're a cat. Not letting your shoulders engage and letting your middle fill and then narrow is exactly what you need to be doing.

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**JM:** That's great. What would be the next step after that? Because there's a whole progression of different strategies. I guess how frequently would one do this and then for how long before they progress to the next step?

**BV:** The rock and roll breath is something that you'd want to do as often as possible. What's interesting is because it has this different self-reinforcing type of quality to it, is that you'll find yourself doing it all the time, and I encourage you to. I encourage you to look at your schedule and say, "You know, I'm going to do my rock and roll before I look at my texts," because god knows we look at our texts in our handhelds way more than we need to. Or, "I'm going to do a horizontal breath every time I go through a doorway," or whatever it is that works for you, let me take this breath. Every time I sit down, every time I have a moment. I hit the button waiting for the elevator, right then.

Whatever it is, just do it as often as possible, because I really feel like there's a window of learning where your body is sort of wondering, "Are you letting me breathe this way? I know how to breathe this way. I've sort of forgotten, but there's something in the back of my mind that remembers." You do that belly breath as often as possible. It can be every hour on the hour, you take two breaths. I don't care. But you want to get yourself almost trained to breathe that way all the time. And then you take a vertical breath if you're sighing, if you've already filled up the bottom and you want to fill up the top, if you're doing extreme exercise. But the belly breath or lower body breath is something that you want to be doing all the time.

It's not a matter of, "I'm going to do this at the end of the day for five minutes." It's really, "Let me see how often I can do it throughout the day." If you find yourself in that vertical breath and you have to change to horizontal, go ahead and do it. Don't beat yourself up about it. You've already got decades of breathing vertically. Just switch that horizontal breath.

**JM:** Okay. That reminds me of addressing probably a big question, which is how long it takes to transition to an autonomic function. My first exploration to breathing was well over 20 years ago. I read a book, *Conscious Breathing* by Gay Hendricks, and actually visited his clinic in Santa Barbara for five days. I took the intensive course on how to breathe. I remember lying on the ground and doing these exercises, but it never stuck with me. I've abandoned it. I'm wondering what you would advise and recommend as strategies so that this becomes automatic, because that's the key. You want to do this for the rest of your life.

**BV:** Yes.

**JM:** It's so easy to fall back to those old patterns.

**BV:** Yes.

**JM:** Why don't you address that?

**BV:** I love that you asked that. One of the things that helped me be able to have people commit to this is that my background is in child psych, in psychometrics. I spent a long amount of time doing IQ testing. I actually taught the Rorschach at New York University (NYU). Doing IQ tests, you look at scatter of what IQ testing is. Some people do things well, especially since we all learn very differently and there are a lot of learning disabilities, how someone learns. When I was working with children, the first 20 years of being a psychologist, I would see how they learn and how I could show them things in a way that they understood.

When I came to breathing, I was fascinated because everybody agreed breathing was important. Yes, yes, yes, no one disagreed. There was no one in the back of the room saying, "Yeah. I don't think so." It was really people agreed on it. They would post pins and things on Facebook. They would sing about it. We all agreed on it, but nobody was really doing anything. There seemed to be this gap of information. It's super important. I know I don't do it well, but we don't know what to do.



I looked to see how people were teaching breathing, if anybody was. Gay Hendricks is brilliant. [I] love him. He does an amazing work. But I looked to see what was the problem. Why were people not doing it? What was the vocabulary that was getting in the way? What were our misunderstandings? What were the myths? When I teach, and I do this in the book, I make it so that you cannot forget where your diaphragm is, and your knowledge of the diaphragm actually changes dramatically from when you start reading.

Understanding things like that gets you committed to the process. Taking the breath and having as many cues as you can make sense. It's this aha moment where people are doing it and say, "This is so simple. Why didn't anybody say this before? And it makes so much sense." It's that. It's that way of teaching it and using certain words that all of a sudden folks think, "How was I ever breathing the other way? That's so silly." That's what makes the change so easy. It's really how it's presented, which of course, everybody is different. But the majority of people, once you teach them really where their diaphragm is in a way that you're touching where it would be kinesthetically, they're getting it.

The rock and roll makes sense. You understand, "Hmm. Right here? Right under my belly button? That is my lower dantian, my second chakra, my intuition. It's also my anatomical center. It feels right. Why does this feel so right?" Once you give them all that information – don't infantilize them by just telling them what to do, and actually get them to understand – it works.

**JM:** You've been doing the breathing class for some time now. I'm curious about a few things about that. One is if you teach them all personally or if you sort of franchise your license, the material, or you have other teachers under you. If you can answer that question, and then what is the likelihood of long-term success and transition to horizontal breathing for those who complete your breathing class versus those who read your book?

**BV:** That's a great question. The book just came out so I don't know if I'm going to know that.

**JM:** Yeah, I guess.

**BV:** That's okay. No.

**JM:** It's empirical data.

**BV:** Give it away.

**JM:** Let's give some of the data that you do have from where you do the class, but then maybe a projection or estimate as to the differences between the two teaching models, because that's the key. From what you just said, it's not just knowing the information. It's actually embedding it in a way and learning it in a way that you do it. That's the key, because knowledge by itself is useless unless you apply it.

**BV:** Exactly. Understanding is overrated – it really is – unless you do something with it. I teach one on one, which is great when you have someone who has something very specific going on

with them, very troubling. I do small classes. I've done enormous classes with 300 people in them. I don't just teach, but I actually do teacher trainings now. There are going to be people who are teaching exactly the same class.

The best combination and what's actually making me very happy right now is seeing people teach and take a class with someone, not necessarily me, and read the book. It tends to work really well. It doesn't need to be me, but if they have someone in front of them who understands and can look at them and they have the book at the same time, it works really well. I'd like to say that it's just me, but it's not really just me.

I think that it's the information and the need for it and sort of the desperation that folks feel in trying to find help for their breathing, because they're really not feeling well. They're feeling air hunger, discomfort and pain. The book, as well as sessions with me or a huge auditorium where I have somebody in the back, it works. Yeah.

**JM:** That was what I was thinking. It's that just reading may not be sufficient for probably most people. It's actually the one-on-one interaction and real-time feedback from someone on their implementation or attempt to implementation of the message in the book that might be the most useful long-term intervention.

**BV:** It helps to have someone else, but I've written a book so that there's so many exercises that it should feel interactive. I don't love self-help books where they spend the first half of the self-help book telling you why you need to buy the book, because obviously if you're halfway through, you've already gotten the book. I do things in the book that hopefully translate to be dynamic.

Right in the beginning, you start testing yourself. You start doing exercises. There are chapters that are specific to digestion and back pain. For me, I'm really hoping that the way the book is set up that it's dynamic and it's an interaction between me, sort of, and the person who's reading it, and that if you actually do write down your symptoms and watch them change as you do your practice that it helps you feel better.

If you are a paradoxical breather, for instance, or if you have some kind of lung problem, something very specific, it always helps to see someone who can take a look at you and help you change. Paradoxical breathers are some of the toughest people to change the way they breathe. But even then, I've had really decent successful paradoxical breathers reading the book and changing.

It's the understanding what you're doing wrong and why it's wrong, and then starting to look into your past to see why you changed that really makes you committed to the process. It's very personal.

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**JM:** Okay. Great. I couldn't agree more. I think books are a magnificent investment. I mean most of the time they're under 20 dollars and you're getting literally thousands of hours of work

to compile that knowledge in a written text. I've structured my life so I can read about 150 books a year. I think that's been a real benefit. I really enjoyed yours.

*Breathe* – this is not the first exposure to breathing on our website in the last few years. We'd like you to comment on this and really discuss quite a bit about Buteyko Breathing. I've interviewed Patrick McKeown, who I believe was out of Ireland, teaches that. A new one we're going to have is Scott Carney, who wrote the book *What Doesn't Kill Us*, who I'm going to be interviewing shortly, which described the Wim Hof method. I'm wondering if you could comment on those and how your approach differs or is similar.

**BV:** Completely different. Patrick is lovely. His book is actually on my required reading list for my students.

**JM:** *The Oxygen Advantage*.

**BV:** Exactly. Yes. The Buteyko message focuses on your carbon dioxide (CO<sub>2</sub>) levels, breathing through your nose, and posits that most people over-breathe.

**JM:** With secondary low CO<sub>2</sub> concentrations.

**BV:** Exactly. There's definitely a big part of the population that that resonates with. I focus on style of breathing. I really look to see where you're breathing from. Because in my experience, that has been what really resonates with people and what creates the most change. Although I touch on Buteyko Breathing in my book, I try to bring in breathing exercises from as many different places as possible, because I want there to be information that resonates with a really diverse group of people.

I'll talk about breathing that happens in singing. There are really some fantastic exercises in singing for your breath. I'll talk about breathing in martial arts, because I have a martial arts background. I love martial arts. There's some fantastic information from Russian Special Operations Training, for instance. If you're not into Russian Special Operations Training or martial arts, you never get to that information.

In *Breathe*, I bring in everything I possibly can, as far as breathing, to really give you a choice to see which of these different exercises works for you. But my main gift, I'd like to think, is that I look at where you're breathing from.

There was a fantastic article last week in Scientific American. It talks exactly about this. It's that apical breathing might be one of the reasons that we have as much dysfunction in breathing patterns and are health-related to breathing.

**JM:** That's a scientific term for vertical breathing.

**BV:** Exactly. Of course the day that article came out, I was just – people should understand that I get very giddy and excited about anything that has to do with breathing – I was just thrilled, because here was the first time an article that was talking about style of breathing and how

actually maybe that has more to do with the dysfunction around oxygen, the way we breathe, our posture, so on and so forth. That's sort of what I bring to the table.

I have huge respect for anybody who talks about breathing and gets folks interested in breathing. But I think that what's nice is that there's a whole slew of amazing people teaching breathing out there, whether it's Stan Grof or Jeremy Youst or Judith Kravitz. They're just fantastic people that have been teaching for a really long time. Not just recently who've been out there talking about breathing and really teaching a lot of people and traveling to teach. It's one of the things I do in my book.

If you take a class with me, I say please read other people. Here's a list of them. They're fantastic. Please look at Blandine Calais' book on breathing. It's absolutely gorgeous, her description of things. Donna Farhi, amazing book. I have a recommended reading list that's huge. I always hope that my class will catapult people to be able to take all different, other sorts of breathing and meditative classes, if I can just get them to come in and maybe not bristle at the words they were hearing before, which is really my goal.

**JM:** Having read both books, your approach is much easier to implement because air hunger is a real serious challenge. It seems that's far more of a common occurrence in seeking to integrate the Buteyko Breathing than what you're teaching.

**BV:** Yeah.

**JM:** I'm giving a vote for your approach. But I'm wondering if you could help reconcile my confusion with respect to the Wim Hof method, which essentially rapidly breathes. It seems to be in direct conflict with Buteyko Breathing, because you're expelling all this and actually increasing oxygen concentration and getting phenomenal, enormous control of your autonomic nervous system, and doing remarkable superhuman feats like walking Mount Everest in your boots and no shirt and doing it in record time. I mean it's just incredible what Wim Hof has done. He's like Superman.

**BV:** You're not going to find me in my underwear or my shirt off. Not going to happen.

**JM:** No, I know. I know. Yeah. It has to do with some other adaptations that aren't related to breathing, which is cold exposure and brown adipose tissue increases, and things like that. It's a whole different approach. But can you help reconcile the differences between the Buteyko and Wim Hof?

**BV:** Sure.

**JM:** Because it seems to me they're diametrically opposed.

**BV:** They're apples and oranges. Again, that we have such a menu of people to choose from is fantastic. But really, they don't have anything to do with each other. The Wim Hof method is holotropic breathing. It's based on pranayama and controlled hyperventilation. It's using breath

to get into a trance-y state, which is interesting. I do teach that as well. But it's not new at all. There are lots of people who are very well trained.

You need to be very well trained when you get someone to do controlled hyperventilation, because if they have panic attacks, if they have anxiety, god forbid they have post-traumatic stress disorder (PTSD) and you don't have a background of what to do when someone has some kind of a cathartic moment, god forbid they have a psychotic episode. How do you deal with that happening? I think that when you do controlled hyperventilation, there's an ethical consideration. There is, "Do I really know depending on what comes up for this person? Do I know how to explain it to them and get it to be something that's psychologically good for them?"

I worry when people are starting to teach controlled hyperventilation and they don't know what's going on, and they don't know how to deal with someone who might have a psychotic episode or a cathartic moment, or just a release where the last thing you want them to do is feel scared or push it all back down again, or have a full-out panic attack.

Controlled hyperventilation has been around for a long time. If it's something that you're interested in, I think you need to be really careful that you're around someone who is certified, who either is a member, an affiliate, or one of the global breath work practitioners. There are two or three organizations that are good to look at, to see who belongs to them.

For doing things in the ice and the cold, I think when you live in a country where there's lots of ice and cold, you do what you can with what you have. I'm from Wisconsin. I was ice skating on single blades at three. It's not because I was precocious at all. We just had a lot of ice. You did what you could. I think it's super interesting. I've done the cryo-freeze. I don't love the cold. If you like icepacks—

**JM:** I don't think anyone loves the cold.

**BV:** You know, again, I think people that like extreme things and [see] it like sort of a challenge in that way will do that. That's not to say, for instance, my worrier class is definitely challenging. You get lightheaded. You might feel like you're going to pass out. Some people throw up, whatever. It feels like when I'm doing an extreme class and folks want to have that, they can have that as well. But they're so different, one from the other.

I just think that if it's nice if you go in and you do one sort of breathing and you like it is to really think, "Do I feel better? Has this made me a better breather? What are the metrics that are being used here?" And just always check the science behind things. Always check the science.

**[CUT 39:23 to 39:38]**

**JM:** I'm particularly fond of cold thermogenesis as a really powerful clinical intervention, especially for those who are overweight and they really aren't burning fat as their primary fuels, because you increase brown adipose tissue, which is incredibly mitochondria-dense and really facilitates the burning of fat. It's separate from breathing, of course, but it's a really powerful tool that I think really is not fully appreciated and applied clinically.

[----40:00----]

Let's get back to the breathing. I think one of the intriguing concepts you bring up is that these breathing muscles, your diaphragm and the intercostals and such, if we haven't been breathing the correct way or if we've been breathing dysfunctionally for the last three, four, five decades, it could actually be two or three weeks that muscles we know will atrophy if you don't use them. I'm wondering if you could address that component and some of the strategies, the foundational approaches, you would take to recover these fundamental, mechanical muscles that allow us to breathe optimally.

**BV:** Sure, sure. I do focus on breathing muscles. That's something that you won't see most other people do. There is a book called *Breathe Strong, Perform Better*, where the author talks about muscles, but I address it in a different way. She has tremendous amount of literature and studies on it, which is excellent. But I do look at the muscles that are helping you breathe.

I do get a baseline on people to see how strong their muscles are as compared to non-athletes and athletes. But we don't work out our breathing muscles, and just doing your sport doesn't necessarily work out your breathing muscles. If you want to have breathing muscles that are really strong, you actually need to work them out separately. That's incredibly important, your breathing muscles.

Most people will say your lungs are your breathing muscle. First, we have to go back and go, "Your lungs are not your breathing muscles." Intercostals, as you mentioned, diaphragm, obliques and even pelvic floor. If you start working out those muscles and really engage them when you're breathing, the repercussions for the breath, how well you breathe, and the rest of your body are just mind-blowing, really.

**JM:** I thought that was an interesting point that I hadn't seen mentioned in previous works before. I'm glad you address that. Maybe you can comment further on some of the ways that people can start strengthening those muscles at a foundational level.

**BV:** Sure. When you inhale, your inhale is governed by your diaphragm. Most of us, you can't feel your diaphragm. We've just been seeing this little red line all the time. We just think, "Oh. The diaphragm? It's that little red line that crosses the body." Or if you look at the plastic man who never has a head, or arms, or legs in your pediatrician's office, there isn't quite a diaphragm there. We don't really know.

We've all had some anatomy, probably not much anymore. But understanding the diaphragm and understanding how it works. There's such confusion around this muscle that's tremendously important. I mean, it's big. It's the size of a Frisbee. If you look at a medical model, it's terrifically confusing. It just looks like this crazy looking amoeba. I'd like to simplify. It's either a pizza or a Frisbee. It's right in the middle of your body.

If you think about this, it's that it's right below your heart. There are studies right now. I'm terrifically interested in heart health and diaphragm movement. [It's] right below your lungs and right above your digestive system and affecting your spine as well. On the inhale, that inhale is

governed by your diaphragm. Your diaphragm does very little when it comes to the exhale. The muscles that really have to do with exhale are your intercostals and your obliques, and some other very important core muscles, but those are the two that we can focus on.

The exhale. You know what? I talk so much about the exhale because it's the underdog. It's so not appreciated. As we get older, one of the things that happens is that there's more residual air in your body than you'd like. You end up feeling, as an older adult, that you're not getting enough breath. It's not usually that your inhale isn't big enough, it's that your exhale has gotten worse with age.

Keeping your intercostal muscles stretchy, functional and strong for me are terrifically important so that anything related to aging and breath doesn't happen, or at least we can push it off into the far future. Your exhale is really your intercostal muscles, which need to be stretchy, and your abs.

Again, when I teach, I teach the extremes so that you understand the mechanics. I make that exhale a squeeze. When you think about exhaling, most people think, "Inhale, exhale, let go," and that really messes us up. That idea of "exhale, let go" makes you short of just kind of relax and flop down when you actually want to be narrowing your body just a little bit on the exhale. If you think about your average American who might have a couple extra pounds on them, their exhale is going to suffer with those extra pounds.

Make sure that your exhale is your body narrowing. If you can think about your belly button getting closer to your spine and even your ribs coming together, that's a really good exhale, which will obviously make your next inhale much better.

**JM:** I guess – How long do you think it takes for us to strategically make these shifts and changes, in your experience? How long do people need to practice these exercises, these routines, before it becomes autonomic, where they don't have to think about it? Or is it something that they have to consciously integrate into their schedule every day, a few minutes of this and that? What's the experience you've had, and people successfully making a transition from dysfunctional breathing?

**BV:** I'll talk about it in percentages. That most people will change their breathing just in either one reading of the book, or one session, or one class, I'd say about 50 percent. It's sort of lovely because how many other things can you not focus on, but they actually make the change on their own. That understanding makes for change. That, for me, just makes me very happy. That just your understanding something helps you change.

Now, if you want to get to the 100 percent, do you then need to commit at least, I'd say between one to three weeks of doing a workout, doing the rock and roll breath throughout the week, throughout the day, but also doing a little bit of the workout. I get people to get obsessed, and they do it four times a day for 10 minutes, which is still not a terrifically long amount of time.

It really depends also on are you coming into this being a paradoxical breather, a very vertical paradoxical breather, and you've been doing it for 50 years? Or are you a 25-year-old? So for the

last 10 years, it's changed. You're mixed. You have a little bit of horizontal. You're closer to what I want to get you to. A lot of it depends on that.

**JM:** Alright. It's still a relatively short amount of time before you can make this really almost magical improvement at virtually no cost to you. I mean it's just improving this one variable has such a profound downstream impact metabolically.

**BV:** Yeah.

**JM:** Once you improve your breathing efficiency. Ultimately, it's because your cells are basically, functionally receiving more oxygen. Oxygen, as eukaryotic organisms or those with mitochondria in them, that's what they require to generate energy or ATP. We really do need this really good, constant, steady access to oxygen. This is one effective way to do it.

**BV:** Yes.

**JM:** I'm wondering if you have any other sort of broad comments you'd like to integrate before we close.

**BV:** I think stretching is really important.

**JM:** Wait. Before we go into that, remember that, please. That was a question I had, one of the ones I forgot.

With respect to stretching, a lot of us do stretching for a variety of reasons, especially if we've got these tight muscles. We want to improve our range of motion and flexibility. It would seem to be that integrating this breathing into the stretching would be a really powerful way to do that, especially on your exhale where you're activating your costals, then you go deeper into the stretch. I'm wondering if you can comment on that.

**BV:** Sure. Actually with intercostals, I actually do it on an inhale, which sounds funny. But since your intercostals are two layers of muscle that are on the inside of your ribs, the best way you can stretch them is actually inhaling and then stretching. If you want to try this, you certainly can [do it] seated. It's that you just drape one hand over the top of your head, inhale and do a sideways belly press. You should inhale, pop this side open, and open up these side muscles. Same thing on the other side.

Hopefully I'm not sweating too badly in my sweater. But you're opening up the spaces between your ribs. Visualizing them is terrifically important, because most people actually haven't thought about the fact these two layers of muscle on the inside. You add air to the ribcage, on the inside, and then stretch. Add a little bit more. It's called air packing. Stretch a little bit deeper. You can actually focus on the side that's collapsing and give that a little crunch. Keep your arm moving to the side. I like doing that seated, but you can also do it against the wall. Opening up your ribcage in that way is fantastic.

[-----50:00-----]



Now, I love spinal twists. If you don't have any injuries, if you've been OK'd for doing spinal twists, and doing spinal twists on the exhale will definitely get you deeper into the twist using the breath. Most people when they stretch, they hold their breath, which is terrible, not only for your blood pressure but it just doesn't get you deeper into the stretch. If you are doing a spinal twist, I actually love them in the chairs because all you have to do is grab the back of the chair and twist yourself this way. You should do it on the exhale.

Whether you're on the airplane or whatever chair you're on, taking the back of your seat, holding your hand and pulling yourself around on the exhale will get you deeper into the twist. Spinal twists, I love them for entire back health, from your pelvis all the way up to your neck.

**JM:** That's especially useful if you're in the middle seat on the airplane.

**BV:** Absolutely. You can turn around. I hate the middle seat. It's terrible.

**JM:** Yeah. It's one of the unfortunate challenges that many of us go through when we travel.

**BV:** Oh, yeah.

**JM:** I interrupted you when I asked you to remember that. If you can continue on that point now, because I just wanted to find out about the stretching and integrating into it.

**BV:** Sure. I think the answer is that I love stretches and those are the two that I recommend. In the book, I show you spinal twists on the ground, the way you actually move your legs. You can do them seated in three different variations of a yoga stretch, also, like I said, against the wall and on your chair. I love them. I think they're good for everything.

There are all sorts of research that spinal twists help everything from digestion to carpal tunnel syndrome, which I thought was kind of interesting. Again, exhaling with the rotation, exhaling with the stretch, unless it's an intercostal stretch. In that case, I want you inhaling.

Usually, once you get more advanced with the stretches and with the breath, doing a little bit of air packing – and air packing comes from free diving – is that you just sip in some more air and try to gently push it into your body. That way, you're actually stretching your muscles from the inside as well. A tiny bit, but they're small muscles and they make these huge repercussions on the rest of your body.

**JM:** Yeah. These are just great tips. I've been studying health for many decades. The longer I study it, the more I realize that the basic, profound, powerful strategies to get you healthier are really pretty simple.

**BV:** Yeah.

**JM:** The simpler it becomes. We complicate it so much, especially in Western medicine. Breathing is really a foundational core of staying healthy. I think intuitively, as you mentioned

earlier, if most of us understand this and appreciate this, we wouldn't argue against it. But with respect to actively integrating principles to take advantage of that, very few of us are doing it.

**BV:** Yeah.

**JM:** You've written a book. I couldn't recommend it more heartily. *Breathe* is the name of the book. Hard to remember, of course. It's on Amazon. It's a great tool to help incorporate these. You also teach this live class, which is also named Breathe. I'm wondering how one would find out about those courses.

**BV:** I'm a good breather, but I'm not very imaginative when it comes to marketing, obviously.

**JM:** No. Sometimes it's important. But sometimes if it's so good, helpful and valuable, people find out about it anyway. Certainly, it's not deceptive marketing.

**BV:** No. It's exactly what it is. It's all you get. I do teach the class all over the United States. I do have the class coming out in video shortly.

**JM:** That's good.

**BV:** Yeah. For people that can't –

**JM:** Is it video like DVDs or online?

**BV:** Online. You'll be able to grab it online.

**JM:** Okay. Perfect.

**BV:** And [I'm] starting to travel internationally to do teacher trainings. I have London, Germany, Australia and Thailand coming up, and another teacher training out in Los Angeles as well. The teacher trainings are fantastic. I've got some really lovely people who are spearheading teaching.

**JM:** How many teachers have you taught? And how many people are available to provide this instruction locally?

**BV:** I just started teaching so I've got about 50 people who are training. Again, the training is not a short training. There will be people available over the next year, but they still have a lot of work to do. There's a very long reading list, as you can imagine, and then a lot of practices, a lot of test-taking to take. But there will be people who are certified in the next year, hopefully in every state.

**JM:** That would be continually changing. How does one find or access these? What's the website so that we can find them?

**BV:** TheBreathingClass.

**JM:** TheBreathingClass. All one word, no hyphens?

**BV:** Exactly.

**JM:** It's dot com?

**BV:** Dot com. TheBreathingClass.com.

**JM:** TheBreathingClass.com. Okay. That's pretty simple. TheBreathingClass.com. It's been great.

**BV:** Thank you.

**JM:** I really appreciate and thank you for your developing these simple tools that can impact and have such powerful benefits for so many of us. It's great.

**BV:** [It's] an honor and a privilege to be here. Thanks for having me.

**JM:** Alright.

*[END]*