

The Anatomy of Anxiety by Kira M. Newman

Anxiety is “that hypervigilant feeling that escalates swiftly to a sense of catastrophe and doom,” writes Ellen Vora, M.D., in her new book, *The Anatomy of Anxiety: Understanding and Overcoming the Body’s Fear Response*. Anxiety is “as grounded in the body as it is in the mind.”

Too often, she argues, we turn to only mental solutions for what is in part a physical problem.

That resonates with me. When I feel anxious, some solutions I try—like talking to a friend or watching TV—are hit or miss. Over the years, the only foolproof remedies I’ve found have to do with the body: A good high-intensity workout is bound to make me feel better, and cutting out caffeine has sometimes eliminated anxious feelings for months at a time. Taking care of our body represents a different pathway to healing for many of us, who are already doing everything we can to tend to our minds through therapy or other cognitive tactics.

Sharing research and stories from a decade of clinical practice, Vora’s book catalogues how anxiety shows up in the body and how diet and lifestyle changes can lead to major shifts. She also addresses what to do with anxiety that isn’t primarily physical. This distinction offers a new way of understanding your own anxiety and an invitation to get curious about it, rather than fearing it.

THE PHYSICAL CAUSES OF ANXIETY

When we think about anxiety and how to treat it, we often go straight to talking about the brain. But Vora believes this misses a key piece of the puzzle below the neck.

“While brain chemistry and thought patterns do play a role in anxiety, I would argue that these are often ‘downstream’ effects—meaning that frequently our brain chemistry changes as a result of an imbalance in the body,” she writes.

Her book identifies many ways our physical health and habits can make our minds anxious. Here are a few.

Sleep. Sleep affects our brains and hormones in ways that can ramp up anxiety. According to a 2019 study, after a sleepless night, our brains show less activity in the medial prefrontal cortex (which helps regulate emotions). The researchers also found that the quantity and quality of our sleep tonight predicts how anxious we feel tomorrow. Sleep deprivation raises stress hormones, which can make anxiety and insomnia a vicious circle,

Vora writes: After a night of tossing and turning, we're more stressed, so it's harder to sleep the next day.

"There is probably no more effective or accessible treatment for anxiety than sleep," she writes.

Caffeine. Caffeine stimulates the release of cortisol in the body, which "can feel identical to anxiety," Vora explains. Research also suggests that caffeine can worsen the physical effects of stress: Our blood pressure is higher during a stressful situation if we consumed caffeine beforehand, and caffeine also magnifies other cardiovascular responses to stress.

I've observed this in myself. If my life is calm, I seem to have no problem tolerating caffeine, but if I'm going through a season of high stress at work or at home, the combination puts me constantly on edge. Different people have different sensitivities to caffeine depending on their genetics (and, sadly for this latte lover, I seem to be very sensitive to it).

Diet. Sometimes, anxiety can come from something as simple as low blood sugar—whose symptoms include anxious feelings, nervousness, shakiness, and heart palpitations. There's some evidence that improving your diet (to include less refined carbohydrates and more protein, fat, and fiber) can alleviate anxiety symptoms.

"I start with the assumption that anxiety is a blood sugar issue until proven otherwise," Vora writes.

Feeding our healthy gut bacteria with probiotics and prebiotics (which can be taken as supplements or found in many fruits and vegetables) may be helpful in alleviating anxiety, too, a research review concluded.

All these factors are interrelated, of course: When we sleep poorly, we may need an extra cup of coffee, which makes it harder to sleep the next night; tired and deprived of willpower, we eat unhealthy foods, causing blood sugar crashes that can wake us up hungry in the middle of the night.

Sun exposure. Around one quarter of Americans are deficient in vitamin D, which we get from our diet, supplements, and sun exposure, and research suggests that that puts us at higher risk of anxiety. Getting more sunlight—especially in the morning—can not only boost vitamin D levels but also help regulate our circadian rhythm so we sleep better at night.

Breathing. "Breathe like a relaxed person, and your body will tell the brain you are a relaxed person," Vora writes. Indeed, after eight weeks of training in belly breathing, participants in a 2017 study showed physical signs of reduced anxiety: lower heart rate, slower breathing, and lower skin conductivity.

And the opposite seems to be true, too: As journalist James Nestor explains in his book *Breath*, the modern habit of breathing through our mouths and into our chests—and even holding our breaths during stressful moments at work—can contribute to anxiety and mental health problems. Breathing directly influences our nervous system; so the way we breathe can promote calm and relaxation or put us into fight-or-flight mode.

Inflammation. Inflammation in the body, which is caused by things like stress, diet, or even birth control, can influence how we feel. As Vora explains, inflammation

causes changes in our brains, including in the amygdala and neurotransmitters related to threat, that may contribute to anxiety.

“Inflammation occurs when the immune system is mobilized to address a threat, such as injury or infection, and it can directly signal that the body needs to fight back, leaving us feeling anxious,” she writes.

Vora suggests we troubleshoot each of these areas of our lives, from sleep to inflammation. Her recommendations are quite specific at times, especially in the realm of food. There, she draws more on her clinical experience with patients who alleviated their anxiety by cutting out, say, gluten or dairy, rather than extensive research that supports these approaches.

Still, looking at anxiety through the lens of diet and lifestyle can be empowering, I discovered. Vora shows how small changes to our physical bodies can make a meaningful difference to anxiety that feels stuck in our minds.

ANXIETY BEYOND THE BODY

What happens if you’re sleeping well, eating right, and breathing deeply, but you still feel anxious? Vora calls the anxiety that remains “true anxiety.”

“When our lives don’t align with our values or capabilities, we can feel anxious,” she writes. “When you listen closely, this anxiety can point you in the direction of actions you need to take as well as the unique contribution you are here to make.”

True anxiety is not meant to be quelled with yoga or soothed with meditation. In this case, “instead of asking, How can I stop feeling so anxious?, we should be asking, What is my anxiety telling me?” she writes. “Anxiety is not what’s wrong with you—it is your mind and body fiercely alerting you to the fact that something else is wrong.”

For example, this kind of deeper anxiety may stem from being in the wrong relationship, feeling disconnected from other people or from nature, or even living in a world marred by injustice.

Again, her solutions are not revolutionary: practicing gratitude to see more good in the world, connecting authentically with others, allowing ourselves rest when we feel pressure to do more. The wisdom of Vora’s approach is more in distinguishing where, exactly, our anxiety is coming from.

Vora is a holistic psychiatrist, and her book may stray too far from conventional medicine for some (coffee enemas, anyone?). As a science journalist, I found myself skeptical at how often she speculates about causes or solutions. But I also recognize that the research connecting anxiety, sleep, diet, and inflammation is just emerging. Though you might not want to take every one of her recommendations, they do raise questions that you can explore about your diet, sleep, and exercise.

Ultimately, I found Vora’s book both alarming and reassuring. It’s alarming in revealing all the ways that modern life seems to conspire to make us anxious. But the book is reassuring, too, by reframing anxiety as something concrete and malleable—and (most importantly) normal.