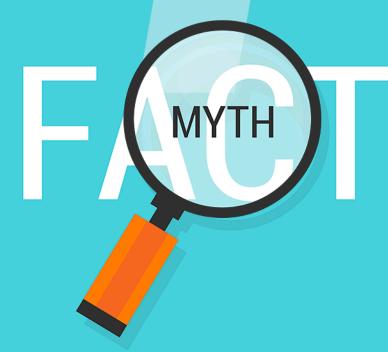
7 FACTS ABOUT DEPENDENT ABOUT THAT WILL BLOW YOU AWAY







7 Facts About Depression That Will Blow You Away

Adapted from <u>A Mind of Your Own: How Women Can Heal Their Bodies to Reclaim Their</u> <u>Lives</u> by Kelly Brogan, MD

SILENT TRAGEDY IS HAPPENING in modern health care in America, but it is rarely discussed. We have been told a story of depression: that it is caused by a chemical imbalance and cured by a chemical fix—prescription pills. More than 30 million of us take antidepressants, including one in four women over the age of 40. Millions more are tempted to try them to end distress, irritability, and emotional "offness"—an exhausting inner agitation that seems impossible to shake.

But people are beginning to awaken to the truth: a pharmaceutical fix can't cure what ails us. Some come to question the prescribed path after taking antidepressants but failing to get better, or more accurately, wondering who they would be without them. Others witness the effects of psych meds on people close to them and don't want to go down the same path. I've met people who believed that antidepressants helped them, for a time, but along the way their inner voice said, "This doesn't feel right." These are the people who seek me out, desperately looking for an alternative to the medication trap. Too often, that path is completely hidden from view.

For anyone seeking *a cure* for depression, not just a Band-Aid—if you're unwilling to accept that it's a lifetime diagnosis that needs to be *managed* (with pills)—your Inner Healer is speaking to you. My job is to help you *tune in* to that voice. I truly believe that the role of a doctor is to support the patient's natural healing process. While I instruct my patients thoughtfully on what has worked for hundreds of others in my practice, it is a person's innate, unerring wisdom that does the healing. Our bodies know what to do; we just need to get out of the way!

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Sometimes what is in the way are beliefs that do not serve our highest good. These may include outdated beliefs about depression and how to treat it. Brain science is a relatively new field, and the truth is, most doctors have no clue what is really going on in the body when depression presents. As a practicing clinical psychiatrist for a decade, I have been on both sides of the prescription pad. My own brush with potentially a lifetime on medication after a diagnosis of Hashimoto's thyroiditis prompted a deep dive into the scientific literature to uncover the truth about depression. I found out that there was *a lot* more to the story.

This deeply personal journey altered the way I practice medicine and the way I live my life. It led to the development of an all-natural, drug-free protocol that completely reversed my "incurable" autoimmune disease. Ten years later, I still use this same protocol to successfully treat hundreds of depressed patients—*without* medication. I want to share the foundational beliefs of this protocol with you and dispel some of the staggering myths about depression that you may have unwittingly bought into along the way. Understanding what is really going on inside your brain and body is a powerful step toward acceptance. And it is only by first accepting, even *embracing*, this aspect of your life experience that you can begin to move *through* it. Here are seven pivotal yet little-known facts about depression that can help set the record straight and empower you to move gracefully through the storm.



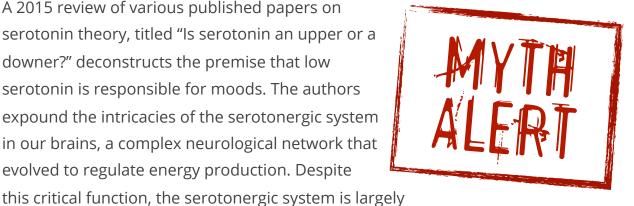
Depression is not a chemical imbalance

I N SIX DECADES, not a single study has proven that depression is caused by a chemical imbalance in the brain. Let that sink in for a moment. It's the story that literally *everyone* has been told. It sounds official, medical, and even understandable that a complex cocktail of brain chemicals could go awry suddenly and permanently. You might imagine the diagnostic process to go something like this: a female patient reports feelings of overwhelm to her doctor. She is referred to a psychiatrist, where she undergoes an extensive battery of tests on her brain to determine which of her specific brain chemicals is deficient or excessive. Using these results, the doctor prescribes a specific drug formulation to restore the balance of her unique mind. Except none of this is actually happening.

Before we can qualify something as abnormal, we must first establish what "normal" looks like. A normal mix of brain chemicals has never been established, because neither the scientific community nor the field of neuroscience has been able to define the optimal brain state. We don't even know how to assess it! Not that scientists haven't been looking for clues. The chemical imbalance myth, or *serotonin theory of depression*, implies that a lack of serotonin, the so-called feelgood chemical, results in low emotional states. A 2009 meta-analysis examined this potential, exploring the records of 14,000 depressed patients, looking for a causal relationship between a gene that transports serotonin (called *5-HTTLPR*), stressful life events, and risk of depression. In this comprehensive review of published data and individual case histories, researchers concluded that there was no link between low serotonin and depression, nor any link between stressful life events and changes to serotonin levels. Rather, it was the number of stressful life events that was significantly associated with depression.¹

It's not your serotonin

A 2015 review of various published papers on serotonin theory, titled "Is serotonin an upper or a downer?" deconstructs the premise that low serotonin is responsible for moods. The authors expound the intricacies of the serotonergic system in our brains, a complex neurological network that evolved to regulate energy production. Despite



unstudied in the Western medical community. The authors express alarm at the prevalence of serotonin reuptake inhibitors (SSRIs), which artificially elevate the brain's serotonin levels. They explain that it's high serotonin levels, not low serotonin, that has been linked to multiple depressive disorders. When SSRIs artificially elevate serotonin, energy homeostasis is disrupted and symptoms often worsen. Finally, the authors posit that symptom reduction after beginning SSRIs is not a direct pharmacological effect of the drugs but rather the brain's natural compensatory response in an attempt to restore energy homeostasis.²

Finally, if low serotonin was at the root of most cases of depression, why is everyone taking antidepressants yet no one is getting better? In the last fifteen years or so, antidepressant use has increased by 65% in the United States.³ That

¹ Risch N, Herrell R, Lehner T, Liang K, Eaves L, Hoh J, Griem A, Kovacs M, Ott J, Merikangas KR. Interaction Between the Serotonin Transporter Gene (5-HTTLPR), Stressful Life Events, and Risk of Depression. A Metaanalysis. JAMA. 2009; 301(23): 2462-2471. doi:10.1001/jama.2009.878.

² Andrews PW1, Bharwani A2, Lee KR2, Fox M3, Thomson JA Jr4. Is serotonin an upper or a downer? The evolution of the serotonergic system and its role in depression and the antidepressant response. Neurosci Biobehav Rev. 2015 Apr; 51: 164-88. doi: 10.1016/j.neubiorev.2015.01.018.

³ <u>https://www.cdc.gov/nchs/products/databriefs/db283.htm</u>.

should result in lots of people getting relief from their depression, right? That's not what the data shows us. When examining health outcomes of people who take antidepressants, compared to those who *do not* take medication, increases in prescribing medication actually results in increases in severity and duration of mental illness.

A 2004 Canadian meta-analysis sought to determine the impact of antidepressant treatment on the Canadian population, specifically the effect of antidepressants on depressive episode duration and relapse frequency. Results showed that depressive episodes lasted longer for antidepressant users than for non-users and occurred more frequently, two health trends that are decidedly not for the public good. Researchers concluded that despite the prevailing belief in the modern medical community that depression is undertreated, there exists a powerful need to address "the lack of epidemiological evidence confirming the population-health benefits of increased antidepressant treatment."⁴

I want to reiterate this very important point: there is no standardized medical test to ascertain brain chemical levels that cause depression, nor is there a defined state of normal. As such, there is no prescription that can restore us to normal, no matter how much we wish it were so. Antidepressants have been shown to aggravate symptoms of depression, with users experiencing worse depressive episodes that last longer and occur more frequently. And this is just one of the potentially damaging myths about depression that we need to bust!



⁴ Scott B Patten. The impact of antidepressant treatment on population health: synthesis of data from two national data sources in Canada. Population Health Metrics. 20042:9. <u>https://doi.org/10.1186/1478-7954-2-9</u>



Depression is often an inflammatory condition

HEN DEPRESSION PRESENTS for less-than-obvious reasons, it is often a manifestation of systemic abnormalities that originate far from the brain. For many, if not *most*, of my patients, depression started in their gut. When a woman comes into my practice describing symptoms of fatigue, brain fog, flat mood, PMS, and constipation, coupled with relentless anxiety and overwhelm, I know that chronic inflammation is driving the condition. The first thing that all of my patients do (this is a requirement to work with me!) is a 30-day, highly committed diet, designed to eliminate all food-based inflammatory triggers. You may find this hard to believe, but after one month of strict adherence to this way of eating, detox, and medication, most of my patients require no further interventions. Seriously! Many of them had struggled with depression for decades, taking all of the prescribed drugs along the way. Some had attempted suicide or been hospitalized for extreme manic episodes—these are NOT the worried well! But despite having severe, long-term diagnoses, once we addressed the chronic inflammation that was keeping them in a perpetual physiological state of high alert, all symptoms of depression abated. I've heard it said so many times, and it's always music to my ears: "I feel like myself for the first time in years . . . decades . . . my entire life." So, what exactly is going on, and what does inflammation have to do with it?

Medical literature has emphasized the role of inflammation in mental illness for more than twenty years.⁵ You might wonder why you've never heard about it or why your doctor didn't explore it with you before writing a prescription for pills. We can thank the roughly 17-year time lag from when a clinical discovery is made to when this "new" information finally makes its way into your doctor's routine.⁶ I'm here to bring you up to speed!

Depression is like a fever

Consider that depression is like a fever of unknown origin; you know your body is hot, but you don't know what's causing it. Depressive symptoms are the manifestation, much like a fever, of many downstream effects on hormones and neurotransmitters. If we swim to the source, we will find a river of inflammatory markers coursing by. The source of inflammation may be a singular cause, like infection in the body, or multifaceted, for someone exposed to high stress, poor diet, and environmental toxicants. The medical literature tells us that inflammation is a highly relevant determinant of symptoms such as:

- Flat mood
- Slowed thinking
- Avoidance behavior
- Alterations in perception
- Metabolic changes

Can you see how easily these signs of inflammation can be labeled depression, brain fog, lack of joy, moodiness, or acting crazy? These important associations between mood, behavior, and depression were made possible thanks to *biomarkers*. Simply put, a biomarker is a biological data point through which changes within the organism can be measured. When a marker is low or high, it gives us a clue that something is going on within the body that is disturbing

⁵ <u>https://www.ncbi.nlm.nih.gov/pubmed/20599581</u>

⁶ <u>http://www.ncbi.nlm.nih.gov/pubmed/22179294</u>

balance. Cytokines are biomarkers that deliver the messages of the immune system. The presence in the blood of specific cytokines is a clear indicator that inflammation is present in the body.

Research has shown that in cases of melancholic depression, bipolar disorder, and postpartum depression, white blood cells express pro-inflammatory genes that cause secretion of cytokines.⁷ The effect this has on the individual is an amazing domino effect of biointelligence: increased cytokines lead to decreased cortisol sensitivity—the body's stress hormone and buffer against inflammation.⁸ This keeps the cycle of



inflammation feeding forward. Once triggered in the body, these inflammatory agents transfer information to the nervous system, typically through stimulation of major nerves such as the vagus, which connects the gut and brain.⁹ Specialized cells in the brain called microglia are activated by the inflammatory state. Activated microglia produce an enzyme that has been shown to direct tryptophan, an essential amino acid, *away* from the production of serotonin and melatonin and *toward* the production of quinolinic acid, which is linked to symptoms of anxiety and agitation.¹⁰ These are just some of the biological changes that may occur when your body's innate intelligence conspires to show your brain what it knows is wrong. Talk about an intelligent alarm system!

⁷ https://www.ncbi.nlm.nih.gov/pubmed/19188531

⁸ <u>https://www.nature.com/articles/tp2013118</u>

⁹ Wilson CJ, Finch CE, Cohen HJ (2002). Cytokines and cognition–the case for a head-to toe inflammatory paradigm. J Am Geriatr Soc. 50:2041-56.

¹⁰ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3140295/</u>



The side effects of antidepressants can do serious harm

A SILLUSTRATED PREVIOUSLY, antidepressants have been shown in longterm scientific studies to worsen the course of mental illness.¹¹ This is just one example of the deep gulf that exists between public perception of efficacy of these drugs and the clinical reality. Another important reality check that needs to take place before doctors prescribe is a frank discussion with the patient about the risks of antidepressants. The definition of *informed consent* is "a patient's consent to a medical procedure after being properly advised of the relevant medical facts and the risks involved."¹² I know unequivocally that patients are not being adequately informed about the real risks of harm from antidepressants.

If the patient is given anything explanatory, it's usually a promotional pamphlet the drug company produced. This might list potential side effects in an imperceptible font, presented in the same offhand way drug manufacturers breeze through them in TV commercials. Any data on drug efficacy will be the tailored result of cherry-

¹¹ Scott B Patten. The impact of antidepressant treatment on population health: synthesis of data from two national data sources in Canada. Population Health Metrics. 20042:9. <u>https://doi.org/10.1186/1478-7954-2-9</u>

¹² <u>http://www.dictionary.com/browse/informed-consent</u>

picked studies that report results in a decidedly skewed light. Drug manufacturers self-fund most of the studies done on a particular drug, so they have vested interests in good results. If that's not what studies show, they can choose not to publish results, increasing the chance the data will be left out of future analyses of drug performance. A special review published in the *New England Journal of Medicine* addresses this problem head-on. Entitled "Selective Publication of Antidepressant Trials and Its Influence on Apparent Efficacy," the authors state plainly that "Evidence-based medicine is valuable [only] to the extent that the evidence base is complete and unbiased."¹³ When valid study results are omitted, unrealistic assessments are made about drug efficacy. Even worse, risk-to-benefit ratios are skewed in favor of pharmaceutical companies—to the detriment of every patient, whose right to fully informed consent about the real risks of medication is surreptitiously undermined.

Risk-to-benefit ratios are skewed in favor of pharmaceutical companies

But fast talking and invisible text doesn't erase the very real dangers for people taking these medications. The range of potential side effects is vast due to individual biology and unique lifestyle factors (such as other medications people may be taking or health conditions that may be present). Let's focus our lens on some serious risks that have been documented as a result of antidepressant treatment.

¹³ Erick H. Turner, Annette M. Matthews, Eftihia Linardatos, et al. Selective Publication of Antidepressant Trials and Its Influence on Apparent Efficacy. The New England Journal of Medicine. Massachusetts Medical Society. Jan 17, 2008.

Liver damage. A 2013 study delivers a shot across the bow: "All antidepressant drugs may potentially cause liver injury, even at recommended doses, and some groups are more vulnerable than others." Published in *The American Journal of Psychiatry*, researchers determined that antidepressant-induced liver injury can be irreversible and has been underestimated (or just under-reported?) in the scientific literature.¹⁴

Weight gain. Weight gain may not seem like a serious side effect, especially if you believe that you're benefiting from the meds; however, weight gain can portend generalized metabolic disturbance. Research conducted in 2000¹⁵ ranked the following drug types in order of their impact on body weight, from highest impact to lowest:

- Tricyclic antidepressants (TCAs)
- Monoamine oxidase inhibitors (MAOIs)
- Mirtazapine
- Paroxetine
- Selective serotonin reuptake inhibitors (SSRIs)
- Bupropion and Nefazodone (no difference was noted)

Sexual dysfunction. Incidence

of sexual dysfunction was among the first widely reported side effects of antidepressants to get people's attention. Early studies verified these widespread concerns. An early study published in the *The Journal of Clinical Psychiatry*



¹⁴ Cosmin Sebastian Voican, M.D., Ph.D., Emmanuelle Corruble, M.D., Ph.D., Sylvie Naveau, M.D., Ph.D., and Gabriel Perlemuter, M.D., Ph.D. Antidepressant-Induced Liver Injury: A Review for Clinicians.October 25, 2013 | https://doi.org/10.1176/appi.ajp.2013.13050709

¹⁵ <u>https://www.ncbi.nlm.nih.gov/pubmed/10926053</u>

reported a 43.3% occurrence of sexual dysfunction among the study group of sexually active adults taking various antidepressant medications. Eighteen percent of males in this group also reported painful ejaculation.¹⁶

A more recent meta-analysis on the broader implications of antidepressant-related sexual dysfunction expounds on the "significant impact" this side effect has on the person's quality of life, relationships, mental health, and recovery.¹⁷ The extensive review explored incidence patterns, physiological impacts, and treatment approaches from recent and historical studies. Once again, we see a broad range of ways side effects can show up in the population. Among problems reported:

- Decreased sexual desire, excitement, pleasure
- Diminished or delayed orgasm, painful orgasm
- Erectile dysfunction, painful erections
- Delayed ejaculation, ejaculation problems
- Loss of sensation in the vagina, nipples, penis
- Persistent genital arousal and discharge from the breast in women

This analysis confirms that 40% of antidepressant users will suffer some type of sexual dysfunction,¹⁸ with some variance in incidence rate based on the type of antidepressant used. With regard to treating medication-related sexual problems, researchers admit "it's more art than science."¹⁹ Lack of evidence-based treatments means that it's a guessing game for doctors as well as for the patient, who is now dealing with a significant complication from his or her attempt to get better.

¹⁶ <u>http://psycnet.apa.org/record/1994-02826-001</u>

¹⁷ Agnes Higgins, Michael Nash, and Aileen M Lynch. Antidepressant-associated sexual dysfunction: impact, effects, and treatment. Drug Healthc Patient Saf. 2010; 2: 141–150. Published online 2010 Sep 9. doi: 10.2147/ DHPS.S7634

¹⁸ Sexual side effects of antidepressants.Rothschild AJ. J Clin Psychiatry. 2000; 61 Suppl 11(): 28-36

¹⁹ SSRI-associated sexual dysfunction. Balon R. Am J Psychiatry. 2006 Sep; 163(9):1504-9; quiz 1664

Difficult withdrawal. Perhaps the dirtiest untold secret about antidepressants is the fact that they are among the most difficult drugs on the planet to step down from. A shocking report released in 2014 showed that a single dose of an SSRI drug "dramatically alters functional connectivity throughout the whole



brain" within just a few hours of intake, with researchers noting a widespread decrease in connectivity in most cortical and subcortical areas.²⁰ This is just one example of how pulling a single thread within the interconnected web of body-mind creates ripple effects that doctors are still trying to understand.

Most people don't start taking antidepressants thinking they will never go off them. If the journey takes them to a place where they feel healthy and empowered to take their life and body back, it's a serious gut-punch to realize that antidepressants and anti-anxiety medications like Xanax are as addictive as opiates.²¹ While you might call it "going through withdrawal," we medical professionals have been instructed to call it "discontinuation syndrome," which can be characterized by fiercely debilitating physical and psychological reactions. Discontinuation syndrome can feel like a persistent flu and can cause unrelenting insomnia, nausea, imbalance or vertigo, sensory disturbances, and hyperarousal.²² Another common side effect of SSRI and benzodiazepine discontinuation are "brain zaps," a phenomenon where electrical pulses (often described as small electric shocks) are emitted by the brain as it attempts to recalibrate in the wake of lowering medication doses. These jolts travel from the brain throughout the body and can be accompanied by feelings of disorientation and lightheadedness, loss of balance, and ringing or buzzing of the

²⁰ Schaefer, Alexander, Burmann, Inga, Regenthal, Ralf, Arélin, Katrin, Barth, Claudia, Pampel, André, Villringer, Arno, Margulies, Daniel S., Sacher, Julia. Serotonergic Modulation of Intrinsic Functional Connectivity. <u>http://</u><u>dx.doi.org/10.1016/j.cub.2014.08.024</u>

²¹ <u>https://www.karger.com/Article/FullText/371865</u>

²² <u>http://www.aafp.org/afp/2006/0801/p449.html</u>

ears.²³ Some medication tapers can take months, even years, to do the right way. Prepare for the length and difficulty of the step-down process to be closely correlated to the length of time spent on medication.

Increased risk of violence. The

FDA and the pharmaceutical industry have gone to great lengths to conceal multiple signals of harm that have arisen from the use of antidepressant medication. This secrecy, combined with the snail's pace of affect-driven changes to medical treatment protocols,



makes it difficult to hold the average prescriber accountable for not having done the investigative work necessary to get at the truth. From 1999 to 2013, there was a whopping 240% increase in death rates from psychiatric medication prescriptions.²⁴ Prescribed specifically to prevent suicide, antidepressants have come with a black box warning label of "suicide risk" since 2010. A 2015 analysis²⁵ reexamined the results of an influential 2007 study called "The Treatment of Adolescents with Depression Study (TADS)" and found a fourfold increase in suicide among adolescents taking SSRIs, despite the fact that the initial publication²⁶ claimed no increased risk relative to placebo. According to available data—three large meta-analyses—more psychiatric treatment means more suicide.^{27, 28, 29}

²³ <u>https://www.psychologytoday.com/blog/creativity-way-life/201107/fireworks-or-brain-zaps</u>

²⁴ <u>http://bit.ly/2DKLxAK</u>

²⁵ <u>https://content.iospress.com/articles/international-journal-of-risk-and-safety-in-medicine/jrs0645</u>.

²⁶ <u>https://jamanetwork.com/journals/jamapsychiatry/fullarticle/210055</u>

²⁷ https://www.sciencedirect.com/science/article/pii/S0160252713000587

²⁸ <u>https://www.researchgate.net/publication/</u>

²⁶⁷¹³⁹⁸³_The_Relationship_Between_General_Population_Suicide_Rates_and_Mental_Health_Funding_Service_ Provision_and_National_Policy_a_Cross-National_Study

²⁹ <u>https://www.ncbi.nlm.nih.gov/pubmed/15555028</u>

But suicide is not the only mode of violence that antidepressants can trigger. A firstof-its-kind study analyzing the use of prescription drugs by persons convicted of a homicide in Finland found that pre-crime prescription of benzodiazepines and opiates resulted in the highest risk (223% increase) of committing homicide.³⁰ It's also been shown to be an international problem, with a Swedish study identified a statistically significant increase in violence in males and females under the age of 25 who had been prescribed antidepressants.³¹ Relatedly, eleven antidepressants, six sedative/hypnotics, and three drugs for attention deficit hyperactivity disorder represented the bulk of 31 medications associated with violence reported to the FDA.³² These drugs are implicated in school shootings, stabbings, and national tragedies, and whenever reports of unusually violent behavior surface in the public sphere, I suspect psychiatric prescribing as the most likely cause. I am proven right far too often.

³⁰ <u>https://www.eurekalert.org/pub_releases/2015-06/uoef-fsa052515.php</u>

³¹ <u>http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001875</u>

³² <u>http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3002271/</u>



The effect of antidepressants is NOT a cure.

CONSIDER THIS SCENARIO: A woman suffering from crippling shyness in social situations decides to try alcohol, the classic social lubricant, as a way to "loosen up" and enjoy the upcoming office party. This works for her, and she begins to use alcohol regularly whenever she needs to go out in public. Since this strategy appeared to work, would we conclude that this woman was suffering from an alcohol deficiency? While this may seem laughable, it's exactly what we do when we ascribe healing properties to the effects of antidepressants. Even if we accept the proposition that these drugs are helpful for some people, extrapolating a medical cause from this observation is akin to saying that headaches are caused by a lack of codeine.

Alcohol, codeine, antidepressants, etc. exert distinct pharmacological effects that impact human biology. Withdrawal syndromes and long lists of potential side effects attest to this reality. But the nature of effects of these substances, particularly antidepressants, derives more from what we *think* we are experiencing than from any physiological measurement. The groundbreaking work of Dr. Irving Kirsch shed much-needed light on this phenomenon, known as the *placebo effect*. Thanks to Dr. Kirsch's work, we now know that the majority of the effect of antidepressants is attributable to the activated beliefs that a person holds about his or her treatment. If your doctor gives you a "brain chemical corrector" and you believe that this treatment will help you alleviate symptoms, there is a good chance you will be right. According to Dr. Kirsch's work, these are statistically the same odds you will have treating with antidepressant medication, but with absolutely zero risk of side effects.³³

Far from some holistic crusader, Dr. Kirsch is a classically trained clinician who started pulling on a thread. His findings changed his views on antidepressant drugs entirely; he went from actively referring patients for antidepressant treatment to believing that the risks were not worth the small potential for benefit to patients. They can even pave the way for more problems down the road: "Instead of curing depression, popular antidepressants may induce a biological vulnerability, making people more likely to become depressed in the future."³⁴

And what about a genetic vulnerability? Is there such thing as a depression gene? A 2009 study suggests that those with genetic variation in their serotonin transporter are three times more likely to be depressed.³⁵ But two years later this idea was wiped out by a meta-analysis of 14,000 patients published in *The Journal of the American Medical Association* that denies any such association.³⁶ A 2012 review



exploring the potential for biomarkers for depression acknowledged that while this potential exists, "specific genes or relevant DNA sequence variations involved in the

³³ <u>http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0050045</u>

³⁴ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4172306/</u>

³⁵ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2708005/</u>

³⁶ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2824618/</u>

pathogenesis of depression have not yet been identified."³⁷ Since mapping the human genome, the science of epigenetics has done much to dispel the belief that our genetic inheritance defines our fate. Studies on obesity³⁸ back up findings on depression and mental health—it is our individual choices, not our genes, that have the most significant impact on health outcomes.³⁹

³⁷ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3385174/</u>

³⁸ <u>https://www.hsph.harvard.edu/obesity-prevention-source/obesity-causes/genes-and-obesity/</u>

³⁹ Institute of Medicine (US) Committee on Assessing Interactions Among Social, Behavioral, and Genetic Factors in Health; Hernandez LM, Blazer DG, editors.Washington (DC): National Academies Press (US); 2006.



Most prescriptions for antidepressants are written by family doctors (NOT psychiatrists!) without any diagnostic protocols.

T'S BEEN 50 YEARS since the first antidepressant medications were prescribed, and the number of people being handed these little slips of life-changing paper has increased steadily ever since. According to the Centers for Disease Control (CDC), the rate of antidepressant use in the United States increased by nearly 400% between 1988 and 2008,⁴⁰ and numbers are still ticking up.⁴¹ Most of this growth is being driven by nonpsychiatrist providers writing prescriptions for psychiatric medication.

Research shows that in the United States, nearly four out of five antidepressant prescriptions are written by doctors who are not trained mental health professionals.⁴² "Basic mental health" (whatever that means) has long been considered the domain of the primary care physician (PCP), but what explains the fact that almost 10% of visits to a PCP end with an antidepressant prescription?

⁴⁰ <u>https://www.cdc.gov/nchs/data/databriefs/db76.htm</u>

⁴¹ <u>https://www.cdc.gov/nchs/products/databriefs/db283.htm</u>

⁴² Proportion Of Antidepressants Prescribed Without A Psychiatric Diagnosis Is Growing. Ramin Mojtabai and Mark Olfson. Health Affairs 2011 30:8, 1434-1442.

Even more confounding, nearly two-thirds of antidepressant-prescribed patients have never received a formal psychiatric diagnosis.⁴³ What is going on here?

Thanks to the influence of drug company advertising, now "the most prominent type of health communication that the public encounters,"⁴⁴ people are walking in to their doctor's offices armed with printouts bearing names of drugs that they feel they should be taking. This trend of self-diagnosis via slick advertisements is decidedly a factor, but is it the only reason why antidepressants have become the third-most-highly-prescribed drug on the planet? I believe a primary driving factor is that antidepressants have become the go-to drug for an astonishingly wide array of symptoms. A 2011 meta-analysis listed some of the reasons PCPs are prescribing antidepressants. Besides patient-reported depression, anxiety, and nervousness, other reasons for prescribing include psychosexual symptoms, sleep disturbances, a desire to quit smoking, and other addictions. Other reasons include feeling tired or generally unwell, nonspecific pain, headaches, premenstrual syndrome, and basically *feeling anything* the patient or doctor thinks is "abnormal."⁴⁵

Perhaps this wouldn't be as concerning if these medications weren't highly habitforming and known to cause serious side effects. But any drug that carries with it increased risks of suicide, violence, and psychosis-induced homicide⁴⁶ should not be the default standard of care! By prescribing without proper diagnostic evaluation, doctors are not adhering to their vow to "first, do no harm." It's time for all prescribing physicians to wake up to the reality of antidepressants and to stop treating them like a one-size-fits-all prescription for what ails people.

⁴³ Yoichiro Takayanagi, MD, PhD; Adam P. Spira, PhD; O. Joseph Bienvenu, MD, PhD; Rebecca S. Hock, PhD; Michelle C. Carras, BA; William W. Eaton, PhD; and Ramin Mojtabai, MD, PhD, MPH. Antidepressant Use and Lifetime History of Mental Disorders in a Community Sample.J Clin Psychiatry 2015; 76(1): 40–44. 10.4088/JCP. 13m08824.

⁴⁴ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3278148/</u>

⁴⁵ <u>https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2010.1024</u>

⁴⁶ BMJ 2017;358:j3697. doi: <u>https://doi.org/10.1136/bmj.j3697</u> (Published 02 August 2017)

Physical health conditions can mimic psychiatric symptoms.

THROUGHOUT A TYPICAL DAY, everyone experiences different physiological states, most of which are determined by a combination of individual biology and personal choices. Sometimes our biology and our choices don't mix well, and we experience symptoms that I call "psychiatric pretenders." These states feel like mental health issues: low mood, anxiety, inability to concentrate, brain fog, restlessness, irritability. Certainly, any one of these complaints is likely to result in an antidepressant prescription from your PCP! But what I have seen time and again in my practice is that these symptoms are actually being driven by physiological processes over which we have total control.

Two prime examples that I see with nearly every patient I treat are blood sugar chaos and dysfunctioning thyroid. The knee-jerk reaction of most doctors is to think, "I need to fix the brain." But in reality, we need to look at the whole-body ecosystem: intestinal health, hormonal interactions, the immune system, blood sugar balance, and toxicant exposures. In the case of blood sugar, here's a typical example of this masquerade: You wake up and have a glass of store-bought juice and a bagel or bowl of cereal. Your pancreas is confronted with a wave of sugar, to which it responds by creating a counterwave of insulin. The insulin sweeps the sugar into your cells for energy production. Once that simple sugar is metabolized—and it doesn't take long the resultant dip in blood sugar can alarm the body and the adrenal glands, causing them to compensate. This might feel like anxiety, jitteriness, nausea, headache, and even a racing heart. Fatigue and cloudiness often follow this stage, leading to a sugar/ carb craving. Do you see how this daisy chain connects?

Diets fueled by sugar create a cycle of intense hunger, followed by short-lived satiety that is the equivalent of being on a perpetual glucose-insulin rollercoaster ride. Simple carbohydrate consumption is linked with abdominal obesity (and diabetes, and heart disease, and . . .), which is tied to inflammation, which is a key biomarker for depression.⁴⁷ It's as easy as connecting the dots.

The thyroid epidemic

How much of what we call mental illness is actually thyroid-driven? In my experience, a vast majority. And instead of patients being given proper diagnosis and treatment for this common underlying condition, an antidepressant is often slapped on top of it, leaving the thyroid condition unseen and untreated. In cases where a thyroid issue has been diagnosed, the typical prescribing physician will dole out a prescription for Synthroid. But maintaining a healthy thyroid is about more than just slapping on a chemical Band-Aid. It's a sophisticated conversation between the brain, gland, hormones, and receiving cells and tissues.

Thyroid circuitry is regulated by the hormone cortisol, which is produced by the adrenal glands and signaled by the brain. Adrenal glands are responsible for quick bursts of survival energy, the fight-or-flight regulatory system, which is why hypothyroidism can present as anxiety, palpitations, insomnia, and sweating. To get to the underlying root of these symptoms, so often mistaken for depression and anxiety, the physician must identify the state of adrenal function and understand what is taxing these glands. How many physicians explore this diagnostically before prescribing psych meds? Finding a practitioner who understands these connections is critical to having a complete and accurate diagnostic. When I begin this conversation with a patient, the topic soon shifts to the state of their gut, how they eat, and what types of environmental immune system provocations they might be experiencing. In other words, we start talking lifestyle.

⁴⁷ https://www.ncbi.nlm.nih.gov/pubmed/23089630



Basic lifestyle interventions can facilitate the body's powerful self-healing mechanisms to end depression.

THIS FINAL FACT ABOUT DEPRESSION is arguably the most important, because it holds the key to your highest well-being. When I tell my patients that 30 days on a specialized diet is going to change the way they view their depression, most of them look at me like *I* need a psychiatric prescription! Kidding aside, I don't mind if they don't believe me. This is an experiential truth, and once they feel it, I know we will never have to look for any other cure.

The point that I want to stress here is that depression is not a lifetime sentence, imposed on you by a doctor who couldn't be bothered to ask you basic questions about your lifestyle before strapping you with a diagnosis and associated prescription . . . sometimes for life. You are not broken. You do not need to be fixed. However, you do need to take stock of your diet, stress levels, and potential toxic exposures. And then you need a reset.

I prescribe a 30-day restrictive diet as a baseline-setting mechanism for all my patients. Dietary modifications like eliminating processed foods, adding more healthy fats, removing common food-based allergens, and adding strategic foodbased supplements reset the body to a natural still point. And as long as the patient is 100% compliant, I can sit back and watch as the magic of a self-correcting physiology unfolds before my eyes. One of the most remarkable academic papers I've ever read was the psychiatric treatment profile of a 57-year-old woman treated for several months as an inpatient in a psychiatric ward.⁴⁸ Treatment included both antipsychotic and antidepressant medications. In addition, she was given two rounds of electroconvulsive shock therapy before anyone bothered to check her vitamin B12 level. Of course, it was dangerously low. Within two months of identifying her basic vitamin deficiency and supplementing it effectively, she reverted to her behavioral baseline—in other words, she returned to her "normal" self. This is someone whose symptoms were *years* in the making. She was exhibiting tearfulness, anxiety, movement abnormalities, constipation, lethargy, and eventually, perceptual disturbances (hearing her name called) and the ultimate in severe psychiatric pathology: catatonia. Despite her inpatient treatment, she remained suicidal, depressed, and lethargic. After a simple, painless, inexpensive dietary supplement, she stabilized, and she remained stable with no additional treatment.

Clean house

Diet is not the only lifestyle intervention that needs to happen on this journey. In addition to policing what goes *into* your body, I want you to consider the products you put *on* your body. The personal-careproducts industry is a poorly regulated chemical cesspool that keeps cranking out new and fresh-smelling ways for you to take a toxic bath. Phthalates, an industrial additive used to soften plastics, are just one example of the more than 13,000 chemicals that are used in health and beauty products, most of which never undergo any safety testing.



⁴⁸ <u>https://www.ncbi.nlm.nih.gov/pubmed/12823174</u>

Phthalates have become a staple ingredient in hair and nail products, makeup, and body cleansers.⁴⁹ "Reasonably anticipated to be a human carcinogen,"⁵⁰ phthalates have been clinically shown to cause reproductive problems and lung, liver, and kidney damage.⁵¹ What's most disturbing about this trend? The FDA does not require that these chemicals be approved, nor is there a burden of proof on manufacturers to ensure they are safe.⁵² Despite many of these chemicals being known or suspected carcinogens, they are often not even listed on the label. Hence, you must become a bit of a supersleuth to find all the ways these insidious chemicals are gaining entry into our homes, our bodies, and our minds.

In 2015, the Environmental Working Group released a report called "Body Burden: The Pollution in Newborns," that produced shock waves far and wide. Researchers at two major laboratories tested umbilical cord blood from 10 babies born in US hospitals between August and September 2004. Tests revealed a total of 287 chemicals in the group, with an average of 200 industrial chemicals and pollutants in each newborn baby.⁵³ When we open our eyes to the myriad ways these exposures compromise us, it becomes clear that modern humans may have lost Eden, but must we lose our very lives as well?

⁴⁹ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1253722/</u>

⁵⁰ <u>https://ntp.niehs.nih.gov/ntp/roc/content/profiles/diethylhexylphthalate.pdf</u>

⁵¹ https://noharm-uscanada.org/issues/us-canada/phthalates-and-dehp

⁵² https://www.fda.gov/Cosmetics/GuidanceRegulation/LawsRegulations/ucm074162.htm

⁵³ Environmental Working Group analysis of tests of 10 umbilical cord blood samples conducted by AXYS Analytical Services (Sydney, BC) and Flett Research Ltd. (Winnipeg, MB).

It's tempting to look away as the list of biology-disrupting toxicants that we are exposed to everyday grows:

- Fluoridated tap water that leads to cognitive decline⁵⁴
- Fragrances in cleaning products and air fresheners that disrupt the endocrine system⁵⁵
- Chemicals in drugs like Tylenol and over-the-counter pain relievers that " alter personality⁵⁶
- Triclosan (known to cause cancer) in antibacterial products and sanitizers⁵⁷
- Parabens in sunscreen and makeup that disrupt hormones and increase disease risks⁵⁸

But look at them we must if we ever wish to take control over our health outcomes. It may seem overwhelming, but there are simple and effective ways to circumvent the unfettered access these chemical toxicants have to our lives and our bodies.

Calm your mind

of the most life-changing things that I have ever done is face my own sense of "there is never enough time" and learn how to simply *be* in the moment. Regardless of the type of self-limiting inner program that you're running, there is a powerful way to flip the script and send a different signal to your subconscious mind: meditation.



⁵⁴ https://ehp.niehs.nih.gov/EHP655/

⁵⁵ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3404651/</u>

⁵⁶ <u>http://journals.sagepub.com/doi/abs/10.1177/0956797615570366</u>

⁵⁷ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3945593/</u>

⁵⁸ <u>https://www.researchgate.net/profile/Robert_Golden4/publication/</u>

⁷⁶⁶³⁶¹⁶ A Review of the Endocrine Activity of Parabens and Implications for Potential Risks to Human He alth/links/5746fb3b08ae205b05caeb6c.pdf

Learning to mediate was, I'm not ashamed to say, one of the hardest things I've ever done. But it is undoubtedly one of the most rewarding.

I know what you're probably thinking (because it's what I used to think): *I don't have time for that!* But Kundalini Yoga, arguably the most powerful and ancient of yoga traditions, provides benefits that supplements, food, exercise, and certainly drugs can never impart. Kundalini is referred to as a technology because it connects mind and body through breath and movement in a way that sends a visceral signal of safety to your nervous system. I have witnessed transformative leaps in as little as one practice session, in as few as three to eleven minutes, that would otherwise take years and years of psychotherapy and personal work to achieve.

Other lifestyle interventions that I emphasize for my patients involve prioritizing sleep and establishing a natural, healthy sleep cycle that is in tune with organic biorhythms. Grounding is another simple, clinically proven modality that helps shield you from the barrage of EMFs (electromagnetic frequencies) inherent in our modern, connected world. Grounding, or Earthing, has been shown to reduce inflammation, speed wound healing, and boost the body's immune response, yet it is as simple as standing barefooted on the Earth for a few minutes each day.⁵⁹ Getting natural sunlight exposure and spending time in nature are not only proven to boost our immunity, they also help us connect with the source of all that is. As you engage more naturally with the Earth, you send a signal of calm to the body that precipitates a healing relaxation response.

⁵⁹ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4378297/</u>



Suffering ends where meaning begins

FYOU WANT TO EXPERIENCE YOUR BEST SELF, it's time to exercise radical self-responsibility. Take your future out of the hands of doctors, and reclaim it. It begins with a simple question: Why?

- Why am I experiencing this health crisis in my life?
- Why would I want to mask it with pills?
- Is there a message inside of this experience that I am meant to hear?

When something inside tugs at you, pull the thread, and then go wherever it leads you. *Depression is a crisis of opportunity*. Through understanding what's *really* going on inside your brain, your body, and in your deepest heart, you will see that depression is a message that's telling you to course-correct. And for that, depression is also a profound blessing . . . and a highly personal wake-up call.

When a person is ready to step through the door of change, the way forward always illuminates. Self-discovery is a process that requires us to be honest with ourselves, sometimes painfully so. With knowledge to guide you, and <u>a community</u>

of people to support you, you can take the first step on the path to your own awakening. Now is your chance to choose a new story, to engage in radical transformation, to say yes to a different life experience: the life you've always wanted to live!

Join the revolution. Find out more in <u>A Mind of Your Own: How Women Can Heal Their</u> <u>Bodies to Reclaim Their Lives</u>.



