

EASE EMOTIONAL PAIN:

9 STEPS TO BUILD YOURSELF
A HEALTHIER BRAIN



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Begin to Heal Your Brain[™]

As you consider the following steps, please take out your workbook and write down your answers to the questions.

Step 1: How is your brain functioning?

Do you feel that your brain is not functioning as well as it used to? Describe what is different. Do you have increased difficulties remembering and recalling? Give specific examples. Is it more challenging to stay focused? Is this a problem reading the newspaper or watching television? Please describe the circumstances. Are you more easily overwhelmed or mentally exhausted by tasks of daily living that used to be much easier to perform? Give specifics. Is it more difficult for you to remember what you have been reading or conversations that you have had with others? Give examples. Do you find that you increasingly feel confused, even when carrying out routine tasks? Which ones? Have you been getting lost even when traveling in familiar areas? When did this begin, and is it getting worse?

Some of these symptoms may be a sign of normal aging.¹ Others may have reversible causes, such as an underlying mood disorder, vitamin deficiencies or low thyroid levels, or may be caused by

medication. These are all possible signs of brain dysfunction, and it is important that you discuss them with your family doctor or psychiatrist. If your doctor dismisses your concerns by telling you that you should just accept these distressing symptoms as the normal accompaniments of getting older, find another doctor who will leave no stone unturned in getting to the bottom of what's wrong and how you might treat it.

Step 2: Be willing to modify your lifestyle to achieve resilient aging.

Before we close out today's session, let's summarize the types of lifestyle interventions that may help you to prevent or delay the neurobiological effects of aging through epigenetic and other influences that are under your control. Roughly speaking, they fall into the following categories:

1. Promote brain plasticity—to grow new connections between cells—for example, through regular cardio exercise.
2. Help prevent brain-cell damage and destruction by blocking oxidative stress (reactive oxygen species and free radicals), by adopting a healthier diet, for instance.
3. Assist in reducing inflammation that damages brain cells—for example, increasing your intake of fruits and vegetables.
4. Promote improved energy production by the brain cells; one way to accomplish this is to dramatically reduce your consumption of processed foods and simple carbohydrates.
5. Create a healthier microbiome in your gut (the type and numbers of bacteria in your intestines, to promote a healthier brain–gut, gut–brain axis)—for example, by eating so-called

raw foods, unsweetened yogurt, fermented vegetables, and by drinking kombucha.

6. Improve oxygen levels in the brain; here again, daily cardio exercise can help, along with evaluating and treating sleep apnea syndrome.
7. Improve cellular metabolism; good nutrition is key here.
8. Prevent strokes by effectively treating high blood pressure, elevated cholesterol levels, and elevated blood sugar (elevated hemoglobin A1c levels).
9. Improve sleep quality and quantity. Consult a sleep specialist if you are having trouble sleeping through the night, or waking up feeling unrefreshed.
10. Ensure adequate levels of vitamins necessary for healthy brain functioning—for example, the B vitamins, vitamins D3, and folic acid.
11. Help repair damaged brain cells through exercise, good nutrition, and a healthier microbiome.

Step 3: Increase Cognitive Stimulation.

Have you become a couch potato? Do you passively sit and watch television? Did you once enjoy learning? What are you willing to do to increase your intellectual stimulation? Are there bodies of knowledge that you would like to learn more about? Which subjects once intrigued you? Are there new areas of knowledge that are appealing? How might you go about pursuing these interests? Would you be willing to join classes provided by a continuing-education organization? If not, would you be willing to engage in online learning?

Step 4: Honestly assess your level of socialization.

Have you withdrawn from the world? Do you no longer enjoy being around others? When did this begin? What was the context? Did it coincide with a major life loss? Might it be associated with feelings of depression? Social anxiety? If so, please seek out professional help. Having an active social life is a critical pillar for healthy brain aging, as important as physical fitness and intellectual stimulation. Would you be willing to pick up the phone and call an old friend to catch up? Visit more with neighbors? Become more regularly involved in social events at a church, mosque, or synagogue? What are you willing to commit to?

In your workbook, write out which of these steps you would be willing to address and how you will do so. Be willing to persist for six to twelve months to see the full effects. Be patient! As Lao Tzu once stated, “A journey of a thousand miles begins with a single step.”

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- If you are under the care of a psychiatrist, you should be evaluated and treated as a whole person under the biopsychosocial model. If your condition does not improve or gets worse, you may want to consider getting a second opinion or switching to a new doctor if one or more of the following circumstances describes your situation:
 - I have not been tested for underlying medical problems.
 - I feel like my doctor just keeps switching or adding medications to my regimen, without explaining why.
 - My doctor generally rushes my sessions and doesn't take the time to get to know me.
 - I complain about side effects, and my doctor minimizes them as inconsequential, or I sense that they feel that I am inventing them.
 - Drugs are prescribed for me without a detailed explanation as to the rationale behind choosing them and how they might help me.
 - I ask for a clearly articulated plan of action, and my doctor won't provide one.
 - I have expressed my needs and frustrations to my doctor, and they dismiss my concerns or won't address them.
 - I don't feel listened to or respected.

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- The doctor is frequently late in taking me into the office or doesn't show up for appointments.
- My doctor lectures me, and it is not a true partnership to help me get better.
- They do not share in my goal of a complete remission of symptoms and a restoration of my prior level of functioning.
- I try to advocate on my behalf but feel that my concerns fall on deaf ears.
- I want to feel hopeful about a full recovery, yet I have lost hope, or no longer have faith in my doctor.
- High levels of anxiety should be evaluated and treated using the biopsychosocial model, including the following:
 - Testing for an underlying thyroid condition
 - Treating psychological factors such as traumatic experiences
 - Addressing social and environmental stressors that promote learned helplessness and social defeat stress
 - Antianxiety medication and cognitive behavioral therapy (including desensitization)
- Your brain is the organ of your mind.
 - Optimize its functioning to...
 - ✓ Improve the effectiveness of introspection, psychotherapy, and medication management
 - ✓ Lessen the symptoms of a mood, anxiety or cognitive disorder
 - ✓ Reduce the probability of developing a dementia
 - ✓ Decrease the likelihood of developing many other chronic diseases
- Consider addressing the following epigenetic factors that may negatively affect the functioning of your brain cells:
 - Inflammation, such as that caused by...

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- ✓ Obesity—fat cells release cytokines and C-reactive proteins that are known to cause inflammation throughout the body, and are associated with psychiatric disorders in the brain, leading to alterations in neurotransmitter levels, neuroendocrine systems, and how brain synapses function
- ✓ Gluten sensitivity (assessed by the Cyrex Array 3 and 4)
- ✓ Delayed hypersensitivity food allergies (detected by specialized blood tests provided by Genova)
- ✓ Autoimmune diseases
- ✓ Chronic or recurring infections
- ✓ Alcohol or drug abuse
- ✓ Environmental stressors such as learned helplessness and social defeat stress
- ✓ Certain dietary and nutritional factors
- ✓ Endocrine diseases (such as a thyroid disorder)
- ✓ Dysbiosis in the microbiome
- Reverse these destructive influences through DNA promoters that increase neurogenesis and mitochondrial energy production, and improve emotional, cognitive (learning, memory, attentional, and executive functions), and behavioral functioning. These promoters can be positively influenced by the following:
 - ✓ Cardiovascular fitness exercise²
 - ✓ Antidepressant medication³
 - ✓ Psychotherapy to reduce or eliminate sources of learned helplessness and social defeat stress.^{4,5}
 - ✓ Healthy nutrition—a diet that is rich in lean protein, fresh fruits and vegetables, low-glycemic-index carbohydrates, olive oil, and sources of omega 3 fatty acids.^{6,7,8}
 - ✓ Eliminating food antigens and other sources of inflammation^{9,10}
 - ✓ Prebiotics and probiotics^{11,12,13}

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- ✓ Weight loss^{14,15}
- ✓ Cognitive stimulation^{16,17,18}
- ✓ Correcting any underlying toxic, metabolic, endocrine, and infectious or inflammation-producing medical conditions
- ✓ Successfully treating obstructive sleep apnea
- ✓ The many other interventions covered in session 15
- Some of the tests that might be ordered to determine possible causes of suboptimal brain functioning would include these:
 - ✓ Thyroid function tests
 - ✓ Comprehensive metabolic profile
 - ✓ B vitamin levels including folic acid
 - ✓ Vitamin D levels
 - ✓ Lyme screening
 - ✓ Testosterone levels (if you are a man)
 - ✓ Estrogen and progesterone levels (if you are a woman)
 - ✓ Inflammatory biomarkers
 - ✓ Neurologic evaluation
 - ✓ Overnight polysomnogram to test for sleep apnea syndrome
 - ✓ Psychiatric genetic testing
 - ✓ Antibodies to gluten and wheat
 - ✓ Food allergies and sensitivities
 - ✓ Stool testing for dysbiosis
 - ✓ Additional tests; neuroscience is rapidly evolving.
- If you or someone you love is suffering from ADHD,
 - It is a neurobiological condition with a likely genetic component.
 - Crucial circuits in the frontal cortex and other regions of the brain responsible for sustained attention, organization, planning, and various other executive functions are not working properly.

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- These circuits mainly rely on dopamine and norepinephrine neurotransmitters, and most medications used to treat ADHD increase the availability of one or both of these.
- The symptoms typically fall under one or more of these four areas of dysfunction: executive function, attention, arousal level,¹⁹ and behavior.
 - ✓ Executive function deficits may include trouble organizing and planning, difficulty prioritizing tasks (everything may feel urgent and important), poor time management with chronic lateness, a reduced capability to execute on a plan, and messiness.
 - ✓ Common attentional symptoms include trouble sustaining a focus, particularly when bored; being easily distracted; reduced speed and efficiency of information processing; and distracting thoughts.
 - ✓ Since a lower arousal level results in trouble sustaining a focus, and high levels of arousal improve focus, those suffering from ADHD may unconsciously gravitate toward activities that are exciting, such as video games and risky behaviors (driving too fast, sky diving, bungee jumping, etc.).
 - ✓ Common behavioral symptoms include procrastination, mood swings, anger outbursts, impulsivity, poor frustration tolerance, irritability, impatience, restlessness, agitation, fidgeting, difficulty sitting still, and having a short fuse.
- The person suffering from untreated ADHD typically develops learned helplessness as they feel “stupid” and that “everything takes longer” and live through many other humiliating experiences.
- These symptoms can feel extremely distressing and overwhelming, and cause low self-esteem and higher rates of mood, anxiety, and substance abuse disorders.
- There are other potential causes of ADHD-like symptoms that might warrant a medical evaluation, including (but not limited to) anxiety disorders, certain prescription and nonprescription medications; vitamins and supplements; concussion or whiplash injuries; alcohol abuse; use of marijuana and other illicit drugs; dementia;

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sleep apnea syndrome; thyroid disorders and other hormonal or metabolic disorders; lead or other heavy-metal intoxication; over-exposure to pesticides; vitamin deficiencies; mood disorders; Lyme Disease; petit mal or complex partial seizures; and other physical conditions.

- Exercise is medicine for ADHD; it does the following:
 - ✓ Increases the concentration of both dopamine and norepinephrine, as well as other beneficial brain chemicals
 - ✓ Helps to grow the quantity of neurotransmitters in the brain
 - ✓ Increases the number of brain-cell receptors that respond to the neurotransmitters.
 - ✓ Causes growth of the attentional system circuitry
 - ✓ Activates the frontal cortex, home to executive brain function
 - ✓ May enable a reduced dosage of medications used to treat ADHD
 - ✓ Makes it tougher to develop learned helplessness
 - ✓ May help protect against some of the symptoms in Alzheimer's as well as Parkinson's disease.
- Other potential treatment interventions include the following:
 - ✓ Medication, which can improve symptoms 80–90 percent
 - ✓ Simple organizing techniques such as the use of a PDA or a spiral notebook and habitually returning personal belongings back to the same location
 - ✓ Use of a Smartpen to digitally record and transcribe lectures and conversations²⁰
 - ✓ Specialized neuropsychological evaluations to guide ADHD coaching strategy and requests for accommodations
 - ✓ CBT, including the development, implementation, and mastery of routines at home and in the workplace environment
 - ✓ Supplemental educational services including tutoring and accommodations
 - ✓ Being taught tangible techniques to improve study skills and workplace performance

Endnotes

1. <http://www.mayoclinic.org/healthy-lifestyle/healthy-aging/in-depth/aging/art-20046070>
2. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3256007/>
3. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3711377/>
4. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3784793/>
5. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3566720/>
6. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3752894/>
7. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4581239/>
8. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4207041/>
9. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2991515/>
10. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4080409/>
11. <http://www.ncbi.nlm.nih.gov/pubmed/25402818>
12. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4245558/>
13. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4588083/>
14. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3235257/>
15. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3873820/>
16. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2950073/>

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17. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2656583/>
18. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3111751/>
19. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2863119/>
20. <http://store.livescribe.com/smartpen.html>

About the Author

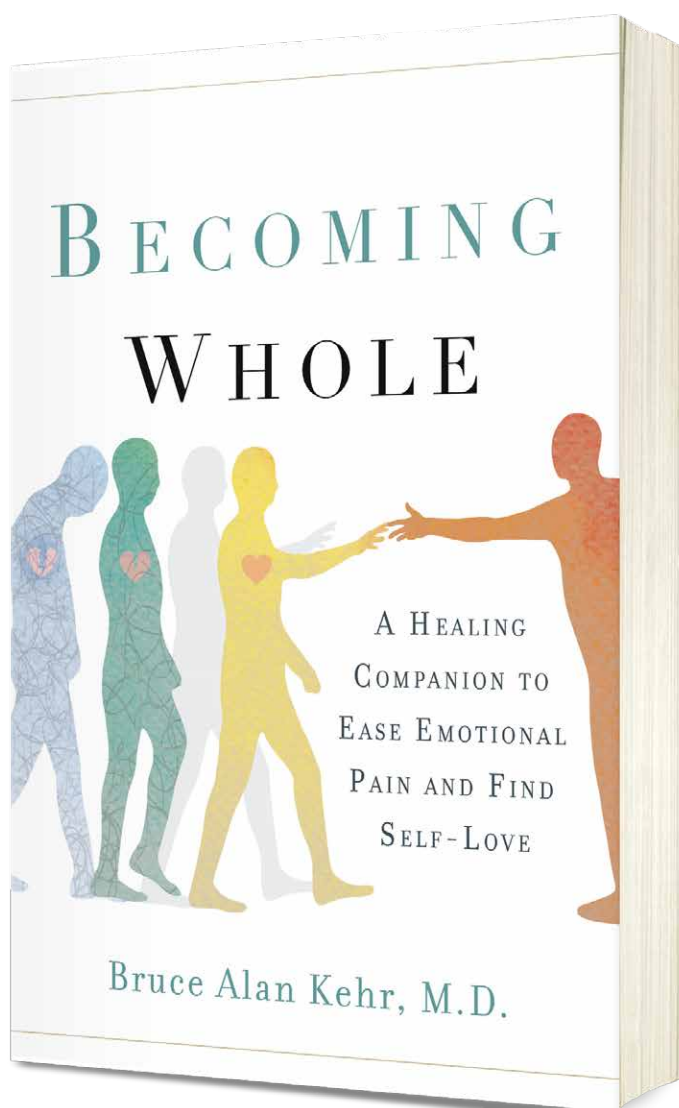


Author and national award-winning psychiatrist Bruce Alan Kehr, M.D., is the founder and president of Potomac Psychiatry (PotomacPsychiatry.com) since 1981. *Washingtonian* magazine awarded him their Top Doctor designation from 2012 to 2017. In 2016, the magazine named him The Face of Psychiatry in their “Faces of Washington” issue. Dr. Kehr serves on the Board of the Institute on Aging of the University of Pennsylvania and served as its chairman from 2006 to 2009. The readers and editors of *PharmaVOICE* selected him in 2007 as one of the 100 Most Inspiring and Influential Leaders in the Life Sciences Industry. He is also an Eagle Scout.

Dr. Kehr received training in psychiatry at Tufts New England Medical Center, where he was chief resident; in neuropsychiatry at the VA Boston Healthcare System—Jamaica Plain; and in psychoanalysis at the Boston Psychoanalytic Institute. He practices psychiatry and psychotherapy using the biopsychosocial model, designed to evaluate and treat the whole person by understanding each individual’s unique genetic, biological, psychological, social, and life-stage attributes.

Dr. Kehr lives in Potomac, Maryland, with his wife, Barbara, a psychotherapist. They have two daughters: Melanie, an immigration attorney who advocates for asylum on behalf of refugees fleeing domestic violence and child abuse, and Lisa, a psychiatric nurse practitioner graduate student.

Learn more by visiting DrBruceKehr.com.



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