

"An important book."

DAVID S. LUDWIG, MD, PHD, PROFESSOR, HARVARD MEDICAL SCHOOL;
NEW YORK TIMES BESTSELLING AUTHOR

M E M O R Y

M E M O R Y

M E M O R Y

M E M O R Y

R E S C U E

*SUPERCHARGE YOUR BRAIN,
REVERSE MEMORY LOSS, AND
REMEMBER WHAT MATTERS MOST*

THE OFFICIAL PROGRAM OF THE AMEN CLINICS

DANIEL G. AMEN, MD

This is an incredibly helpful book for anyone who wants to increase their brain capacity and strengthen their memory. I want to stay sharp, and that's why I read everything Dr. Amen writes, and you should too!

PASTOR RICK WARREN

Author of *The Purpose Driven Life* and *The Daniel Plan*

Rescue your memory with Dr. Amen's embraced habits that will brighten your mind.

MEHMET OZ, MD

Professor of surgery, New York-Presbyterian/Columbia University Medical Center

Memory Rescue is such an important book if you want to strengthen and keep your memory strong for the rest of your life. Millions of people find themselves victims of memory loss and have no idea that there are simple interventions to help keep their memory strong. I deeply believe this approach can help you or your loved ones.

TONY ROBBINS

#1 *New York Times* bestselling author, philanthropist, and America's #1 life and business strategist

While there's no pharmaceutical fix for memory decline, research now validates the powerfully therapeutic role of lifestyle choices in recovering and preserving memory. Dr. Amen's *Memory Rescue* eloquently embraces this science and presents it to the reader in a wonderfully user-friendly format.

DAVID PERLMUTTER, MD, FACN

Author of the *New York Times* #1 bestsellers *Grain Brain* and *The Grain Brain Whole Life Plan*

Memory Rescue is a powerful new book that shows you step-by-step how to improve your memory and overall health. The information is smart, simple, research-based, and effective. It's your road map to the best brain possible.

MARK HYMAN, MD

Physician and bestselling author

This is an insanely simple guide for preventing and possibly reversing memory loss and dementia, based on Dr. Amen's 25-plus years of clinical experience treating thousands of brain-injured patients. *Memory Rescue* is a must-read, not only for patients fearful of memory loss, but also

for physicians who too often take a fatalistic approach to this epidemic. Dr. Amen provides scientifically based measures that can prevent or slow dementia. This book is the most current and succinct source to date on “how to do it.”

JOSEPH MAROON, MD

Clinical professor and vice chairman, Department of Neurosurgery, University of Pittsburgh Medical Center; team neurosurgeon, the Pittsburgh Steelers

Dr. Amen’s work continues to break ground. All cultures put great value in living a long life, but what if we can’t take our memories with us? Now we have a choice. The sage wisdom and scientific advances taught in this book are the secret to living a long, healthy, and fulfilling life.

PEDRAM SHOJAI, OMD

Founder of Well.org; *New York Times* bestselling author of *The Urban Monk*

Dementia with aging is the sad new normal, but it is neither natural nor inevitable—if you follow Dr. Amen’s brilliant guidance. Keeping and even improving your brain is really quite simple: Get nutrients in; keep toxins out; and use it or lose it.

JOSEPH PIZZORNO, ND

Author of 12 books, including *The Toxin Solution*; editor-in-chief, *Integrative Medicine: A Clinician’s Journal*

Your mind is everything that makes you human. Your memory is the most important part of your mind. My friend and mind mentor, Dr. Daniel Amen, is the master’s master of memory. In his page-turning book, you will discover the wisdom, insights, and understanding to optimize and maximize your mind and memory. It is a must-read for everyone with a mind.

MARK VICTOR HANSEN

Cocreator of the Chicken Soup for the Soul series; cochairman of Metamorphosis Energy, LLC

Memory Rescue is an important book that shows you how to keep your memory strong. If you want to protect your most important organ and keep it healthy, you’ll find a clear, simple path in this book.

DAVID S. LUDWIG, MD, PHD

Professor, Harvard Medical School; author of the #1 *New York Times* bestseller *Always Hungry?*

Our ability to remember is a precious gift, one that makes us human. Until reading *Memory Rescue*, I had not realized how much I could do for and with my memory. In this warm and very accessible book, Dr. Daniel Amen uses brain scans and science-based insights to help protect our precious asset. The book does more than help us boost our memories—it promises and delivers a program for healthy aging and a happier life. I highly recommend it.

MICHAEL GURIAN

Author of *The Wonder of Aging* and *Lessons of Lifelong Intimacy*

Dr. Amen has done it again with *Memory Rescue*, the quintessential book on how to get your brain healthy and how to keep it that way. It is full of essential information, based on the latest research, that everyone needs to keep their brain working at optimum health. Its easy-to-read format will allow everyone to find what they need for their individual brain. The brain scan data is second to none in showing how people can fully engage ways of keeping their brain happy and healthy for a long lifetime.

ANDREW NEWBERG

Bestselling author of *How Enlightenment Changes Your Brain*

As a heart researcher, I'm amazed at how many of Dr. Amen's BRIGHT MINDS factors apply to cardiac as well as brain health. Following his clear plan will slow the aging of both your ticker and your thinker.

WILLIAM S. HARRIS, PhD

Professor of medicine, Sanford School of Medicine, University of South Dakota; president of OmegaQuant, LLC

I have known Daniel for more than 25 years. He has been amazingly consistent in his journey, not only to describe neurological conditions from a more physiological basis, but also to promote a structured dietary program to improve brain function. This book carries on his explorations to build a better brain. As with each of his books, I always find new and provocative information. *Memory Rescue* is no exception. I highly recommend it to everyone.

BARRY SEARS, PhD

Author of *The Zone*

Memory is critical to success in every area of life. For more than a decade, Dr. Amen has been my go-to guy for all things related to memory, the

brain, and performance. This terrific book is a complete manual for making your brain better now and into the future.

JONNY BOWDEN, PhD, CNS

Board-certified nutrition specialist; editorial advisory board (emeritus) for *Men's Health* magazine; columnist for *Clean Eating*, *Better Nutrition*, *Amazing Wellness*; author of *The 150 Healthiest Foods on Earth*, *Living Low Carb*, and *The Great Cholesterol Myth*

Without healthy brains with healthy memories, we suffer significant losses in the quality of our lives. Dr. Amen's book is a highly valuable resource on how to not only stop the degeneration, but reverse it. Highly recommended, and well worth the reading.

JOHN TOWNSEND, PhD

New York Times bestselling author, psychologist, and founder of the Townsend Institute for Leadership and Counseling

At a time when memory loss is increasing at epidemic rates, Dr. Amen leads the way to better health. *Memory Rescue* is easy to read and simple to implement, and it will definitely help protect your brain.

STEVEN MASLEY, MD, FAHA, FACN, CNS

Bestselling author of *The Better Brain Solution*

Following the protocol in Dr. Daniel Amen's new book will not only renew your memory, it will renew your very life. You know enough to tune your car—experience what happens when you tune your brain!

CHRIS PRENTISS

Cofounder and codirector of Passages Malibu and coauthor of *The Alcoholism and Addiction Cure*

Dr. Amen helped to rescue my memory and brain, which changed my life. *Memory Rescue* will give you strategies to quickly improve your memory and brain now and for the rest of your life too. I highly recommend it.

DAVE ASPREY

Founder and CEO of Bulletproof 360

Memory Rescue will empower you to take charge of your life by embracing simple habits and strategies that will boost your memory. I am eager to recommend it to my patients.

FREDERICK ROBERT CARRICK, DC, PhD, MS-HPED

Senior research fellow, Bedfordshire Centre for Mental Health Research in association with the University of Cambridge

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Memory Rescue: Supercharge Your Brain, Reverse Memory Loss, and Remember What Matters Most

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MEDICAL DISCLAIMER

The information presented in this book is the result of years of practice experience and clinical research by the author. The information in this book, by necessity, is of a general nature and not a substitute for an evaluation or treatment by a competent medical specialist. If you believe you are in need of medical intervention, please see a medical practitioner as soon as possible. The stories in this book are true. The names and circumstances of the stories have been changed to protect the anonymity of patients.

Contents

The Problem . . . the Promise . . . the Program *xiii*

Preface *xvii*

PART 1: MEMORY IS LIFE

1. A Breakthrough Approach to Memory Issues, Aging, and Alzheimer's 3
2. How the Brain Works: Learn about the Most Important Part of You 11
3. What Trouble Looks Like: How Brain Imaging Changes Everything 27

PART 2: BRIGHT MINDS: THE ULTIMATE MEMORY FORMULA

4. The BRIGHT MINDS Approach to Rescuing Your Memory: The Best Way to Help Prevent or Treat Memory Decline and Alzheimer's Is to Know and Address All Your Risk Factors 47
5. **B Is for Blood Flow:** Unlocking the Key to Life 59
6. **R Is for Retirement and Aging:** When You Stop Learning, You Start Dying 79
7. **I Is for Inflammation:** Manage the Internal Fire That Destroys Your Organs 95
8. **G Is for Genetics:** Genes Only Load the Gun; Your Behavior Pulls the Trigger 109
9. **H Is for Head Trauma:** The Silent Epidemic 119
10. **T Is for Toxins:** Is Your Memory Being Poisoned? 139
11. **M Is for Mental Health:** Your Mind Is Essential to Your Brain 167
12. **I Is for Immunity/Infection Issues:** Strengthen Your Internal Defenders 183

13. **N Is for Neurohormone Deficiencies:** Boost the Symphony of a Youthful Mind 203
14. **D Is for Diabetes:** Kill the Sugar before It Kills You 225
15. **S Is for Sleep Issues:** Cleanse Your Brain and Eliminate Its Trash Nightly 241

PART 3: DAILY FOOD, HABITS, AND MORE TO BOOST YOUR MEMORY

16. The Memory Rescue Diet: Food for BRIGHT MINDS 255
 17. Sharpen Your Memory: Brain Workouts for a Richer Life 287
 18. Memory Medications: When and What to Consider 303
 19. Brain-Enhancement Therapies: Innovative Ways to Strengthen Your Memory 309
 20. Memory Rescue Made Easy: 20 Short Stories of the Seahorse Twins, Scarlett and Sam 323
 21. How to Start Your Personal Memory Rescue Plan 333
- About Daniel G. Amen, MD 345
- Gratitude and Appreciation 347
- Resources 349
- Notes 353
- Index 409

The Problem . . . the Promise . . . the Program

THE PROBLEM

Memory problems are common at every stage of life, and they can impair learning, working, relationships, and even self-reliance. Memory problems clearly get worse as we age, with 75 percent of older adults complaining about them. No problem is more closely associated with memory loss than Alzheimer's disease (AD), one of the most feared and devastating illnesses of all. With the aging population, experts expect the incidence of AD to triple in the next 30 years, and there is no cure on the horizon. The Centers for Disease Control and Prevention report that the US death rate from AD rose by 55 percent between 1999 and 2014.¹ If you live until age 85, you have a nearly 50 percent chance of being diagnosed with AD or another form of dementia; and these illnesses start in the brain *decades* before any symptoms appear.

THE PROMISE

Your brain's history is *not* its destiny. Even if you have brain fog or trouble remembering now, it doesn't mean you always will. You can start having a better memory today by engaging in the Amen Clinics' simple Memory Rescue: BRIGHT MINDS program. What's more, the same plan will help your energy, mood, anxiety, sleep, weight, and overall success in life. The plan will also help you decrease your risk of developing Alzheimer's disease and other forms of dementia. Scientists have estimated that delaying the onset of AD by as little as one year could reduce the number of cases worldwide by

as many as 9,200,000 by 2050!² Of course, we must do much better than that—and you can and will.

THE PROGRAM

Memory Rescue is based on an insanely simple idea: The best way to sharpen your memory, reverse brain aging, and prevent AD is to *eliminate, prevent, or treat* all of the risk factors that steal your mind, represented by the mnemonic (a memory device) BRIGHT MINDS.

B – Blood flow: hypertension or prehypertension, stroke, cardiovascular disease, cholesterol problems, erectile dysfunction, infrequent exercise (less than twice a week)

R – Retirement/Aging: risk increases with age (over 50); lack of new learning—when you stop learning, your brain starts dying

I – Inflammation: gum disease, high homocysteine or C-reactive protein (CRP) levels in your blood, low omega-3 fatty acids

G – Genetics: a family member with Alzheimer’s disease, any other form of dementia, or Parkinson’s disease; having the e4 version of the *APOE* gene

H – Head Trauma: a history of head injuries with or without loss of consciousness; playing contact sports, even without a concussion

T – Toxins: alcohol or drug abuse, exposure to toxins in the environment (mold, pollution) or personal products, cancer chemotherapy, etc.

M – Mental Health: chronic stress, depression, attention deficit disorder/attention deficit hyperactivity disorder, post-traumatic stress disorder, bipolar disorder, schizophrenia

I – Immunity/Infection Issues: chronic fatigue syndrome; autoimmune issues, such as rheumatoid arthritis or multiple sclerosis; untreated infections, such as Lyme disease, syphilis, or herpes

N – Neurohormone Deficiencies: low levels of thyroid, testosterone (males and females), estrogen and progesterone (females), DHEA (dehydroepiandrosterone); high cortisol levels

D – Diabetes: diabetes, prediabetes, and obesity

S – Sleep Issues: chronic insomnia and sleep apnea

The good news is that almost all of these risk factors are either preventable or treatable. Even those that aren't, such as a family history of dementia, can be ameliorated with the right strategies.

YOU NEED THIS BOOK IF:

- Your memory has never been good and now it's getting worse.
- Your memory is not as sharp as it was 10 years ago.
- You're having trouble remembering to take medications or supplements consistently.
- You frequently misplace your keys or phone.
- You often wonder why you came into a room.
- You're embarrassed by forgetting appointments.
- You read a book or an article but don't remember much of it.
- You struggle with brain fog.
- You notice that a loved one's failing memory is interfering with everyday tasks.
- You are concerned about a family member who has been diagnosed with dementia.
- You wonder what you can do to avoid Alzheimer's, which has been diagnosed in one or more of your close relatives.

As you read *Memory Rescue*, keep an eye out for the icon on the following page. It will accompany many BRIGHT MINDS tips that will help keep your memory strong and reverse problems that may be present. Rest assured, you don't have to do everything at once! Most people are successful when they make one simple change at a time. Once they see how easy it is and how much better they feel, they often make scores of other healthy changes.



Loving your brain means treating
it with respect and care.

Preface

Memory is the treasury and guardian of all things.

MARCUS TULLIUS CICERO

Can you relate to any of these people?

- Steve, a 60-year-old father and CEO, lost both his father and grandfather to Alzheimer's disease. Steve was terrified he'd get it too, because he noticed his own memory was slipping.
- Joelle, 42, had no filter. She just said whatever came to her mind, which tended to hurt other people's feelings.
- Jim, 61, was a very successful businessman who had overcome addictions, as well as growing up with attention deficit disorder and dyslexia. After he got into a bad car accident, his memory became worse, his behavior changed, and he started to engage in habits that nearly cost him his family.
- Sherman, 71, had been under a great deal of work-related stress for years and had started to struggle with memory, decision making, and anxiety. He frequently woke up in the middle of the night.
- Todd, 53, a busy, stressed-out executive, was really struggling with his memory. He frequently misplaced things and hoped it was just part of normal aging. Secretly, he suspected something might be wrong.
- Sarah, a 62-year-old grandmother of six, worried because her memory had started to fail. Several months before she came to Amen Clinics, she had a ministroke that left her transiently paralyzed on her right side. Her faith was critically important to her, and she wanted to pass it on

to her grandchildren. However, she was concerned that she wouldn't be able to if she lost her memory.

- Bud, 52, was concerned about his memory, focus, and energy. His mother had died of Alzheimer's disease, and he had a wife 20 years younger than he was and two children, ages five and seven.
- Jasmine, 26, couldn't get out of the funk she had been in for more than a year. She was depressed, anxious, and obsessive. She had to drop out of her PhD program in clinical psychology because she couldn't focus or remember. Five antidepressants and three therapists later, she was giving up hope.
- Shawn, 35, broke his neck in four places in a surfing accident. After a remarkable physical recovery, he noticed his mood, memory, and cognition failing him. He was having suicidal thoughts when he first came to see us.
- Lew, 67, was a navy pilot and instructor for 40 years. He had to stop flying because he was not able to think through his flight plans. He and his wife were shocked when he made a mistake regarding some finances, causing a significant loss.
- David, 62, had become a recluse. His doctor had recently diagnosed him with Alzheimer's disease. After beginning a new medication, he seemed confused.
- Jesse, 42, had recently been diagnosed with multiple sclerosis. She struggled with her mood and memory. She had been put on immune-suppressing drugs, but the side effects made her feel terrible.
- Anita, 38, thrived for years in her roles as a teacher and mom of three. Then suddenly she began feeling exhausted, sad, and forgetful. She couldn't sleep well and had little energy. Nothing she tried seemed to boost her energy level or mood.
- Kyle, a 51-year-old CEO, was successful in leading his family's meat-packing business, but he was not doing well personally. He had diabetes and sleep apnea, and he wasn't following his doctor's treatment plan.

You will meet all these people in *Memory Rescue*. Over the past 30 years, people with stories like these, plus tens of thousands of others, have come to Amen Clinics for help. They all have had one thing in common: The physical

functioning of their brains needed improvement. Through a series of events in my life, it has become my mission to help people have better brains and better lives.

At 18, I was trained as an infantry medic in the US Army, where my love of medicine was born. While still in the service, I became an X-ray technician and developed a passion for medical imaging. As our professors used to say, “How do you know unless you look?” Then, when I was a second-year medical student, someone I loved tried to kill herself. I arranged for her to meet with an outstanding psychiatrist and came to realize that if he helped her (which he did), he would ultimately help her children and grandchildren, too, because they would be influenced by someone who was happier and more stable. I was drawn to psychiatry because I realized its potential to change generations of people for the better.

Yet psychiatry then, and even now, remains the only medical specialty that virtually never looks at the organ it treats—the brain. Frustrated, I decided to learn more about brain imaging tools, which have revolutionized my life and the lives of my patients, coworkers, family members, and friends. I first learned about SPECT (single photon emission computed tomography) during a lecture conducted by the chief of medicine at our local hospital in 1991. Convinced that such imaging could provide invaluable information, my colleagues and I adopted the technique and began building a database of brain scans related to behavior. Today it is the world’s largest database, totaling more than 135,000 scans on patients from 111 countries taken over the past 25-plus years.

Ultimately, the scans led me to five conclusions:

1. **Brain health is central to all health and success in life.** When your brain works right, you are happier, healthier (because you make better decisions), wealthier (again because you make better decisions), and more successful in everything you do.
2. **When your brain is troubled, for whatever reason, you are likely to be sadder, sicker, poorer, and less successful.**
3. **You are not stuck with the brain you have.** You can make it better, even if you have been bad to it—and I can prove it. This has been the most exciting lesson of my professional life, and it is one of the main topics in this book.
4. **To save your brain, you have to get your mind right.** Too many people give themselves excuses to stay sick. I call them the “little

lies” that keep them fat, depressed, and feeble-minded. Here are the most common justifications I’ve heard over the years, along with my responses to patients.

LITTLE LIES	RESPONSE
This will be hard.	Focusing on getting well is dramatically easier than being sick or losing your mind. Initially change is hard because the brain hates change and likes to do what it has always done. But with the right attitude and strategies, it can be very rewarding.
I don’t want to deprive myself.	When you make poor health decisions, you are robbing yourself of what you really want—energy, memory, and good health. Getting well is about abundance, never deprivation. <i>Memory Rescue</i> will help you avoid hypertension, heart disease, cancer, diabetes, depression, and dementia.
It is too expensive.	Being sick is much more expensive than thoughtfully spending your resources to get and stay well. With a better-functioning brain, you will have more money because the quality of your decisions will be better.
I don’t have time.	Spending time and energy to optimize your brain will help you live longer and be cognitively sharper, giving you much more time overall.
Everything in moderation. Just a little can’t hurt.	This is the gateway thought to illness. It is generally an excuse to justify doing something unhealthy. “Just a little can’t hurt” leads to just one more cigarette, one more piece of cake, etc.

5. **You are in a war for the health of your brain.** Just about everywhere you go, you are offered toxic food that will kill you early. The real “weapons of mass destruction” are highly processed, pesticide-sprayed, high-glycemic, low-fiber food-like substances in plastic containers. Such fare is destroying the health of America: Two-thirds of us are overweight or obese; 50 percent are diabetic or prediabetic; and 60 percent are hypertensive or prehypertensive—all conditions that damage the brain. In addition, news channels repeatedly pour toxic images into our minds, stoking our fear that disaster is everywhere and constantly exposing our brains to stress chemicals that

can damage our brains' memory centers. Technology companies continually produce addictive gadgets that steal our attention and distract us from our loved ones. According to a study from Microsoft, the human attention span is now eight seconds; a goldfish's is nine seconds.¹

For three decades, my staff and I have been at war, too, seeking to restore the mental health and brain health of thousands of people who've come to Amen Clinics. Just a few years ago, my staff and I began referring to those patients who took up the fight themselves as brain warriors.



To rescue your memory, you must counteract the dangers to your health. You must become a *brain warrior*.

Throughout the book, I will tell you about brain warriors who've embraced a healthier mind-set and changed their lifestyle habits to save their own brains and those of the people they love. In this book, I'll tell you how to become a brain warrior and a memory rescuer, too.

That's because one of the most important symptoms of an unhealthy brain is memory problems. Once your memory starts to slip, everything in your life becomes harder, including your health, relationships, work, and finances. Such problems can even strip you of your independence. Let me be clear: I love my children very much, but I never want to live with them. I never want to be a burden to them, and I would prefer they not make decisions for me. I don't want them taking my driver's license from me or deciding what I'll wear and eat. If that is true for you, too, it means you need to think about your brain now, not 20 years from now. The truly exciting news is that you can start to change your brain and memory, beginning today.

Join me on a fascinating and important journey into improving your brain, memory, and life.

PART 1

MEMORY IS LIFE

CHAPTER 1

A BREAKTHROUGH APPROACH TO MEMORY ISSUES, AGING, AND ALZHEIMER'S

Memory is all we are. . . . Take a man's memories and you take all of him. Chip away a memory at a time and you destroy him as surely as if you hammered nail after nail through his skull.

MARK LAWRENCE, *KING OF THORNS*

Memory is the fabric of our souls. It enables us to integrate and make sense of the experiences of our bodies, minds, and spirits. It makes us who we are and allows us to keep our loved ones close, even when they are far away. Memory houses our joys, our hurts, and all of life's lessons. It reminds us who is trustworthy and who isn't, who has helped us and whom we need to help. Memory enables us to recall the important events in our lives and keeps us centered and growing. And because it contributes to our values and outlook, it also provides us with a sense of purpose that gives our lives meaning.

Our memories are such a part of us that we often take them for granted. Yet when our memory is damaged, the costs can be high. A diminished memory can rob us of our ability to make good decisions (because we forget important life lessons) and disconnect us from those we love. Memory problems limit our success at work, steal our independence, and ultimately make us vulnerable to anyone who might take advantage of us.

When someone's mental abilities, including memory, deteriorate enough to affect daily life, we say that person has dementia. Worldwide, a new person is diagnosed with dementia every seven seconds.¹ *Of the approximately 318 million Americans living today, 45 million—about 15 percent—will get*

Alzheimer's disease (AD) at some point in their lives. Tens of millions more will experience other forms of dementia, and 75 percent of older adults will suffer from memory problems.² Plus, more than 200 medication trials have failed to reverse Alzheimer's disease and other forms of dementia.³ Given the complexity of the illness and how early it begins altering the brain, we are likely never going to have a medicine that cures it.

Yet new research suggests that a “memory rescue” program, like the one presented in this book, can dramatically improve memory and can prevent and sometimes even reverse some forms of dementia.⁴ Given how most doctors approach this issue, however, you cannot count on traditional medicine to rescue your memory.

THE OLD APPROACH TO MEMORY COMPLAINTS

Here is a common scenario: You are having difficulty remembering conversations, forgetting where you put your reading glasses, or briefly getting lost driving in familiar areas. So you see your primary care physician or local neurologist, who asks you a few questions, gives you some short tests, orders an MRI (magnetic resonance imaging), and tells you, “Everyone has memory problems as they age. You're normal.” It's also common for family members and friends to downplay forgetfulness.

A week or so later, you meet again with your doctor, who says that the report on your MRI came back as “mild, age-appropriate brain atrophy.” He or she tells you that you have mild cognitive impairment (MCI). You're reassured that it's common and that you'll likely retain your personality and long-term memory until later in the illness. You're encouraged to get your affairs in order, given a prescription for Aricept (donepezil, a common memory medication that has short-term benefits but loses its effects after 18 months⁵), and told to schedule a follow-up appointment in six months. Typically, there is no discussion about eliminating risk factors through exercise, diet, supplementation, or memory training exercises.

That's literally the extent of the workup in 80 to 90 percent of the memory-related cases that come to us at Amen Clinics from the traditional medical system. *It's completely ineffective, heartbreaking . . . and unconscionable given what we know now.*

Until recently, health-care professionals assessing the presence of memory problems in patients classified their cognitive functioning as: (1) normal with no symptoms; (2) mild impairment observed by patients or their families;

or (3) Alzheimer's disease, in which dementia was becoming significant and getting worse.

The National Institute on Aging announced a significant change in 2011. Based on new brain imaging data, they added a new "preclinical" level. As a result, the current staging guidelines are

1. normal
2. preclinical: no obvious symptoms, but negative changes can be seen on biomarkers such as brain scans
3. mild cognitive impairment
4. Alzheimer's disease

Can you see the problem here? Long before symptoms develop, your brain may already be beginning to deteriorate, years or even decades before you realize it!⁶ A UCLA study found that 95 percent of people with Alzheimer's are not diagnosed until they are in the moderate to severe stages of the disorder. Yet the brain of a person diagnosed with Alzheimer's disease at age 59 likely started to show signs of deterioration by the time that person turned 30.

No matter your age, memory symptoms should be taken seriously. Developing brain fog or feeling as if your memory is slipping when you are in your forties, fifties, sixties, seventies, or even eighties is common, but it's not normal. It is a sign of impending doom. Ten years after you notice a problem (called subjective cognitive decline), there is an estimated 70 to 100 percent chance of your getting worse and slipping into dementia.⁷

But while it is true that memory issues are common with age, they are not inevitable. In the presymptomatic stage, when memory problems are minor, help is likely to be most effective. If you're struggling with your memory, even if it seems inconsequential, *now* is the time to get serious about your brain's health.

A BREAKTHROUGH CONCEPT: MEMORY RESCUE

Our decades-long experience at Amen Clinics of looking at the brain, together with the latest scientific research, has convinced me that the traditional approach to memory problems is misguided and leads to unnecessary disease and disability.

Just as many tributaries feed a river that is about to flood and destroy a community, we've discovered that there are many different causes of memory loss. It is no longer accurate to talk about mild cognitive impairment or AD as single

entities with single causes, just as at Amen Clinics we no longer talk about a single type of depression, addiction, attention deficit hyperactivity disorder, or obesity. The ability to identify and address each of the potential causes of memory problems has enabled us to develop a plan to prevent or even reverse these devastating issues. Steve's story illustrates how effective our approach can be.

Steve: staring down Alzheimer's

Steve, a 60-year-old father and CEO, lost both his father and grandfather to AD. Steve was named after his grandfather, and they were very close. Steve found it heart-wrenching to watch him deteriorate to the point that his grandfather no longer recognized him. But watching it happen to his father was even worse. He worried about his dad every day for a decade. His father got lost, acted irrationally, and spent money in ways that jeopardized his life savings and family. In addition, Steve's mother always seemed sad and stressed.

Steve was terrified he'd get AD too. When his own memory began slipping, he went to see his family physician. His doctor did a cursory physical examination, ordered some blood work and a brain MRI, and saw him for follow-up a few weeks later. Steve's physician told him that his blood work was "mostly" within normal limits but didn't elaborate; his MRI was "normal for age with mild atrophy." He also told Steve it was "normal" for most people to struggle with memory problems as they aged. His doctor, who was Steve's age, said that he was having more senior moments too. Plus, he said, if Steve had early AD, there was nothing he could do for it, so why worry? The last thing the doctor said was "Make sure you have your affairs in order and let me see you in six months."

Deeply unsettled by the appointment, Steve came to see us at Amen Clinics. We have heard stories like Steve's over and over, and our approach is dramatically different. We know that the best way to prevent and even reverse significant memory problems is to identify them as early as possible and work to eliminate or treat all the risk factors that may be contributing to them. The mnemonic I developed to help us remember the risk factors is BRIGHT MINDS.

- B** – Blood Flow
- R** – Retirement/Aging
- I** – Inflammation
- G** – Genetics
- H** – Head Trauma
- T** – Toxins

M – Mental Health

I – Immunity/Infection Issues

N – Neurohormone Deficiencies

D – Diabesity (diabetes, prediabetes, and obesity)

S – Sleep Issues

When I reviewed Steve’s records, I noticed that he had several important risk factors. He was prehypertensive (**blood flow**) and 60 years old (**retirement/aging**). His blood tests showed he had markers of **inflammation**. He also had a family history of severe memory problems (**genetics**) and was under chronic stress from watching his father’s health decline and taking care of his mother (**mental health**). He was not eating organic or paying attention to the products he put on his body (**toxins**). His vitamin D (**immunity/infections**) and testosterone levels (**neurohormone deficiency**) were low, his fasting blood sugar and HbA1c levels were high, and he was overweight (**diabesity**). He had not been sleeping well for three years (**sleep**). Steve’s risk factors and our recommended interventions (both of which will be explained in more detail in chapters 5 through 15) are summarized in the box below.

BRIGHT MINDS	STEVE'S RISK FACTORS	INTERVENTIONS
Blood Flow	Low blood flow on SPECT; prehypertension	Exercise, diet, ginkgo biloba
Retirement/Aging	60 years old	New learning exercises
Inflammation	High CRP and homocysteine	Diet; omega-3 fatty acids
Genetics	Strong family history of Alzheimer's	Serious focus on brain health
Head Trauma		
Toxins	Using multiple toxic products daily; not eating organic	Eliminate toxic products; eat organic
Mental Health	Chronic stress	Stress management tools
Immunity/Infections	Low vitamin D	Vitamin D3 supplements
Neurohormone Deficiencies	Low testosterone	Weight training, supplements, and no sugar
Diabesity	Prediabetes; overweight	Memory Rescue Diet
Sleep	Insomnia for three years	Sleep strategies

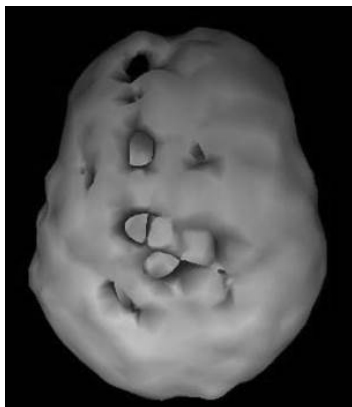
Steve's Memory Rescue risks and plan

As part of Steve's evaluation, I ordered much more extensive blood work and a SPECT (single photon emission computed tomography) scan, which measures blood flow and activity in the brain. SPECT is different from a CT (computed tomography) or MRI, which are anatomy scans that look at brain structure. SPECT looks at function. Functional problems almost always precede structural problems. SPECT tells us three things about the brain: Is there good blood flow? Too little activity? Or too much?

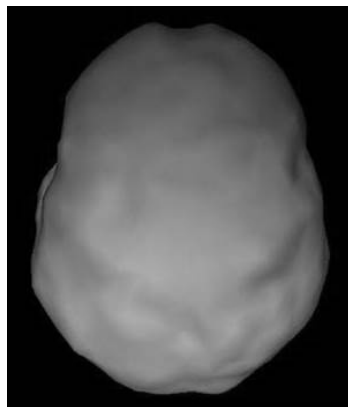
Steve's SPECT scan showed very low blood flow, the number one predictive sign of future trouble and Alzheimer's disease.⁸

Steve became serious about his self-care (he became a brain warrior), and within nine months of being on the Memory Rescue: BRIGHT MINDS program, Steve felt sharper, his memory was better, and he was hopeful that he could do something about his risk of Alzheimer's. A year later his scan showed remarkable improvement. Armed with this information, he taught his children about brain health.

STEVE'S "BEFORE" AND "AFTER" BRAIN SPECT SCANS



Low overall blood flow



Marked overall improvement

THE MEMORY RESCUE PROMISE

Memory Rescue will teach you the most common reasons for memory loss and help you identify the specific factors affecting your brain health. It will then provide you with a step-by-step approach to get your memory back, strengthen it, and keep it healthy for a lifetime.

You will learn:

- How to assess your brain on a regular basis to pick up issues early
- How to test for each of the risk factors
- Strategies to decrease or eliminate avoidable risks through exercises, nutritional supplementation, and diet
- How to follow the Memory Rescue Diet (one of the most powerful weapons for memory sustainability)
- Memory training and workouts to keep your brain sharp
- Innovative strategies to enhance brain function

Before we dive into those details, join me on a fascinating and important journey into your brain, the place where memories are truly made.