



THE BRAIN OWNERS

OWNER'S MANUAL

3 SIMPLE SOLUTIONS FOR
QUICKLY BOOSTING YOUR MEMORY



BY JULIA LUNDSTROM

Memory. That elusive part of our lives that makes us who we are. It lives in our brains and doesn't seem to get much attention, until the day we need it and it isn't there for us.

You know the feeling. You're in a restaurant when someone walks up to you that you haven't seen in ages. You did know this person at one point in time. For the life of you, you can't remember his name. Your face turns red, your pulse quickens as he introduces his wife and you want to do the same, but don't know how to do it without coming clean that you can't remember either of their names.

Some call this a 'senior moments'. We all get it from time to time. As we get older these 'senior moments' happen more frequently.

If this is happening to you, then you've found the right book.

Your memory is what makes you who you are. Every action, every reaction, every thought, every movement is pulled from your memory.

And when it fails... life becomes very difficult.

This book is all about memory, and more specifically the organ that holds your memory – your brain.

When your brain is unhealthy, it is your memory that is the first to go.

And it starts to go earlier than you would think. Our brains begin shrinking as early as age 35 and at a rate of about .5% a year. That means, if you do nothing about it, your brain will shrink 10% by the time your 55. And your memory suffers the most. (That is 10% of your life gone, poof)

Brain shrinkage is so common that neuroscientists can guess your age just by looking at your brain scan on an MRI.

And it should come as no surprise: A smaller brain means poorer memory and cognitive performance.

Translated, this means that unless you're actively growing your brain, you'll be:

- Increasingly slower at learning
- Struggling to recall memories, names and faces
- Working harder to focus and concentrate
- Having a hard time making decisions

But it doesn't have to be this way and that's why we wrote this book.

With years of brain health expertise behind us, my brother and I decided to bring to the masses this simple book that helps you regrow your brain, no matter what age you are. And, written in a language that's easy to understand.

We're taking what the neuroscientists have discovered and bringing it to the masses, in an easy to understand language.

We often hear of heart health, but rarely do we hear of brain health. That seems strange considering your brain is the control center for your entire body.

It drives every system, from your immune system to your nervous system. It creates every emotion. It stores every memory. It filters what is important to you and what isn't important.

So, why aren't more people focused on putting their brain health first?

It is our belief that if you put your brain health first, good health and a good memory will follow.

That is what this book is designed to do... teach you how to put your brain health first.

We're going to teach you how each function of your brain corresponds to your memory. And then teach you three strategies you can do, starting today, that will begin regenerating your brain.

We will walk you through the three most important strategies for correcting brain and memory problems and why you must incorporate these three strategies into your daily life. You risk losing more and more of your memory (and heading towards that dreaded Alzheimer's disease and dementia).

Not only that, at the end of each chapter, we will give you a step by step action plan to get started. No matter what

condition you're in, what age you are or your current level of activity - there is an action plan just for you.

Are you a couch potato and a bit stuck in your ways?
We'll help you start slow.

Are you extremely active and simply want to take your life to the next level? We have the trampoline to launch you on your way.

And a plan for everyone in between.

Each chapter will teach you specific methods to help improve your memory. Also, what happens if you aren't including the activity in your daily life including the scientific studies that support the methods.

Years of scientific studies provide a foundation for our methods and our action plans.

So, buckle your seat belt and get ready to start re-growing your brain. It's not going to happen overnight, but it will happen. (caveat, if you already have Alzheimer's or dementia, these action steps will help slow down the rate of decline, but not bring your memory back).

This plan is a preventative course of action. You can slow down the rate of your brain shrinkage, and in most cases actually grow your brain back to more youthful levels.

After 3-6 months of following our action plan, the cobwebs should be gone.

This is our promise to you.



CHAPTER 1

Your Memory Problems

Picture this— an all too familiar scene:

Your light in the bedroom goes out. So you go to the garage to get a new light bulb and by the time you get there, you can't remember why you went to the garage.

You stand there for a minute and look around hoping it will come to you.

Try as you might, you keep drawing a blank.
Unfortunately your brain just isn't delivering the goods.

So what gives? Why can't you remember what you needed in the garage?

If this were just a one-time memory fluke, walking into a room and forgetting what you needed, you wouldn't be too worried.

Unfortunately, this situation is happening more and more frequently.

And as much as you hate to admit it, you've been a little slow on the uptake lately too. Come to think of it, a little low on creativity as well.

So far it's not life threatening— just annoying. And a little embarrassing.

You joke about your “senior moments”, even though you're only 51. But deep down, you're getting a little nervous.

Guess what? You're not alone.

Over time, most people start noticing their brains aren't as sharp as they used to be— or as fast as they should be. And they're right.

I'll start with the bad news, but don't worry: There's great news on the way.

The fact is, your brain shrinks with age, starting around age 35. This shrinkage is caused by dying brain cells.

And if you don't actively use your brain from this point forward, you will physically lose it.

Brain shrinkage is so common that neuroscientists can guess your age just by looking at your brain scan on an MRI.

And no big surprise: A smaller brain means poorer memory and cognitive performance.

This means unless you're using your brain (and your body), you'll be:

- Increasingly slower at learning
- Struggling to recall memories, names and faces
- Working harder to focus and concentrate
- Having a hard time making decisions

And remember, this decline can start as early as age 35.

That's the bad news.

Here's the good news:

You don't have to struggle like this... You CAN grow your brain back at ANY age!

Over the course of this book, we'll introduce you to strategies to get your memory back, no matter your age.

We carefully developed these strategies using scientifically proven methods to show you exactly how to re-grow your brain— and in the process: boost your memory, improve concentration, and even increase your creativity and learning speed.

This means you CAN start re-growing your brain in simple, doable steps—starting today.

Plus, you'll also be learning about the science behind growing a larger brain, and how you can apply this knowledge to every aspect of your life—from your work, to your health and fitness, to your personal relationships.

Let's get started.

We recommend you track your progress, because it's important to measure where you are today.

Why?

Well, most people can't tell that their memory is improving. Let's say you usually forget ten things a day. If you improve by 20%, that's two fewer things you forget a day, but you'll probably only think of the things you DID forget and not realize you've made progress.

So, we suggest you use the following brain health calculator put together by neuroscientist Dr. Majid Fotuhi of John Hopkins University.

Courtesy of www.today.com and Dr. Majid Fotuhi of John Hopkins University

From Dr. Majid Fotuhi

“The Fotuhi Brain Fitness Calculator is based on my 25 years of research, clinical and teaching experience at Harvard and Johns Hopkins. I have published several articles about factors that shrink or expand the brain. In my book, I have put together an odometer-type scale that indicates the strength of each of risk factors and each

protective factor. I call them “brain meters.”

The questionnaire is my attempt to put all this information in a simple format so people can get a general idea of how they can improve their brain health.”

Cautions:

- This questionnaire is intended as a general screening tool for brain health issues and should not be used for diagnosing or treating any specific medical conditions.
- A person with a perfect score may still have significant undiagnosed heart disease (without any symptoms) that could result in stroke and dementia in the future.
- A person with a poor score needs to double-check his or her answers with a health care professional. For example, a person with depression may post unreasonably low scores that could be unduly alarming.
- This questionnaire is not intended to be fully comprehensive and should not be used as a medical diagnosis.

To calculate your score, grab a piece of paper and a pen. Choose the answer that you feel best represents you. Write down the number of the answer on your paper. Scoring is explained at the end.

1. Stress

1. Feel high stress, daily
2. Occasional stress, not daily
3. Rare stress, only once in a while (with deadlines, etc.)

2. Laughter

1. Rarely laugh, usually grumpy
2. Occasional laughter
3. Cheerful and smiling most of the time

3. Blood pressure

1. Usually 140/90 or higher
2. Usually between 120/80 and 140/90
3. Usually 120/80 or lower

4. Smoking

1. Smoke daily
2. Occasional smoke (or quit smoking)
3. Never smoke

5. Alzheimer's in the family

1. More than two members of your family have been diagnosed with Alzheimer's disease
2. Only one member of your family has been diagnosed with Alzheimer's disease
3. Nobody in your family has been diagnosed with Alzheimer's disease

6. Sleep

1. Usually less than 6 hours a night
2. Usually 6 to 7 hours a night
3. Usually about 7 to 8 hours a night

7. Memory recall

1. Have a hard time recalling stories, facts
2. Occasional memory problems – 'senior moments'
3. Rarely have memory recall problems

8. Activity level

1. Couch potato
2. Usually active, but no formal exercise
3. Keep an active lifestyle and exercise regularly

9. Brain safety

1. No seat belts, no helmets during biking or contact sports
2. Occasional use of seat belts and helmets
3. Conscious about safety, regular use of seat belts and helmets

10. Fitness level

1. Compared to people my age, I am out of shape
2. Compared to people my age, I am in average shape
3. Compared to people my age, I am in great shape

11. Social engagement

1. Usually isolated and alone
2. Occasional social activities, 1-2 months
3. Regular social activities every week

12. Alcohol use

1. Three or more glasses of alcohol per day
2. No alcohol at all
3. 1-2 glasses of alcohol per day

13. Food quantity

1. Eat large portions, enjoy second servings
2. Eat occasional large portions, no second servings
3. Small and reasonable portions, no second servings

14. Food quality

1. Junk food (such as French fries, donuts or salty foods)
2. Occasional junk food, usually heart-healthy diet
3. Heart-healthy diet, zero junk food

15. Learning

1. I have a hard time learning new information
2. It takes me longer than it used to
3. I learn new things daily without a problem

16. Mood

1. Sad, irritable and/or depressed most of the time
2. Occasional irritability, but generally pleasant
3. Upbeat, cheerful, and agreeable most of the time

17. Mindfulness Meditation

1. Never practice any form of meditation or relaxation
2. Occasional meditation or relaxation
3. Daily meditation and/or relaxation

18. Attitude

1. Usually pessimist, negative, and hopeless
2. Occasional negative thoughts, usually positive attitude
3. Always optimist and positive attitude

19. Memory Stimulation

1. No effort in memorizing names, facts, or stats
2. Occasional efforts in memorizing names, facts, or stats
3. Always eager to memorize names, facts, or stats

20. Sense of curiosity

1. No interest in learning new things or exploring the world
2. Occasional interest in learning new things and exploring the world
3. Usually eager and enthusiastic to learn new things and explore the world

You finished. Good for you. Now add up your answer numbers for all 20 questions. The number is your score.

If you Scored:

Green: 50-60: Good news: You have a brain-healthy lifestyle. There's always room for improvement, though, so please start working on the areas where your score was not perfect.

Yellow: 31 to 49: Your lifestyle needs a checkup. You need to identify key weaknesses and devote a strong effort to strengthening them, while maintaining brain-healthy habits in other areas.

Red: 20 to 30: Your brain is in need of some TLC. Your goal should be to improve your scores across the board. This may involve some major lifestyle changes. Think about which changes you can realistically make and which will have the biggest impact. You need to discuss areas in which you have a low score with your doctor or a health care professional.

****Be sure to write down your results and today's date. Fold and tuck your answers into this book so you can track your progress as we move forward.****

At the midway point of this book, we'll have you take the test again to see how you're doing, and then once again at the end so that you can compare your results.

If you stick with us, you can expect to be enjoying vastly improved brain performance—and all the benefits that come along with it.

Can I Really “Re-Grow” My Brain?

These strategies have worked for us, and our mission is to help you change YOUR life... and hopefully the lives of your friends and family.

We understand that's a big ask.

But I'm confident that by following our strategies, you will have the knowledge and know-how to improve permanently your memory, concentration, and overall happiness after you complete the 10-week action plan in this book.

In the first couple of weeks, you'll start noticing the effects in various areas of your daily life. You might even feel better than you have in years.

In the last few weeks, you'll notice the brain fog clearing up and the cobwebs disappearing.

The bottom line is: You don't have to struggle with a fading memory, or accept “brain fog” as an inevitable burden of aging. Our brains are *designed* to re-grow at any age, and I can assure you based on scientific data: The power for change is within you.

What Kind of Results Can I Expect?

As you move through our Strategies, be prepared to notice:

- You're more alert and focused
- You have more energy
- You're sharper and faster in conversations
- You're sleeping better and waking up refreshed
- Your physical health is improving
- You're calmer, happier and more confident

What do you say? Let's dive in and get going.



CHAPTER 2

Your Memory and Sleep

"I really don't need much sleep."

"I can't sleep past 5am no matter what time I go to bed."

"It takes me hours to get to sleep."

"I often wake up in the middle of the night and can't get back to sleep."

"I'm always tired."

Does any of these sound like you?

If you're like 74% of Americans, you can relate to at least one of these statements.

Why is no one talking about this dangerous epidemic sweeping the country... that is doing more damage to our brain cells than any other single factor in our daily lives?

Most doctors often don't even ask the critical question, "How much sleep do you get?"

This should be one of the **FIRST** questions any doctor asks.

Worst of all, most people never think to seek *treatment* for their sleeping problems, because somehow we're under the impression that everyone has sleeping problems... It's just a part of modern life, right?

The answer is **NO**. Or at least it should be.

This socially accepted killer is becoming such an issue, the National Center for Disease Control has declared insufficient sleep a national epidemic.

If you need more proof, here's what the National Sleep Foundation found in a 2008 poll^[1]:

- 36% of American fall asleep while driving or drive drowsy
- 29% percent of Americans fall asleep or become very sleepy at work
- 20% have lost interest in sex because they're too sleepy
- 14% report having to miss family events, work functions and leisure activities in the past month due to sleepiness and over exhaustion

Sleep deprivation and interrupted sleep are not a part of "normal" life, and let me state this for the record:

Your brain **WILL** not function properly after extended periods of inadequate sleep.

What Happens In Your Brain When You Sleep?

If you've ever suffered through a sleepless night, you know how rough you feel the next day.

You're emotional, groggy, and probably struggling with negative thoughts you can't control. This is because your brain didn't get the time it needed to do the repair work that keeps you sharp, energized—and alive.

When you sleep overnight, your brain rejuvenates and repairs. It is these periods of sustained rest, without any external stimulation, that allow your brain to give 100% focus on the re-growth and repair of damaged brain cells.

You can think of this as the time your brain "cleans the roads" of the normal cellular trash that accumulates through the day.

Just as street sweepers do their work at night, your amazing brain cleans and repairs itself while you sleep.

Sleep also consolidates and organizes your memories, taking the short-term memories you created during the day, and "formatting" them into sticky long-term memories you can recall for many years.

So when you don't sleep properly, you wreak havoc on your brain.

And it makes sense.

Just imagine if those street sweepers ran out of time, and only got to clean half of the streets in a big city every night. As the days pass, the build-up of trash would get so bad that the streets would become cluttered with indistinguishable junk, and eventually they would become *impassable*.

These streets are your neural networks, a.k.a.:
The information highways in your brain.

What you NEED to know about sleep deprivation is that decades of poor quality sleep—which many of us silently endure—**will *shrink* your brain**.

Without proper sleep, over time the hippocampus, or memory sector of your brain (I like to call it the “hippopotamus”) begins to shrink physically.

Blood vessels shrink.

Your cortex shrinks.

And those “information highways” in your brain... well, they erode like an ancient river through a dried up canyon.

The good news is: 99% of sleep deprivation cases are *treatable*.

Easily treatable.

But NOT with sleeping pills.

My personal experience with sleeping pills made this very clear.

During on of the most stressful period of my life, I found it nearly impossible to fall asleep—and when I did finally sleep it was fleeting, as I tossed and turned all night.

When I couldn’t take the exhausting stress of sleep deprivation anymore, I resorted to over-the-counter sleeping pills. At first, these would completely knock me out for over 8 hours.

But the next morning, instead of feeling refreshed, I’d wake up feeling like my head was in a fog... like I was hung over from drinking (way, way) too much.

Every morning, it would take me a couple hours and at *least* two cups of coffee just to get moving... and even then, the best I could offer my business was half-assed work, as my mind felt like it was moving through mud.

I was out cold for eight hours every night—but the truth is I wasn’t getting any *quality*, restorative sleep.

And, every night, I would go to bed feeling more tired than the day before.

You know that point *beyond* exhaustion where your brain is essentially on mushy auto-pilot? Well, that was me every night...

Swallow the sleeping pill just to shut off my brain... And then wake up feeling even worse.

Around and around I went, night after night. It was a horrible losing battle:

I couldn't "sleep" without the sleeping pill... I couldn't get any *quality* sleep actually to function the next day, let alone feel like myself. You can imagine how this impacted my not just my work, but my relationships.

After six months on this exhausting merry-go-round, I knew something had to give.

I couldn't keep up at work. I couldn't focus for longer than five minutes without getting distracted... just *thinking* took enormous effort.

I was emotional, forgetful, distracted, agitated, anxious... and very, very grumpy.

It turns out that most over-the-counter sleeping pills are only supposed to be taken for 2 – 3 nights in a row; and if taken more often, they can actually *cause* insomnia.

Even worse, sleeping pills can quickly become addictive, and often come with a slew of dangerous side effects. Worse, they should NEVER be taken with alcohol, which is often what people use to help fall asleep.

I had no idea how much I was damaging my brain...

Then, I noticed this cycle of relying on sleeping pills—even though I wasn't really feeling better—was increasing my *tolerance* for the sleeping pills.

I had to take **more and more** just to fall asleep, which made me even drowsier the next day.

Without realizing it, I was creating a deadly "sleep debt", much like being overdrawn at a bank.

With such a build-up of damaged cells in need of repair, my body was demanding more sleep than the usual 8 – 9 hours to do its work.

No wonder I couldn't keep up.

Why Is Sleep So CRITICAL To Your Health?

To help you fully understand the gravity of sleep, let's look at what happens when you fall asleep:

In the morning, when you wake up, the GABA levels in your brain are low. GABA is a chemical that acts as a "stop" sign for your brain signals, which allows your mind to quiet so you can fall asleep.

Over the course of the day, your GABA levels increase, so by the time bedtime comes around, you have enough GABA in your brain to quiet all the brain signals, which allows you to fall asleep.

When you sleep, your brain goes through a series of regular sleep cycles. In a full, healthy sleep cycle, you spend about 70% of the night in a state called NREM (*Non-Rapid Eye Movement*) and the other 30% in a state called REM, or *Rapid Eye Movement*.

During sleep, both your heart rate and brain waves slow down, shifting from the short, spiky waves you experience during the day to long, flattened waves.

In your deepest NREM sleep, your blood pressure drops and your muscles relax. This is a very deep sleep stage, from which it can be very difficult to wake.

REM, on the other hand, is a very active period of sleep, when your brain has shorter, choppy brain waves.

REM sleep is when you dream.

As morning approaches and you're ready to wake up, your body produces more of the stress chemical *cortisol*, to make you alert and ready for the day.

How Much Sleep Do I Need?

Most adults need an average of 7 - 9 hours of sleep a night.

The average American gets 6.

And, we're sleeping an estimated **20% less** than we did just a 100 years ago.

Now one thing I will mention:

About 5% of the population has a gene mutation, which allows them to function well on 5 - 6 hours of sleep a night. If you honestly believe this might be you, I encourage you to get tested.

If you're one of the remaining 95% of us and you're still only getting 5 - 6 hours of sleep, well... trust me:

You're in trouble.

Animals will simply fall asleep when their bodies need it. Humans however, have the capacity to push through on too little sleep... but we're only meant to do this once in a while, generally in life or death situations.

Sleep Deprivation and Memory Loss – Are They Connected? (YES.)

If you're noticing your memory seems to be getting weaker, time to look at your sleep patterns.

WebMD states that:

- “Imaging and behavioral studies continue to show the critical role sleep plays in learning and memory. Researchers believe that sleep affects learning and memory in two ways:
- Lack of sleep impairs a person's ability to focus and learn efficiently
- Sleep is necessary to consolidate a memory (make it stick) so that it can be recalled in the future. “[2]

Two of the most common sleep disorders today are Obstructive Sleep Apnea and Insomnia—and both deliver huge brain shrinking damage.

Obstructive Sleep Apnea (OSA) – Signs and Symptoms

Obstructive sleep apnea (OSA) is when your airflow is blocked and you stop breathing for a period of time during the night. This non-breathing period can last from a few seconds to as long as 5 minutes... and the whole time your brain is starving for oxygen.

Have you ever woke up gasping for air, or seen your partner do this during the night? If so, you're dealing with OSA, and need to get that addressed.

Another sign of OSA is heavy snoring, often followed by a few moments of quiet and then a gasping for air. Once again, this indicates periods when you're not breathing.

Obstructive Sleep Apnea is one the most documented brain shrinking illnesses today, and is suspected to be connected to memory loss and Alzheimer's.

People with OSA are chronically tired, foggy, anxious and low on "brain power". They suffer from memory lapses, are often slightly (or severely) depressed.

In one study, 91% of people who suffered a severe stroke also had OSA.

As many as **80% of OSA sufferers today remain undiagnosed**.

Why? Because most people don't seek treatment for sleep.

Do You Have Sleep Apnea?

If you're more than a few pounds overweight, you have a seriously increased risk of suffering from OSA.

Other traits that increase your risk for OSA include a large neck size, as well as smoking.

Obstructive Sleep Apnea can be identified with a sleep study and used to determine if you need treatment. 5 episode per night is considered acceptable, while 15+ episodes is considered critical to your health.

Here's a mnemonic to help you determine if you need to seek treatment.

Ask yourself the questions of: **STOP BANG**

Snoring – Do you often snore loudly?

Tired – Do you often feel tired or groggy?

Observed – Has your snoring and grumpiness been observed by someone else?

Pressure – Do you have high blood pressure?

BMI – Do you have a body mass index greater than 35%?

Age – Are you older than 50?

Neck — Do you have a neck size larger than 17 inches?

Gender – Are you male?

If you answered yes to three or more of these questions, you may be at risk for OSA and need to get checked out.

Now let's look at insomnia.

Insomnia, Memory and Learning Problems

“I don't have insomnia, I just can't sleep more than 6 hours.”

“I wake up and can't get back to sleep.”

These are the first things most people tell me about their sleep.

These are SERIOUS problems.

Dr. Fotuhi talks about a patient named Greg, a high-powered attorney who regularly only slept four hours a night.

“It's not a problem”, Greg would say.

But the truth emerged: This was a HUGE problem.

What they found was that Greg's memory had started to slip. Engrossed in work, he started forgetting life plans like a dinner date with his wife.

He started doing things like suddenly remembering he'd left his coffee cup on the roof of the car... after he just pulled on the freeway.

He thought, “It can happen to anyone.” But it was beginning to happen a lot, and in more dangerous ways.

Insomnia becomes an issue when you don't get enough sleep, or your sleep is regularly interrupted.

If you've been experiencing these symptoms for more than one week, you have insomnia.

How Dangerous Is Insomnia?

Stress, depression, medications, caffeine, alcohol, chronic pain, and inadequate nutrition can all cause insomnia.

And, insomnia is also one of the main causes of *depression*.

The common effect among all of these is the shrinking of your brain.

Fewer than 6 hours a night of sleep is commonly associated with hypertension, chronic pain, and inflammation, all of which affect the brain.

Insomnia also increases your risk of stroke by 51%.

No other way to put it: This is HUGE!

There is also a **strong correlation between sleep deprivation and weight gain**.

When you think about it, this makes sense.

If you're tired, just like when you're drunk, you only have 20 - 30% of your normal "fighting strength" willpower. Your body senses it's low on energy and cravings start to form. You need rest... or is it food?

When you're running on fumes, you can't make clear decisions.

And you certainly can't say no to that donut. Your body needs energy, right?

One study showed that just a single night of inadequate sleep consistently resulted in increased food cravings the next day.

In fact, sleep deprivation is so critical that Dr. Fotuhi recommends OSA and insomnia screenings for *everyone* over the age of 50 who snores.

He believes these screenings are MORE important than getting a colonoscopy or a mammogram at this age.

So, if you think you might be suffering from sleep deprivation (and I suspect you wouldn't still be reading if you didn't), you need to make some changes to start repairing the damage you're doing—and have done—to your brain.

That said, I have good news for you:

Nearly all sleep disorders can be treated, and the damages to your brain ARE reversible.

Here's proof you can regenerate your brain:

One study on OSA conducted by an Italian research team showed that just after three months of treatment, the patients' FMRI (Functional Magnetic Resonance Imaging) scans revealed that their brains now looked very similar to non-OSA patients.

- This reason this is significant is because at the beginning of the research, these same patient's brains were as much as 18% *smaller*.

That's 18% brain growth in just three months of quality sleep!

So How Do I Fix Sleep Problems?

The first area to address is your lifestyle. Some general rules:

- **If you drink caffeine after 3pm**, cut that out. Enjoy your morning cup of joe, but make a point to call it quits in the afternoon, and replace it with other forms of energy boosts like a brisk walk around the block or some ice cold water. (Double benefits!)
- **If you drink more than two alcoholic beverages nightly**, cut that out as well. Alcohol may help you fall asleep for a couple hours, but it also disrupts the sleep cycles your brain needs to *stay* asleep and do its cellular "street cleaning".
- **If you work before bedtime**, put a HARD STOP to work at least one hour before bed. Working, particularly on your computer, keeps your brain active and stimulates you to stay awake.
- **If you watch the news before bed**, another thing to

stop. Again, this triggers your brain to stay in active processing mode, vs letting those natural GABA chemicals do their thing.

- **If you smoke**, no easy way to put it: Time to QUIT.
- **Check your weight.** Are you overweight? Very often, sleep apnea and insomnia completely go away on their own when overweight sufferers shed the extra pounds.

Most of all, remember:

Whatever your source of insomnia might be or however long it's been going on, you can start repairing and re-growing your brain as soon as you start getting a good night's sleep.

The next step is to start healthy sleep habits.

On the following page, we have your 10 Week Strategy to Great Sleep. This plan is a step by step, week by week guide. You get to choose what is right for you and by tracking your progress, it will be clear what is working and what isn't.

Remember, everyone is different so be patient with yourself and keep at it. Sleep will come.

Reducing a sleep deficit can take 4 - 10 weeks before your brain can achieve full benefit and form new sleeping habits.

And trust me: The results are real, and they are *worth* it.

It's not the time you have to live, it is the energy you put into your time that counts.

Good sleep = Great energy = Extraordinary life.

Sleep Action Plan:

Pick 2 actions from the following list to try in Week #1:

Pick 2 actions from the following list to try this week

- Drink a cup of caffeine-free tea 1 hour before bedtime
- Watch 1 hour less of TV
- Don't watch the news
- Take all electronics out of the room
- Have sex before sleep
- Go to sleep 15 minutes earlier than usual
- No Alcohol
- Sound machine (or soft music)
- Sleep Meditation
- Stop any high brain activity like work 1 hour before sleep
- Breathe deeply three times. Wait 1 minute. Repeat five times
- Muscle Relaxation: Squeeze every muscle group starting with the toes and moving up your body for a count of 10 each muscle group
- Don't lie there for more than 20 minutes if you can't sleep. Get up. Make some tea, watch a YouTube video of a river with soft music or read a boring book (nothing interesting). Recent research has even shown playing a simple video game like Tetris will alter your brain waves enough to allow you to sleep.

Sleep Action Plan Week 1				Date:
Action Step #1				
Action Step #2				
Day	A: Number of Hours Slept	B: Ease of waking up in the morning on a scale of 1-10. 1 being very difficult and 10 being very easy to get out of bed.	C: Number of times you woke up and couldn't fall back to sleep for more than 5 minutes	A+B-C = Your Total Score
Day #1				
Day #2				
Day #3				
Day #4				
Day #5				
Day #6				
Day #7				

Improvement Score:

Day #1 Score: _____

Day #7 Score: _____

Average Score: _____

Ending Score higher than 17?

Yes

Congratulations. Keep doing what you're doing and come back to this exercise if you ever fall below 17.

No

Go to Week #2: Try two more action steps and start over. Keep adding 2 Action Steps every week for the ten weeks. If you still haven't achieved at least a 17 in that time, please consult your doctor.



CHAPTER 3

Your Brain on Food

When you think of food, you probably think of that dreaded four-letter word: DIET.

Or maybe you think of fuel for your body... Or a source of happiness (or frustration!) in your life.

What you probably *don't* think of is a powerful influence that affects your emotions, your personality, the quality and quantity of your memories, and even WHO you are as a person...

But surprise: What you eat directly impacts all of the above.

This may sound hard to believe, but it's true. Let me explain...

Your Brain: A Calorie Hungry Machine

Your brain represents only 2 – 4% of your total body mass, which is about 2 – 4 pounds for the average person. However, your brain also consumes about 20% of all the energy from your food.

I'll say that again: Your *brain* consumes 20% of the food energy you consume.

Plus, the *type* of fuel you give your brain through food and supplements have a critical influence on how you think, feel and experience life.

You—and your entire human experience—actually ARE what you eat.

As Dr. Fotuhi put it: *What you eat will re-shape your brain... for better or for worse.*

So, once again, we need to put our brains first when it comes to improving our health and happiness.

Which nutrients does my brain need... And how much?

There are certain nutrients your brain needs, nutrients that when consumed in higher doses increase performance. And then there are foods your body doesn't want.

Let's start with what your brain needs each day: Fuel.

To function properly and consistently repair cells, your brain needs the energy you get from food. This is a no-brainer (ha ha, pun intended).

However, if you go on an extreme calorie restricting diet, not only are you restricting the fuel you're giving your body—you're also *restricting the fuel you're giving your brain*.

Why is this dangerous?

While your intentions may be in the right place, you may effectively be starving your brain, which leads to brain fog, mood swings, anxiety, slower and more difficult learning, feeling unmotivated, etc. And most dangerously, malnutrition over prolonged periods can even physically shrink your brain.

Calorie restrictive diets are NOT the way to go.

Let's say you're on a strict calorie restrictive diet that limits you to 70% of the actual caloric fuel you (and your brain) need on an average day. This means you're not getting 30% of the vitamins, minerals and energy you need just to operate at baseline... which equates to about 6% direct malnutrition of your *brain*.

Here's an example of what this feels like:

Day 1:

You wake up and eat a small (hopefully) healthy breakfast with a vegetable, a small fruit smoothie and an egg. By mid-morning you're hungry again, but you're determined to lose this weight and your willpower is strong. (Grrrr!)

By the time lunch rolls around, you're a little on edge

and have been unusually short with your co-workers. You decide a light chicken salad is just what you need. This boost of food spikes your insulin levels, which fires the dopamine receptors in your brain, and you immediately feel much better. (Ahh...)

However, the small “healthy” salad wasn't enough to sustain you for very long; and because you were depleted coming into lunch, your body burns through that salad VERY quickly.

By 3:00 pm, you're absolutely starving again. You have an annoying headache and are struggling through the same tasks you normally breeze through every day. But darn it, you're DETERMINED to lose that weight so you're sticking with it. You want to feel proud of yourself, right?

By the time you get home, you have one thought on your mind: FOOD!

You're flat out grumpy and not interested in your family's usual dinnertime stories about the day because—why can't they understand?!—You don't have the energy for their chatter. You just need to eat.

You allow yourself to have a small but “healthy” dinner of fish and asparagus, which calms you for another two hours, and eventually you lumber off to bed early, instead of spending time with your family. Because if you're sleeping, you won't be thinking about food.

However your mind is still awake, so you toss and turn

with frustration for the next couple hours. When you finally get to sleep, it's a long, bumpy ride through the night as hunger keeps knocking you awake.

Day 2:

The next morning, you roll out of bed feeling groggy and tired, with less willpower than the day before. Frankly, you just don't feel like talking to anyone right now.

You have that morning smoothie and an egg. Today you double your cups of coffee to help curb the cravings and fight the fatigue. However two hours later, the caffeine wears off and your head is pounding like a hammer.

Your willpower is now officially down to around 40% of its peak state... and the donuts someone brought into work suddenly developed voices that are calling your name... Loudly and repeatedly.

Justification swoops in: You've been eating well, so just one little treat won't hurt, right?

After the sugar rush passes, you're feeling worse than ever. With your willpower in the red zone, you stuff your face at dinner... and figure you'll just start over tomorrow.

Sound familiar?

It's called setting yourself up for failure.

We've all been there. Starving your brain makes you angry, short tempered, dull and emotional. And frankly, it never gets you to your goal.

Do you know where the willpower comes from to stick with a healthy practice? It comes from feeding your brain the *right fuel* in the *right amounts* to stay strong.

On the topic of vegetarian or vegan diets... Well I'm not going to take up the argument about whether you should or shouldn't go that route. What I will say to is that vitamin B-12, which is primarily found in meat, fish and dairy products, is **CRITICAL** to brain health. (B-12 is also found in dirt, but I don't plan on eating dirt anytime soon.)

Why is B-12 so important?

B-12 helps transform the food you eat into the usable energy form your body and brain need to perform.

Interestingly, up to 40% of older adults have B-12 deficiencies, which leads to mental foggy and memory problems.

B-12 deficiency can also lead to other devastating but common conditions, including, depression, anxiety, confusion, disorientation, hallucinations, and schizophrenia.

Eventually, long-term B12 deficiency can lead to permanent nerve and brain damage, brain atrophy, dementia and Alzheimer's.

(There are volumes of research on this topic)

So this should go without saying: If you are vegan or vegetarian, or any adult over age 40, you should be watching, and most likely supplementing, your vitamin B-12 levels.

And this is just ONE small example of the critical role food plays in your brain health.

There are countless other examples, but I want to focus on one particular killer that is extremely dangerous for your brain: Sugar.

WebMD even asks the question: “Is sugar worse for you than say, cocaine?”

When up to 80% of all foods we buy in a grocery store contain added sugar, it can feel like a losing battle.

Not only is sugar proven to be highly addictive—meaning the more you eat, the more you *want* to eat—we’re finding that over time, but sugar can also contribute to the shrinking of your hippocampus (the memory sector of your brain), which is a hallmark symptom of memory problems.

How Does Sugar Affect Your Memory?

Research out of the University of California, Los Angeles, suggests that sugar forms free radicals in the brain and compromises the nerve cells’ ability to communicate.

This can have serious repercussions in how well we remember instructions, process ideas, and manage our moods, says Fernando Gómez-Pinilla, Ph.D., author of the UCLA study.

In the short term, you’ve probably seen how sugar can mess with your emotions and adrenaline surges.

So something to consider:

Your memory issues may NOT be age-related. It might be what you’re eating.

What happens when you eat sugar?

When you eat sugar, your insulin spikes, which briefly increases your dopamine levels. (Think of dopamine as the “happy chemical.”) For a short period, you feel happy and energized... perhaps a little hyper.

But this high quickly wears off (i.e. NOT a stable source of energy), and eventually you come crashing down. This familiar “sugar crash” produces the stress chemicals *adrenaline and cortisol*, which can leave you feeling anxious, moody, exhausted and even depressed in the aftermath.

How MUCH sugar is safe?

The USDA recommends staying under ten teaspoons (40 grams) of added sugar a day. This amount is about the equivalent of a bagel or one cup of your typical non-fat yogurt—which has a tendency to be surprisingly high

in sugar. (Check the label of the yogurt in your fridge and see what I mean.)

Now don't worry: This daily sugar limit doesn't include natural fruit and vegetable sugars in their pure forms like an apple.

But DO avoid those mocha lattes at all costs.

Personally, I think sugar is the real reason gluten-free diets tend to work so well for many people in terms of improving overall body *and* brain health. It's not because they're removing the gluten. (Only 1% of the population has Celiac disease, which is the case when the body can't tolerate gluten).

I believe it's because most foods that contain gluten also contain a lot of added sugar: Bread, baked goods, etc. Removing the sugars alone can have a massive impact on your mood, memory and clarity of thought.

My Movie Recommendation:

To learn more about the effects of sugar on your brain and body, I highly recommend watching *That Sugar Film*, a documentary available on iTunes. In the vein of *Supersize Me*, this film follows a man who doesn't normally eat added sugar... who then experiments with eating nothing but processed foods for 60 days, including popular products with added sugars that are marketed to be "good for you". (Think low-calorie, low-fat foods.)

The results are alarming. Check it out on your next movie night.

We also know though countless studies that obesity, high cholesterol and diabetes can shrink the size and performance of your brain.

So if you want to cut the risk of memory loss, the first and fastest thing you can do is educate yourself on brain-healthy foods vs brain-shrinking foods— and immediately remove the dangerous foods from your diet.

The Best (and Worst) Foods For Your Brain

What are the WORST foods for your memory and cognition?

Salt can be a big culprit, mainly due to excess. Salt is an essential mineral we need to survive; however the USDA recommendation is just 1,500 mg a day.

The average American eats 3,400 mg/day, primarily because our modern society tends to consume a lot of processed and packaged foods. These are the worst when it comes to unknowingly consuming extremely unhealthy doses of salt—which by the way, also increases your risk of stroke.

Trans fats are also dangerous to brain health. Typical trans fats are often found in fried foods, margarine, shortening, non-dairy creamers, ice cream, cake mixes,

microwave popcorn, ground beef, frozen dinners, cookies and crackers.

The BEST Foods For Your Brain

To boost your memory, mood and cognition, you want to focus on a “healthy brain” diet.

This type of diet involves eating foods that support the growth of new brain cells, as well as taking a quality daily supplement with the *right* quantities of specific nutrients, to give your brain the building blocks it needs to stay sharp.

One of these nutrients is called **DHA**, found in Omega 3 fatty acids, which helps reduce inflammation in the brain.

Now there is some controversy on whether or not Omega 3's are heart-boosting or help with reducing cancer risk. However, there is no controversy about the benefits of adding DHA to your diet to improve your brain health—including the quality of your memory and cognition.

Many researchers have found that people with behavioral problems, children with ADHD and people suffering from Alzheimer's disease have lower than normal DHA levels.

For example, in Gothenburg, Sweden, scientists conducted a study on over 9,000 students. They found that children who ate one serving of fish per week (a great source of DHA) did 15% better than students who

ate less than one serving of fish per week.

I suggest you aim for 1,000 mg of DHA each day through your food and/or supplementation.

Best Diets For Memory & Learning

As far as diets go, most scientists recommend the Mediterranean diet as a great plan to give your body and brain the best quality foods. As a bonus the diet even promotes weight loss.

Need motivation? Here's a fun fact for you:

Those who follow a healthy diet combined with exercise have a whopping 65% LOWER chance of getting Alzheimer's disease.

Here's a Good List of Delicious Brain-Healthy Foods:

- Olive Oil
- Garlic
- Peas
- Blueberries
- Green Tea
- Kale
- Nuts and Seeds
- Fatty Fish like salmon, trout, mackerel, herring, sardines
- Tomatoes
- Pumpkin Seeds
- Blackcurrants
- Broccoli
- Sage
- Eggs

This is obviously not a complete list, but it is a good start!

All of these foods are great for children and adults; for studying, improving memory, and just feeling great all-around.

Warning! A “Healthy Diet” Is Not Enough...

No matter how carefully you choose brain-healthy foods, one thing to understand is that it's almost impossible to get all the daily vitamins and minerals you need from food alone these days.

Why?

Today's food contains a fraction of the nutrients it used to provide just 50 years ago. For instance, today's tomatoes contain about 50% less nutritional value than the tomatoes our grandparents ate.

I consider myself a very healthy person—and very educated on this topic—but I still test my nutritional intake twice a year to determine how much I get from food alone.

Here's what I do:

Every six months, I measure ALL of my food intakes for two weeks, down to the micronutrient level.

(Luckily, there are many free apps and websites today that will help you track this. Two of my favorites are Cronometer if you're looking for a great food-tracking app, or if you prefer a website, I've had great experience with <http://nutritiondata.self.com/>.)

Now here's what I've found every time:

No matter how hard I work to vary my diet, I always end up short on my metals, such as iron, copper, zinc and magnesium. I also end up short on my B vitamins and Vitamin E.

Until I can get everything my brain needs from food alone, this continues to prove I NEED to be supplementing my diet each day, to think and feel as great as I know I can.

How do you know which supplements to trust?

There is a handful of reputable supplement companies out there, and unfortunately, a scary amount of big name companies selling low-quality products made of mostly cheap fillers.

To help you find a good product (that won't waste your money), you can read my blog post on How NOT to Get Ripped Off By Supplement Companies (<http://simplesmartscience.com/blog/how-to-not-get-ripped-off-by-supplement-companies/>)

Your Brain Diet Starts Today!

If you want to see how the right foods and supplements really DO affect your mood, memory and cognition, try tracking your food intake for the next two weeks. Start today and find out what you need to add or subtract from your diet.

(Use one of the free apps I mentioned above, or whichever service you like best.)

Then, see what happens when you add DHA and our MindBoost Day and MindBoost Night (found at SimpleSmartScience.com) to your daily routine (great sources of B-12 and other specific brain-boosting nutrients)... And see for yourself if you notice the difference.

I can assure you: You're in for a pleasant surprise.

Food Action Plan:

Pick 2 actions from the following list to try in Week #1:

- Add a blended smoothie to your day: 1 cup of water, three veggies of your choice (carrot, spinach & broccoli are my favorites) and 1-2 servings of fruit (1 banana, frozen fruit etc). Add anything else like ginger, lemon, etc. for flavor
- Buy a good DHA supplement
- Cut out one sugary drink a day
- Cut out one dessert a week
- Have 1 cup of coffee less a day
- Add a small handful of nuts (almonds, cashews, etc.) 2x a day.

- Buy Simple Smart Science's MindBoost Day and MindBoost Night for brain health nutrients
- Cook with olive oil or coconut oil instead of butter or margarine (get rid of the margarine all together in fact).
- Take the top piece of bread off of your sandwich or burger
- Choose a salad over fries
- Have the salad dressing on the side (or skip it all together)
- Eat 5-6 smaller meals a day instead of 3 big meals.
- Add more lean protein (fish, chicken, pork, eggs, etc.)
- Add one more serving of fish a week
- Keep your alcohol intake to 2 drinks (woman) to 3 drinks (men) a night.

Food Action Plan Week 1				Date:
Action Step #1				
Action Step #2				
Day	A: BMI (Weight in Pounds / (Height in inches x Height in inches) x 703	B: Daytime energy level on a scale of 1-10 with 10 being the most energy.	C: Number of bowel movements	A+B-C = Your Total Score
Day #1				
Day #2				
Day #3				
Day #4				
Day #5				
Day #6				
Day #7				

Improvement Score:

Day #1 Score: _____

Day #7 Score: _____

Average Score: _____

Ending Score higher than 17?

Yes

Congratulations. Keep doing what you're doing and come back to this exercise if you ever go above 16.

No

Go to Week #2: Try two more action steps and start over. Keep adding 2 Action Steps every week until you are below 16. If you still haven't achieved at least a 16 in 6 months, please consult your doctor.



CHAPTER 4

Increase Your Memory by 25% in 4 Months with Exercise

If you've exercised before, you know how good you feel after the workout.

Well, you may be surprised to learn that exercise isn't just good for your heart and your physical appearance... Exercise is **CRITICAL** to your brain health.

In fact, exercise is one of the BEST tricks for memory improvement.

Why? Because physical activity naturally stimulates new brain cell growth.

Brain Mapping and Exercise

For a long time, researchers have noted that exercise reduces the risk of dementia in the elderly, but

only in recent years have we begun to shed light on exactly *what's going on* in your brain when you exercise.

In 1999, Neuroscientist Dr. Gage and his team discovered that physical activity dramatically increases the production of new neurons, a.k.a.: the rate at which your brain can grow new cells.

In fact, exercise specifically helps grow the area of your brain called the *hippocampus*, which is the part of your brain where you create and store memories. It is effectively the functioning space where all your memories live.

I like to refer to this area as the “hippopotamus,” as it's the big dog in town when it comes to your memory.

But guess what?

The ‘hippopotamus’ is one of the **FIRST** places in your brain that shrinks with age. And just as you might imagine, a smaller hippopotamus equals not just limited memory *recall*, but also a limited *quality* of memory.

Is exercise proven to help brain cells regenerate? (YES.)

In another study by the University of Pittsburgh, Assistant Professor Kirk Erickson took 120 healthy adults, aged 60 to 80, and split them into two groups.

The first group walked briskly three times a week during this study, while the other group did zero physical exercise. All participants received MRIs at the beginning and end of the study, as well as blood tests for a brain chemical that indicates the growth of new brain cells.

Over a one-year period, the **participants who walked three times per week saw their hippocampi grow by 2%.**

Considering the hippocampus shrinks on average of .05% a year, this means **these study participants walked off FOUR YEARS of brain aging!**

On the other hand, the group that did zero exercise saw their brains *shrink* by 1.4% over the same period. And when it came to memory functioning, the walkers also performed better.

Conclusion? Walking literally re-grew their brain.

Brain-Boosting Benefits of Exercise – At Any Age

It doesn't matter how old you are or what level of health you're at now. Even if you've been inactive for most of your life, starting an exercise routine at any age is NOT futile.

Most incredibly, there are NO medications we know of that can re-grow brain cells like our bodies are naturally wired to do.

This phenomenon doesn't just benefit the elderly.

Children who are physically fit have larger hippocampi than their sedentary peers— as much as 12% larger. They also perform better on memory tests.

To top it off, the effect of physical activity can be immediate. Multiple studies have shown that students who did just a short period of intense exercise before taking a test—say 50 jumping jacks—increased their test scores by 10%.

What about adding intensity and weight training?

In one study at the Canadian Cardiovascular Congress, participants added high-intensity interval training and weight lifting to their current workouts. In just four months, these participants showed a **10-25% increase in short-term memory and cognitive processing speed.**

Add to all of this the fact that exercise reduces the risk of stroke by up to 50%... And you have to admit: This is NO small impact!

Suffice to say: You need physical activity in your life to create AND enjoy all those wonderful memories for many years to come.

How To Improve Memory & Concentration Through Movement

Here's how to start.

(Note: If it's been a long time since you've exercised, check with your doctor for suggestions before starting a new exercise regime.)

If you've never been an exerciser or if it has been a long time, start slow.

A great place to start is by taking 10-minute walks, three times per week. Just enjoy the fresh air! Then, keep adding 10 minutes to your walk each week, until you get up to 30 – 60 minutes. Also, try adding 10 minutes of resistance training two times a week using light hand weights, or simply your body weight.

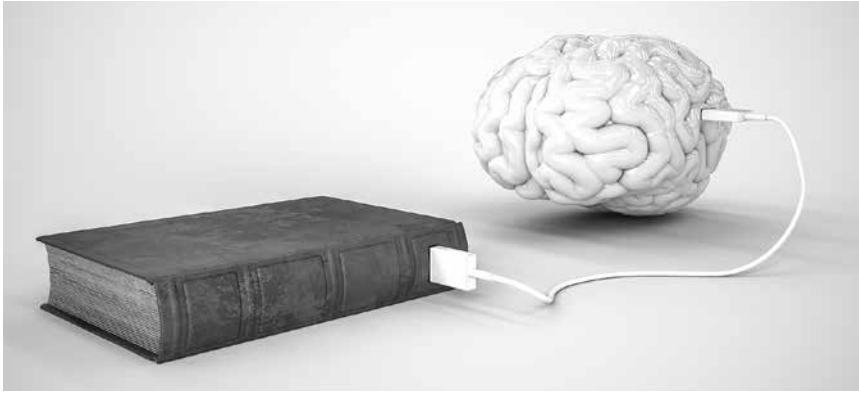
If you exercise occasionally, we recommend brisk walking or jogging three times a week for 20 minutes. Add 10 minutes each week until you get to 30 or 45 minutes of brisk movement, three times a week, and gradually increase the intensity until you get to 60-80% of your maximum heart rate. Meanwhile, add 15 minutes of resistance training or weight lifting twice a week... and pay attention to any changes in your memory, concentration, sleep quality and overall sense of well-being, not to mention the compliments you might start getting with all that movement. ;) If you're not a walker, any aerobic activity like swimming or biking is a great substitution.

If you already exercise regularly, be sure to keep upping the intensity! Also, try including high-intensity

interval training and weight lifting at least 2-3 times week.

Anyone can re-grow brain cells and improve memory and concentration, no matter where you start!

Your Mission: Movement for Memory!



CHAPTER 5

The Final Word

Congratulations on taking the first step towards a better memory by getting this far in the book.

So, now that you've invested the time reading our Brain Owners Owner's Manual, we think there is no better time than now to take action.

If you start today, you'll set yourself on the path towards increasing your memory, sharpening your focus and boosting your energy levels.

You will also add the greatest protection against horrible brain diseases like dementia and Alzheimer's Disease.

Clearly, you understand that your overall health and well-being starts with having a healthy brain. A brain free of toxic build ups and a brain supported with all the nutrients it needs to perform at its best.

If your brain is healthy, you are healthy.

But, we also know some people will read this book and NEVER take action.

Let's be clear. If this is you, I'm sorry to say that you've wasted your time reading this book.

First of all, you have to be consistent, week over week, in order to improve your memory.

You may have decades of damage was done to your brain and your memory. Your brain isn't going to repair itself overnight. It will regrow if you are patient and give it time.

Second, just like you can't 'feel' calcium strengthening your bones, you won't be able 'feel' your brain cells re-growing and repairing.

Over time, usually at least 3-6 months, your brain will be cleaning out all of those dirty roads that haven't been swept clean in ages. You will then start to feel more focused, have more energy, and enjoy a much-improved memory.

This is what a healthier, bigger brain gives you.

But how do you know it's really working if you can't 'feel' it right away?

Easy.

Measure your results.

At the beginning of this book, we asked you take Dr. Fotuhi's Brain Fitness Calculator test and write down your score. You should still have the piece of paper folded in this book.

Well, we encourage you to take the test every 30 days in your brain-saving journey to see how you improve.

We also highly recommend taking our free Memory Test at: www.simplesmartscience.com/memory-test

I would also recommend doing this test once every 30 days to track your progress.

Remember, you may not be able to 'feel' your memory improve by 10, 20, even 30%, but your results on these tests will prove it.

Be sure to write down all your test results. You can even send them to us at support@simplesmartscience.com and we'll keep track of them for you.

My brother, Russell and I and our entire team at Simple Smart Science are here to help you improve your life through better brain health.

You've taken a major step towards protecting your brain against long-term brain damage and improving your memory, focus and energy.

Just imagine six months from now forgetting less and less every day...

Imagine having more energy to get through your day – feeling more alive...

Imagine being able to recall information faster and easier...

And this is just the first step. There are many other things you can do once you have accomplished these strategies.

When you're ready, you can take it to the next level by reading my full book on brain health called, *The 9 Pillars of Brain Health: Improve Your Health and Your Life By Putting Your Brain First* (available on Amazon November 2015).

In the meantime, we are always here for you to answer questions, be your cheerleaders and have your back. Email us at support@simplesmartscience.com anytime, day or night or call us at 1-888-503-2911.

Congratulations again!

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June 2012 Study by the Canadian Cardiovascular Congress: High-Intensity Training Boosts Cognitive Function

Published January 2012 in the Proceedings of the National Academy of Sciences. After one year of exercise, hippocampus region was bigger Kirk Erickson, Ph.D., assistant professor, psychology, University of Pittsburgh; Gary Kennedy, M.D., director, geriatric psychology, Montefiore Medical Center, New York City; Jan. 31, 2011, Proceedings of the National Academy of Sciences, online

Published May 2015 Edition in the Journal of Physiology by Fernando Gomez-Pinilla, a professor of neurosurgery at the David Geffen School of Medicine at UCLA and a professor of integrative biology and physiology in the UCLA College of Letters and Science – “Eating a high-fructose diet over the long term alters your brain’s ability to learn and remember information. But adding omega-3 fatty acids to your meals can help minimize the damage”



Julia Lundstrom is a brain health expert. She started Simple Smart Science with her brother in 2013 in order to spread the word about how important brain health is. Having experienced her own brain health issues, she

made brain health her life focus. Now, she's helped thousands of people improve their lives from their brains on down.

