

# Emotional Memory Management: Positive Control Over Your Memory (Part 1)

By Dr Joseph M Carver, PhD



Every second we are alive, our brain functions. At a very basic level it maintains our breathing, our blood flow, our body temperature, and other aspects that allow us to stay alive and thinking. Emotional Memory Management, or EMM, is concerned with the thinking and memory part of brain functioning — and how we can use it to lead happier lives. This article by our Consulting Clinical Psychologist Dr Joseph M. Carver offers a non-technical look at emotional memory and provides practical tips which can help you establish positive control over your emotional memory. This article is divided into several parts.

Every second we are alive, our brain functions. At a very basic level it maintains our breathing, our blood flow, our body temperature, and other aspects that allow us to stay alive and thinking. Emotional Memory Management, or EMM, is concerned with the thinking and memory part of brain functioning. Almost every aspect of daily functioning is directly related to our memory. As you read this document, your brain recognizes words and provides definitions as you read — pretty fast operating when you think about it! While this discussion is not concerned with reading or word-memory, it is concerned with the manner in which the brain pulls memory files, makes those files, and how those files influence our daily life.

The following discussion is based on psychological and neurological research, combined with ongoing theories regarding memory, thought

control, and therapy/counseling. Several theories and the results of research have been combined by the author in a manner which allows the practical and daily use of advanced knowledge on topics of memory and brain functioning. As research in this area continues, the author anticipates new, neurological definitions of previously-labeled psychological concepts such as "the subconscious" or the various defense mechanisms.

While the underlying theories are very technical, the concept is presented in a nontechnical manner. After reading this information, you are encouraged to practice the techniques, be curious about how your file system works and observe it in operation, and make the most of the new knowledge and understanding available.

## **Introduction**

A psychologist does not need to inform individuals about memory, we all know what memory is. Memory allows us to recognize faces of old classmates, remember old songs, remember good times and bad times, and remember important information about events/experiences in our life. Much like a modern-day computer, the brain stores memories in a system of files. In the past, these files were thought to contain only information or data, much like the files in an office contain patient information or file in a computer contains words or numbers. As science advances, we are beginning to know more about the brain and how it stores memories.

Recent studies in psychology and neurology tell us that the files contain not only data/information, but also emotions. In a manner that is still partially unknown, the brain has the ability to store not only memories but emotions as well — as they occurred at the time the memory was made.

Memory files thus contain two parts, the information about the event and the feeling we had at the time of the event. Graphically put:

Memory file = Information + Feelings at the time

## **How Memories Are Made...**

The brain has specific areas in which information is stored or that operate certain areas of the body. The ability to tap the left forefinger is located in the right side of the brain for example. The left side of the brain contains language capability while the right side contains our ability to view objects in space. Memory for faces is located in the right side of the brain while the name of the individual is located in the left side of the brain. This is why we can recognize an old school mate almost immediately but

the brain may require several seconds to obtain the name. If we are anxious, this impairs recall, and the name won't come to us for several minutes after the recognition.

The brain contains multiple memory systems. Remembering how to ride a bicycle, known as procedural or implicit memory, involves a different memory system than remembering the year Columbus discovered America, known as declarative or explicit memory. Studies tell us we can have two types of memory for the same situation, especially if the situation/experience is one associated with strong emotions. For a single experience (traumatic event, good event, emotional experience, etc.) we can have an explicit memory — a memory of the details of the experience — and an implicit memory, a memory of the emotions connected to the experience. Implicit memory has also been called “emotional memory” because it contains the memory of the physiological response at the time of the experience. This physiological response may include increased blood pressure, higher respiration, muscle tension, anxiety, fearfulness, and other reactions associated with fear, terror, fright, or even joy.

In neurological studies, the memory for details (explicit memory) has been linked to the brain structure known as the hippocampus. Memories made by the hippocampus are very much under our conscious control, as when remembering the words to “Jingle Bells” or our birthday. Emotional or unconscious memories are linked to the brain structure known as the amygdala. Some of these unconscious (out of our conscious control or not purposefully remembered) memories are procedural, as when the brain memorizes how to ride a bicycle — you don't have to think about it, you simply hop on and ride away. Other emotional memories are a record of the physiological/emotional response we have experienced during an event.

When we experience a very emotional event, the brain records not only the details of the experience (where we were, when, who was there, what

happened, etc.) but the emotions we experienced at the time as well. The entire memory of an emotional event (an assault, an automobile accident, a wedding, death of a loved one, a combat experience, etc.) is actually remembered by two systems in the brain and stored in two separate areas of the brain.

When we remember horrible or traumatic events, the brain often remembers both the details and emotional memory at the same time. If we remember the details of being assaulted, we will also experience the feelings we had at that time — the increased heart rate, fearfulness, panic, and desperation.

As we will soon review, the brain has the ability to remember the details and the emotions both on purpose and by accident. The brain also has the ability to remember one part of the memory without another part surfacing. As we go through life, the brain may also have an experience that prompts an emotional memory but does not bring up the details of the experience.

Detail memory will often see someone at a distance and offer a “best guess” as to their identity. As the person moves closer, the “best guess” offered by the brain may be true or false. Emotional memory works the same way, looking at a current situation/experience and offering a “best guess” by remembering a previous emotional situation. This is the reality of [Post-Traumatic Stress Disorder](#) (PTSD) and emotional trauma. We may emotionally relive a combat memory when we hear a car backfire or emotionally feel as if we are being assaulted if someone jokingly grabs us from behind.

It is hoped that this article will explain how emotional memory works and how it can be managed for those who are haunted by the experiences of their past.

## Daily Memory

Throughout the day, we experience a variety of good, bad, and in-between experiences. A specific memory area of the brain will hold memories for about five days, to see if they are important. Memories that are not important are usually “dumped” or erased after the five day waiting period. These erased memories can never be recovered. As an example, we don’t remember how many times we turn on a light unless it shocks us or blows up.

We can store and create memory with data only, as when memorizing spelling words or learning math. The brain will memorize with frequent repetition or constant use. However, if a memory file containing only data is not frequently used, the memory slowly fades away. Examples: 1) Can you calculate square root by hand? 2) Do you remember the names of all your high school teachers or classmates? In the second question, chances are you can remember those who also have an EM file!

Most of us cannot remember our many trips to the grocery store or service station. However, we will always remember times which have a good or bad value such as the time a store was robbed when we were there, the time an old lady threatened us over a can of green beans, or the time we spilled gasoline all over our clothes in one of those self-serve pumps. We don’t remember washing our car unless that spray wand at the car wash facility got loose and just about gave us a skull fracture. In short, if a daily memory does not have a strong good or bad emotional value, it is faded out.

As years pass, we build up quite a file system. We build up a collection of good memories and bad memories. Our brain has the ability to pull these memories at the drop of a hat — almost instantly. As an example, read the following questions and watch how fast your brain pulls the file:

1. Name some songs by the Beatles.
2. Where were you when the space shuttle exploded?
3. Where were you when John F. Kennedy was assassinated?
4. Who was your favorite high school teacher?

As you can see, your brain instantly pulls a file when a question is asked. Importantly, you have no control over what file is pulled, how fast it is pulled, or what is in the file. For example, younger adults and teenagers may have no “file” on the Kennedy assassination. They were not around at the time or old enough to make a memory of that experience. As an additional example, every older adult remembers almost every detail of where he/she was when Pearl Harbor was attacked on December 7, 1949.

Those with emotional memories can not only give you the exact details, but a variety of random and irrelevant details surrounding the event. This is how powerful “emotional memory” (EM) can be.

Those of you with a “Pearl Harbor” file might have rapidly noted that the above date of the attack was incorrect, it should have been 1941. If you had a file for that date in history, you might have immediately noted the error. When we have no file however, our brain does not alert us to errors. This example is used to illustrate just how fast the brain can not only react, but notice mistakes. This is another automatic brain activity

## **Emotional Memory Management: Positive Control Over Your Memory (Part 2)**

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This second part of Dr Carver's explanation of Emotional Memory Management covers basic rules of memory operation using the 'files'

metaphor and begins to touch on ways in which we can change our own experience of negative memories.

## How Files Affect Us...

An emotional memory file is a neurological/brain activity. The brain makes, organizes, sorts, and controls its files. Remember, the file contains two parts, information and emotion. After years of neuropsychological research, we have come to the following rules regarding file control. Each rule will be explained in detail:

### **Rule: The brain operates on chemicals.**

These chemicals produce emotional responses in the brain and body. Just like a certain combination of flour, sugar, butter, and other foods can combine and produce a German chocolate cake, these chemicals combine in our brain to produce certain moods, reactions, and feelings.

Just like an automobile contains various fluids (brake, window washer, transmission, oil, anti-freeze, etc.), the brain operates on chemicals known as *neurotransmitters*. While the subject is too technical for this paper, it is known that these brain chemicals called *neurotransmitters* produce various emotional conditions. Like the oil in our automobile, neurotransmitters have a normal level in the brain and can be “low” or “high” depending upon certain situations. Some typical neurotransmitters:

#### **Serotonin**

Perhaps the most actively researched neurotransmitter at this time, serotonin is known to be related to depression, headaches, sleep problems, and many mental health concerns. When serotonin is low in the brain system, [depression](#) and other mental health problems are produced. Low serotonin is also associated with [bulimia](#), a severe eating disorder, where the body craves sweets and



carbohydrates in a desperate effort to raise serotonin levels. Antidepressants, such as [Prozac](#) and [Zoloft](#), work by increasing serotonin in the brain. As our serotonin level returns to normal, our depression lifts.

### **Dopamine**

Abnormally high levels of this neurotransmitter in the brain produce paranoia, excitement, hallucinations, and disordered thought ([schizophrenia](#)). Abnormally low levels produce motor or movement disorders such as Parkinson's Disease.

### **Norepinephrine**

Related to anxiety and depression, high levels in the brain produce strong physical-anxiety manifestations such as trembling, restlessness, smothering sensations, dry mouth, palpitations, dizziness, flushes, frequent urination, and problems with concentration. A "[panic attack](#)" is actually a sudden surge of norepinephrine in the brain.

### **Endorphins**

Substances produced by the body that kill pain or produce a feeling of well-being. In marathon runners, these substances are responsible for the "runner's high". Also produced during pregnancy, a sudden increase near delivery-time creates that need to rearrange furniture, go dancing, or clean house.

The levels of these chemicals or neurotransmitters in the brain create our mood. A chronic low level of serotonin, as when experiencing long-term severe stress, produces strong depression. The low serotonin creates symptoms such as:

- Frequent crying spells
- Loss of concentration and attention
- Early morning awakening (about 4:00 am)
- Loss of physical energy

- Increase in thinking/mind speed, pulling bad memories
- “Garbage” thoughts about death, dying, guilt, etc.
- Loss of sexual interest

Emotional Memory files contain instructions for the brain to use these neurotransmitter ingredients to produce the mood in the file. We note that all antianxiety, antidepressant, and antipsychotic medications focus on changing the levels of these chemicals in the brain.

### **Rule: Thoughts change brain chemistry.**

That sounds so simple but that’s the way it is, with our thoughts changing neurotransmitters on a daily basis. If a man walks into a room with a gun, we think “threat”, and the brain releases norepinephrine. We become tense, alert, develop sweaty palms, and our heart beats faster. If he then bites the barrel of the gun, telling us the gun is actually chocolate, the brain rapidly changes its opinion and we relax and laugh — the joke is on us.

We feel what we think! Positive thinking works. As the above example suggests, what we think about a situation actually creates our mood. Passed over for a promotion, we can either think we’ll never get ahead in this job (lowering serotonin and making us depressed) or assume that we are being held back for another promotion or job transfer (makes a better mood).

### **Rule: The brain is constantly, every second, pulling files for our reference. It scans and monitors our environment constantly.**

You’ve heard people compare the brain to a computer. Like a computer, the human brain has a huge database containing billions of files (memories) for our reference. As you read this document, your brain pulls definitions of words or phrases. As we meet people during daily activities,

the brain pulls their “file” for their name and related information. You’ll note that with people we haven’t seen for many years the brain recognizes the face first (a talent located in the right side of the brain) but often takes a while to locate the name (located in the left side of the brain). As the left-brain contains language and speech, it’s more crowded over there and processing is a bit slower.

If we travel to another city, the brain pulls up the map and landmarks. Additionally, if we are a frequent traveler to that city, our journey to Cincinnati, Ohio will pull files as we travel. Just sit back and listen to the “file pulling” that takes place on a trip. “Hey Mom, remember the bathroom in that gas station from last year — Uck!” “This is where that bad wreck was a few years ago coming back from the beach.” If the brain recognizes something (road, building, sign, etc.) — it pulls its file. It’s that simple.

Always on the alert and ready to pull a file, the brain has built-in protection behaviors. People who are shy and introverted (socially uncomfortable and withdrawn) tell therapists that when they enter a restaurant, people look at them, creating anxiety. It’s true. When anything enters our range of scanning, almost like our radar range, the brain looks at it. A person walking into a room is “scanned” by almost everyone else, and that scanning procedure taking about two seconds. The brain looks 1) to see if we have a file/reference and 2) for protection. If the new individual is odd-looking, carrying a weapon, or naked — the brain will start a full-scan and react accordingly (long stare, fright, or “Don’t I know you?”).

Individuals with physical features that are unusual will tell us about the common “double takes” they receive at grocery stores. At the same time, other people may dress unusually for exactly that reason. Some people enjoy the constant attention and double-takes that are produced by wearing a safety pin in your nose or coloring your hair bright yellow.

In the bottom line, your brain is always scanning and looking for references/files. These references are designed to help you, as when remembering an old friend, the location of the store in a mall, or when remembering needed facts/details. This is an automatic procedure, a reflex and instinct. To override or cancel this natural/normal procedure requires manual control. As an example, it is said that in a “sophisticated” restaurant, you know the diners have “class” when the busboy loudly drops a tray of dishes — and no one looks up! Now that’s overriding the normal brain response.

Pulling these files automatically is great — unless they contain uncomfortable emotional memory. This is where another rule is important.

**Rule: The emotional part of a memory begins 90 to 120 seconds after a file is pulled.**

In mental health situations, this is perhaps the most important neurological rule. Once we pull a file, after 90 seconds the emotional component begins. Our mood starts to change, returning us to the mood which was present when the file was made. As an example, remember someone discussing the recent death of a loved one. The first two minutes of conversation may go well — then they become sad. The longer the file is out (being discussed), the more the emotional component surfaces to the point that they will become tearful. If the file remains out, the exact feelings made at the time of the funeral and death will surface — they will talk about loss, love, guilt, or whatever other feelings are in the file.

As another example, ask someone about the biggest fish they have caught. When the file is pulled you will receive about two minutes of data, the where and when. Once the memory relives the catch, the person’s eyes will widen, their energy level will increase, they may begin arching

their back as though illustrating a tough fight, and their entire mood and posture will move as though simulating the reeling-in of a fish. Again, after about two minutes, the emotional component begins to act on our brain chemistry, changing our mood/feelings back to that time.

Socially, imagine having a “bad file” on an individual in the community. You are minding your own business and shopping at Kroger’s. You turn the corner only to be confronted by Mr. X. What happens is this: your brain immediately pulls the file, you are somewhat confused at first, and your emotion of anger, fear, or whatever is in the file begins to surface. Even though you may not have seen the individual in 10 years, the Emotional Memory (EM) file is still active and wide-awake in your brain. This explains how many people can say that simply seeing an enemy or disliked person can ruin their entire day. If the file is not properly controlled, the mood will remain for the rest of the day.

The goal in file control is to prevent the 90-second emotion from coming to the surface. We all have bad files but most people try to control them by preventing the emotional part from bothering them. They do this by putting the file away before the two-minute time limit.

**Rule: The brain only allows one file out at a time.**

This rule of brain operation is easy to understand. Much like a television, VCR, or tape player, only one channel/program/tape is allowed to operate at a time. The brain works the same way.

As you read this paper, your brain is focusing on information in the paper. Luckily, the brain will focus on anything we choose, or will play any file or tape we choose. If you suddenly decide to stop reading this paper and watch television, your brain will completely go along with that idea.

Also, your brain can switch files at the speed of light. As an example, allow your brain to change files as you read the following sentences:

1. Where was your best vacation?
2. Who is your favorite relative?
3. Think about the person who last died in your family.

As you read those questions, your brain immediately pulled the files to provide you with the information. The first two questions were rather routine and even if the files were allowed to remain open, would probably not cause much in the way of emotional distress or upset. However, what about the third file? If we allowed it to stay open, we may start thinking about departed grandmother, parents, or close friends. That file, after the two-minute limit, would make us feel sad, lonely, and create all the feelings associated with grief. Importantly, the brain doesn't care whether it's thinking about a departed relative or your favorite song.

### **Rule: The brain doesn't care which file is active.**

Like the body, the brain operates many times on automatic. Our breathing operates this way. We can take control of our breathing and inhale, exhale, inhale, and so forth. We can also ignore our breathing, the brain will switch to automatic, and we will breathe anyway.

The brain operates the same way. It will automatically pull files as we go about our day. As we see fellow co-workers, friends, or neighbors, it will automatically pull their file — that's how we remember their name and information about them. The brain does this automatically. Importantly however, the brain really doesn't care which file is out. However, the fact that the brain operates on automatic is important to us.

When the brain operates on automatic, the files it pulls are greatly influenced by our mood. For example, if you are severely depressed, if your brain is left on "automatic," it will pull nothing but bad, trash, and garbage files. When depressed, due to the brain chemistry involved, our brain will automatically pick bad files to torment us. Our brain will pull

every bad file it can find, often far back into our childhood. As long as the depressed brain operates on automatic, it will continue to make us miserable by pulling every file which has guilt, depression, and a bad mood in it. It will play a series of our “worst hits”.

Remember, we can change files at will. Since the brain really doesn't care which file is active, a depressed mood can be changed by simply switching the brain to manual, taking more control over our thoughts. This is especially helpful when a bad file is pulled accidentally. This fact will be discussed further in this paper.

**Rule: Like the files, the brain only allows one feeling or emotion to be active at a time.**

Again, this is a simple rule if we think about it. At any one second, the brain only allows one feeling. We cannot be happy and sad at the same time. As an example, it is almost impossible to be in a “romantic” mood if you are anxious, depressed, or fearful. In another example, pull a file on someone you think is romantically attractive. Get a picture of that person in your mind. Now imagine someone throwing a large snake on your lap. You'll notice the romance immediately disappears and fear of the snake becomes the active emotion.

Many people have used this brain rule to deal with bad files. As an example, many people have bad files on certain individuals. Suppose we have a bad file on “John Doe.” The mention of his name, seeing him in the street, or any reference to this man brings up a bad file which has bad feelings — anger, hatred, resentment, etc. One way to cope with this bad file is to place a funny name or comment on the file label. In other words, instead of a “John Doe” file, we now have a “Beanie Weenie” file. You'll notice that many divorced individuals have humorous names for their ex-spouse. This is the same principle. If we pull up a bad file but we

have a funny name on it, it prolongs the emotion from surfacing and allows us to put the file away without any problem.

The fact that the brain allows only one feeling also allows us to have great control over our moods, more than we think. For example: A nasty neighbor calls and harasses us for some reason. We immediately pull the file on this neighbor, then another file as we are upset, and end up hanging up with a mood of anger, resentment, and an attitude of “I’ll break her face.” As long as we keep her file out during the day, our mood will be the same — anger, resentment, and so forth. In high stress jobs, for example, people frequently assure others that they don’t take their job home with them, that they leave the work, briefcase, and paperwork at the office. Importantly, while they don’t take the “work” home with them, they clearly take the “mood” home with them. They don’t bring home the briefcase, but they bring home the irritability, tension, and high-stress feelings.

However, if we choose to change our mood, we can do things like listen to favorite songs, look at a high school annual, look at vacation pictures, and do other things which will cause the brain to pull different files which have different moods — better moods.

Keep in mind, the brain will do anything we want: it will allow us to be angry the rest of the day or it will allow us to change its mood — it simply doesn’t care.

## **Emotional Memory Management: Positive Control Over Your Memory (Part 3)**

By Dr Joseph M Carver, PhD





Part three of Dr Carver's exploration of Emotional Memory management describes the rules governing how the brain uses memories in daily life and connects this with depression, anxiety, trauma and problems in communication.

## **Brain Operation and Daily Use**

In all discussions, feelings, and activities during the day, the brain is constantly pulling files. What feelings are contained in those files influences how our mood will be that day. Files can be very helpful if we have a lot of good files.

While good files can be helpful in terms of changing our mood, making us feel better, or providing a bright spot in the middle of an otherwise tough day, bad files can strongly impair our communications with others. Many times, a routine discussion, debate, argument, or hassle can cause files to enter our brain and give us difficulty.

In working with others, after awhile we begin to tell when a file is out. For example, when you hear words such as, "Well, when I was young...", "Just like last week...", or "This is not the first time..." — a file has been pulled. If we were to videotape a discussion, we would immediately learn that all discussion, debate, and agreement is lost when a file comes out. This brings us to another rule:

### **Rule: You can't argue with a file.**

When a file comes out, it is as though we have placed a tape in our VCR. The tape begins playing and we hear the same discussion or feel the same feelings over and over. Husbands and wives refer to this sometimes as "broken record" conversations. We get the same lectures, the same anger, the same resentment, the same everything — it's in the file. As an example, two people can be discussing whether they have enough money to purchase a lawnmower. The wife mentions using a particular credit

card — that pulls a bad file in her husband, perhaps the “VISA” file. At that point, the husband launches into a long story about credit cards, high interest, harassing letters, and so forth. When that file is opened up, a discussion about the lawnmower becomes useless.

The way files open and close in our brain can be a real problem with communication. While we may try to remain business-like and focus on a topic of discussion, we can't help but pull files. This brings up to another rule:

**Rule: Any stimulation can pull a file.**

Our body has five senses: vision, hearing, taste, touch, and smell. A file can be pulled by any of those senses. Example: The Vietnam combat veteran who automatically thinks of his combat experience when he hears a medical helicopter.

Think of how we automatically think of high school and related events by hearing an old song. The five senses are very powerful when it comes to pulling files. Something else can pull files as well.

Emotions can pull files. We must remember that the brain is always looking for files in what we see, hear, and what we feel. As an example, emotions become attached to files. An adult who has had a bad first marriage may automatically pull a jealousy file any time his second wife mentions, “I might be late”. The anxiety in that statement causes the brain to search for a file that make sense — it pulls up a jealousy file from the first marriage. If the husband allows the file to stay out, he will become insecure, jealous, and suspicious for no reason in the present. In second marriages, bad file-pulling is a very common yet very hazardous activity.

Another common way that emotions pull files is in the case of a [panic attack](#). When an individual suffers a panic attack, a powerful brain

chemical is released in the frontal area of the brain which creates the panic attack. After an attack however, we have clearly made a bad file — our brain remembers the attack and the feelings. Months later, we may be in a crowded store or in an emotionally tense situation when the brain recognizes that emotion — it's seen it before during the panic attack. At that point, the brain immediately pulls the "panic attack" file. If we allow the file to stay out or pay attention to it, we are quite likely to have another panic attack — that's what's in the file.

Lets keep in mind that famous actors and actresses have known this method for years. If they want to cry on stage, they can pull a sensitive file from their personal life and within 90 seconds, tears are flowing. Remember: With each emotion or experience, the brain is always searching to see if we have a file on that topic.

## **Files and Marriage/Relationships**

To solve any problem, a typical marital discussion should not last more than 10 to 15 minutes. If you're going to buy a car or discuss what to do about Aunt Gladys, it shouldn't take a three hour discussion. Discussions that last longer than 15 minutes usually contain files. In discussing whether to visit Aunt Gladys over Christmas, the discussion may start out well at first — then we start pulling files. After three hours of arguing, we find that we have discussed the fact that certain relatives don't like us, that we don't like certain relatives, that so and so is the black sheep, and on and on. What began as a business-like conversation has been ruined by files that have been pulled as the discussion continued.

You'll know a file is pulled because the direction of the discussion will not make sense. We know a file is operating when either the content or mood doesn't make sense to the discussion at hand.

A teenager who asks permission to go to a drive-in movie and is suddenly met with anger, resentment, accusations, and suspiciousness by the parent — she has run into a severe communication block. Mother or dad has pulled a file from their teen years — a bad file. Again, we always know a file is out because the content or mood doesn't fit the present situation. We must then remember: you can't talk to a file. People who argue with the content of a file have as much chance as an individual who argues with the television while a videotape is playing.

## **Files and Depression**

As mentioned, when our brain chemistry changes during [depression](#), bad files are immediately pulled, as many as we will allow. These files will keep pulling until the automatic file-pulling is stopped by medication or treatment, or until we take control.

One particularly bad problem with depression is pulling old files. Again, when we pull an old file we relive the emotion — that's what's in the file. We have seen cases where patients have discussed a horrible experience from 15 to 20 years ago stating, "I thought I got over it, I guess I didn't!" Truthfully, they have gotten over that experience — but the file is still powerful. Depressed individuals suffer from the "garbage truck", that truck-load of horrible files that prompt them to think about childhood trauma/abuse, previous relationships and rejections, and any time they have failed within recollection. Again, the file makes us relive the emotions at that time. Even 20 years beyond the present, if we bring out a horrible file, we will feel horrible.

Clients who are depressed are encouraged not to pay attention to the various files being pulled. Again, when a depressed brain operates on automatic, it pulls nothing but garbage/trash. If you are depressed, be prepared to experience a tremendous amount of "mental garbage." Please, take no action on that garbage.

## **Files and Anxiety**

We have all heard of the Guru who can change his blood pressure, slow his heart or breathing rate, stop bleeding cuts, or change his brain waves by meditation. As our brain controls these physical reactions/conditions, those experiences are possible with proper brain/thought control. [Anxiety](#) consists of both thinking symptoms (worry, fear, dread, anticipation of misfortune, etc.) and physical symptoms — actually more physical than thinking! Typical physical manifestations of anxiety include jitteriness, trembling, muscle aches, eyelid twitch, strained facial expression, sweating, heart pounding, dry mouth, clammy hands, upset stomach, frequent urination, poor concentration, and the feeling of having a lump in your throat — just to name a few! What a deal — you receive all the above in just one package, “anxiety”.

Anxiety can be paired with certain events, creating a very strong file that contains both the anxious event (public speaking, air flights, etc,) and the physical reaction as well. When the situation is recognized by the brain, the anxious/trauma file is pulled — and the brain chemicals are released. It's easy to see why files with anxiety are so powerful — they seem to light up the entire body system from head to toe!

## **Files and Physical/Mental Trauma**

One of the most common situations in which emotional memory files create severe problems is in physical or mental trauma. Many of us have experienced trauma in our life. Of the people living in New York City, 85 percent have been mugged/robbed. Studies suggest that 45 percent of all females have been sexually molested or assaulted in some manner. Trauma, or severe emotional memory, can be created by physical assaults, combat experiences, crime, death of a loved one, viewing severe accidents, surgery, or brush-with-death experiences.

In trauma, the brain not only memorizes everything about the event — including the emotions — but adds the surroundings as well. If we are assaulted in our home, suddenly our home is no longer comfortable due to the memories it produces. A severe automobile accident may prompt people to quit driving completely or develop panic attacks if they near the site of the accident. Trauma Emotional Memory (EM) files are perhaps the strongest emotional files and often create long-lasting [phobias](#) or difficulties if not properly handled.

Old Emotional Memory (EM) trauma files are often at the heart of long-standing difficulties. Early sexual trauma, for example, can create poor sexual response/interest that will later affect marriages. Physical assault can produce problems with physical closeness many years later. While such situations are very troublesome, we are reminded that the brain is simply operating on automatic — there are no “positive” files for reference. Correction is often a matter of taking manual control of those situations, creating new files, and “watering down” the old files.

**Rule: The brain pulls the most recent and most powerful file first.**

Imagine being stressed-out for six months, almost at the breaking point. You decide to stop by Kroger’s to pick up some bread and milk. While in the store, you run into someone you dislike which immediately pulls a bad file. As you continue to see them in the store, you keep a file out and your mood becomes worse. At that point, your brain, already overtaxed, kicks in with a panic attack. You feel panicky, you begin to smother, and you feel as though you are going to have a heart attack. You end up leaving your groceries and running out of the store.

You have thus created a panic-attack file with a label “Kroger” on it. Therefore, the next time you drive by Kroger’s or stop for milk, your brain will pull the panic-attack file first. You’ll develop a feeling — “I can’t go in

there!" Whenever we experience anxiety, the brain makes a file and includes the circumstances. This is exactly how people become [agoraphobic](#) — or become fearful of leaving their home. Several agoraphobic patients have areas of the town that are "off limits" — that area of the town pulls a panic file.

We've all heard of people who have suffered an automobile accident and for many months later are afraid to drive: driving pulls a horrible accident file. Perhaps a familiar example is the popular movie "Top Gun." After losing his best friend in an out-of-control jet, our hero Tom Cruise experiences a panic attack after a similar event later in the movie. Fortunately for the movie, he talks his way out of the panic attack and goes on to become the hero. Again, just about any experience can pull a bad file and we must protect ourselves from these files.

After a crisis or emotional upset, a file is made. If that file has a strong emotional value, it will be the first file pulled. Example: A relative by the name of Bill dies. For many months from that point, his death will be the first file pulled when anyone mentions the name. To avoid the constant reminder of sadness, when his name is mentioned we "skip" the first file and pull other "Bill" files, fishing trips, holidays with relatives, etc.

## **Emotional Memory Management: Positive Control Over Your Memory (Part 4)**

By Dr Joseph M Carver, PhD



In this fourth part of Dr Carver's explanation of Emotional Memory management, you can learn how to identify when particular memory files are active and how to control them or replace them with new ones.

## How to Know When A File Is Operating

1. When a file is accidentally pulled, the individual will almost immediately stray off the topic of discussion. As a listener, if you get a feeling of “What’s that got to do with this?” — you’re listening to a file. Remember, you can’t argue with a file.
2. As a file contains the same information each time it’s pulled, when you hear lectures, comments, or attacks that appear to be a “broken record” — it’s a file. When a file is pulled, the individual will say the same things, feel the same way, and react the same way that you heard before. This is quite common in marital arguments and a listener usually gets the impression, “This is the 25th time I’ve heard this.”
3. A file is pulled when the emotional reaction is far above what would be expected from the situation. A husband and wife meet an old boyfriend or girlfriend at the supermarket. Suddenly, all the way home, there’s a gigantic reaction complete with jealousy, suspiciousness, and anger. Somewhere, a file as been pulled.
4. Many files begin with, “We’ve talked about this before,” “When I was young...,” and so on. References to the past are almost always related to a pulled file.
5. If the listener has the general idea that the conversation doesn’t make sense, you’re probably listening to a file. Teenagers have difficulty, for example, understanding why a simple request for money leads into a long discussion of dad’s collecting pop bottles for money during his youth. The key is the phrase, “When I was your age...”
6. If you find yourself thinking about a past trauma or bad situation, you may have an old file out and also be depressed and stressed. When depressed or stressed, the brain becomes our worst enemy, pulling files that have strong negative content and making us relive and reexperience old events. Forty-year old women begin thinking



about childhood abuse, a mature adult tearfully recalls memories of a horrible and violent early childhood, or an older male suddenly thinks, feels guilty, and grieves about his experiences in combat (WW II, Korea, Vietnam, etc.). When the brain pulls these old files we know brain chemistry is upset. Look for early morning awakening, increased brain speed, and decreased concentration as additional indicators — but forget those files, they've already been emotionally solved and put away those many years ago. The brain is simply playing old Emotional Memory (EM).

## **Techniques for File Control**

1. Practice paying attention to how your file system works. If you find yourself in a bad mood, or even happy mood, use the approach, "What file is out?" You will then find the file, what feeling is contained in the file, and be able to have some control over the file.
2. If a bad file starts to come out, do something physical before the two-minute emotional release surfaces. If someone mentions a name or you have an event that brings up a bad file, for example, immediately pinch your ear, touch your watch, or do something physical that lets you know a file is out. You may then change files mentally or even verbally. When talking with others, we can verbally change files by stating, "That's kind of a sensitive topic for me, I'd rather not discuss that." The physical action helps remind us that we have control over these files.
3. Take a bad file and put a funny name on it — the funnier the better. If we have people we dislike or even hate, a funny name is helpful in controlling the emotional content of that file. Common names that might be used are "Bozo," "Beanie Weenie," "Air Head," etc. It is also effective to combine both the funny name and physical action.

For example, if we call a gossip-oriented relative "Sinus Drip", we can combine the pulling of the file with the name and the physical

action of blowing our nose. Again, as the brain will only allow one feeling at a time, the humor and physical action usually is enough to kill the file.

4. Many times we go through a series of horrible experiences, often lasting for years. These may include bad marriages, periods of unemployment, traumatic childhoods, and so forth. Place all those files in one mental filing cabinet. Then place a label on the entire cabinet, one that reflects the condition at that time. Some clients have used such labels as, "Wild and rowdy years," "My misery years," and so forth. When a file from that period is brought up, instead of focusing on the file and allowing the emotion to surface, the individual thinks to himself, "That file is from my wild and rowdy years, it's not needed now." Lumping all files together in one general category decreases the emotional impact and prevents pulling specific files.
5. Together with your spouse or significant other, you may train each other to recognize when one file is out. When a file pops out, a simple time-out hand signal, a certain look, or a certain comment may make the other person aware that a file is out at the wrong time. This cuts down many arguments. Using this method, couples tend to stay on-track and discuss their concerns more at length, without being bothered by bad files.
6. Looks for "blocks" in communication with others. Often these emotional blocks are actually files being pulled in response to something the other person does. Do they sound like a relative/friend or do they remind you of something or some situation? Make a new file on that person.
7. Keep several good and mood-lifting files in close memory. If a bad file is pulled during the day, you then have good files ready to recall — and change your mood. Many people have files about vacations or

other happy times to be used if a bad file is pulled. Always follow a bad file with a good file — it keeps your mood up.

8. In times of social crisis, create and rehearse a special file to cover uncomfortable questions — a “press release”. During a divorce/separation situation, people frequently ask about your situation. Rather than pull up the “divorce” file, pull up a “divorce public relations” file that states “things are pretty disorganized right now with us. I tell you more as things settle down.” Make the public relations file brief, short and sweet.
9. Practice file pulling, especially good files. Look at old pictures of happy times, high school yearbooks, etc. Observe the number of files that are pulled when you do this. It’s amazing how much information your memory contains.

**Rule: The Brain doesn’t know if a file is real or imagined!**

How can this be? The brain makes files based on information it is given, usually through our senses but sometimes through our thoughts. If we have a sweetheart, being in the same room will give us that warm, romantic feeling. However, looking at their picture and thinking about them will do the same thing — even though they are not present. Even better, simply thinking about them will produce the same feelings (pulling the same file). The brain only reacts to the file or image, it doesn’t care how it receives that image or information, by physical presence, by reminders (pictures), or by “thought”.

Psychologists at the University of Chicago took three groups of basketball players. Group One practiced foul shots each day for thirty days. Group Two was instructed to “imagine” shooting foul shots each day for thirty days. Group Three was instructed to do nothing. When tested, Group One (practicing shots) improved 24 percent. Group Three (doing nothing) had no improvement. Group Two, the group that only imagined shooting foul shots, improved 23 percent, yet did not physically touch a basketball.

Why? As far as the brain knew, both groups that practiced (real and imagined) had shot foul shots daily, but Group Two never missed! Group Two, never missing, was given more emotional confidence by their brain and the brain also memorized the foul-shooting pattern as though they were on the court. In Group One, their brain experienced the hit-and-miss pattern of actual foul shooting which did not build confidence.

Why mention this? We have the ability to build our own files, even when the actual real-world experience is lacking. Using our imagination, we can alter files by imagining new information. If shy, we imagine ourselves in gradually more and more social situations, talking with friends, being in groups, giving talks to groups, teaching, and finally being on Johnny Carson. If we have bad files on certain people, using our imagination, we “add” new information to the file. We really do this everyday. If we are wronged by someone, our anger becomes uncomfortable to the point that we begin imagining how guilty they must feel, how low their life really is, and how they will be unhappy the rest of their days. After our brain works on that file, we eventually feel sorry for them! While the brain does this job for us normally, we need to hurry the process along at times.

Pick a target problem for improvement — then design, imagine, and create a set of files to correct it. If you have problems dealing with your supervisor at work, imagine situations in which you first talk to him, then gradually stand your ground in a business manner. We can create files to help anything from tennis backhand to social withdrawal.

## **Making New Files**

- Since our brain can't tell real from imagined experiences, practice making new files to replace your old. If shy, imagine or daydream social competency. If uncomfortable around certain people, imagine positive meetings and outcomes with them.

- Depressed and anxious individuals always imagine negative experiences — and the brain changes chemistry because it thinks that experience happened. If we sit down and think that a loved one has died (even though they are in the next room), our brain will make us depressed and we will cry. If depressed or anxious, think the opposite of the brain's normal disposition — daydream or imagine only positive experiences. It may sound strange but your brain will think your life is better (it only knows what it's told!) and will chemically lift your mood gradually.
- Pick an area in which you are having trouble. Create/Invent new files to deal with that situation. If uncomfortable around your supervisor at work or your relatives, imagine positive scenes in which you solve conflicts or make adjustments.
- If confidence and self-esteem are low, imagine scenes in which your confidence is increased. Imagine being praised for your efforts, being successful, or finally receiving the acceptance/affection from those who have not provided it in the past.

There are other ways to deal with old files as well.

## **Emotional Memory Management: Positive Control Over Your Memory (Part 5)**

By Dr Joseph M Carver, PhD



Dr Carver offers more practical suggestions on how to alter the emotional impact of our memories and create our own personal 'treatment plan' in this final part of his paper on Emotional Memory management.

# Changing, Destroying, and Contaminating Old Files

The brain's file system, just like the government's files, can be ruined and changed in many ways. One way to change a bad file is to alter its content, to add additional information of your choosing — again, the funnier the better. If you have a file where a parent is scolding you, bring up the file, then add the fact that the parent is only six inches tall, standing on a desk, and shaking his/her little finger at you. We can also take a file, review the content and emotion, and find funny things about the file. With some imagination, we can rewrite a file which contained a fight or argument into something looking like The Three Stooges. If we put laughter/humor in the file, it changes the emotional content.

Files can also be “watered down”. As an example, thinking about bad files while our favorite music plays in the background has a way of watering down a file, making it lose its emotional impact.

1. Remembering hearing a good song for the first time on the radio and falling in love with it. However, after hearing it 100 times during the next month, it loses its emotional value. Files can be erased by literally boring them to death or a “watering down” procedure. If we have the time and opportunity, we can set aside a time for file destruction. During the particular 15 minutes of the day, we allow ourselves to pull up files and see what's in them, feel some of the emotion, and practice changing the files.
2. We can also water down files by pulling them in different situations. If we have a bad file, pull that file when watching TV or video, listening to music, or when resting in the sun on the beach. While the file is out, add observations of your circumstances (the music, scenery, etc.) to the file, a technique that both lowers the anxiety present as well as spoiling the bad file.

3. Remember that humor is the best way to contaminate a file. If a bad file is out, find everything about the memory that is silly, humorous, or comical. If nothing is, invent something funny about that experience. Rehearse how things might have happened different, in a funnier manner, than we remember.
4. When a file is out, remind yourself frequently that it is simply a file of your past — Where you've been — *not* where you are. We can watch movies of World War II but we must remind ourselves that we are not currently at war! Self-comments such as "I'm glad I don't live that way anymore!" or "Those sure were tough times!" are helpful. Compare old files with your current situation. This is helpful in old-file jealousy or suspicion, reminding ourselves that our current partner is not our old partner.

## **File Control in Special Situations**

- File control is a serious problem in alcohol or substance abuse. Remember: the alcohol and substance (marijuana, cocaine, etc.) automatically create good files due to their action on the brain. Sadly, bad files are created in the abuser's home/family due to fights, arguments, and hangovers. Therefore, thinking of alcohol/drugs rarely brings up a bad file to make the situation unpleasant. In fact, talking about drinking or using drugs usually brings a smile. To combat this situation, those who have problems with drugs and/or alcohol are advised to pull a bad file when confronted with substances. This is a common situation in those trying to maintain sobriety. How many times have we socially heard someone turn down a beer with "No thanks, My wife would kill me! I'd have no job and my children wouldn't speak to me!" That person is using a file with a marital argument in it to kill his previous attraction to the substance. If people pulled up a file on their

worst hangover every time they thought of alcohol, we might see a dramatic drop in national alcohol consumption.

- File control is especially important in marital/family discussions. Remembering our 90-120 second rule about emotions surfacing when a file is pulled, marital discussions on sensitive topics are best controlled by time-out techniques which prevent entire files from being pulled. Couples are encouraged to conduct business meetings with an egg timer! A three-minute egg timer allows each party three minutes to state an issue, then three minutes for the partner, and so on. The three-minute timer prevents “files” from taking control of the discussion if couples stick to the procedure.
- The filing system works at night too! Dreams are often jumbled as the brain pulls files and puts them together in our dreams. Dreams are actually a time in which the brain sorts its files, at the same time pulling old files. Events during the day are reviewed and combined with old files in our dreams. That’s why we may dream of taking a shower in the middle of downtown Columbus! Dreams only reflect our memory and our mood — they do not actually contain hidden truths, warnings, or other special information.
- Many individuals have been traumatized by assault, the death of loved ones, illness, hospitalization, arguments, and other emotionally stressful events. Emotional trauma produces a huge file, including the feelings of the event. To make matters worse, those concerned with our welfare after the trauma often feel the need to ask us about it — pulling the file! Trauma victims are encouraged to create several rehearsed answers to common comments and questions, much like the President’s press secretary reads responses from a prepared paper. The rehearsed response or “Press Release” usually prevents the original “bad” file from surfacing, as you are too busy recalling your rehearsed comment. Example:  
Question: “What happened to you the other night?”



Response: "I guess things got a little out of hand. I'm sorting things out right now and as soon as I have all the details I'll sit down and give you the story. I've discovered it's better not to talk about it right now but I'm doing ok."

Trauma victims will also find that a location or set of circumstances will almost immediately pull a strong file. Be prepared for the "I can't go back there" reaction, often attached to a work site (where injured), location of the trauma in your community, or activity ("I can stand to drive anymore").

Importantly, remember that if you have been traumatized, so have the people who care about you! Your presence, phone call, or visit may pull their files about your experience, files containing grief, feelings of helplessness, sadness, emotional shock, and so forth.

This is why many friends/relatives often avoid a trauma victim or depressed friend/relative at first — it pulls their files which contain sadness, anger, anxiety, and feelings of helplessness. The traumatized individual can often help by using a rehearsed "file" which sends a signal to loved ones that the situation and condition is being managed.

## **Feeling Levels Can Pull Files**

When we see a friend in town, the brain looks for and pull his/her file. Our emotions work this way also. When we begin to feel a certain feeling or when our "feeling level" reaches a certain spot, the brain searches for anything (a file or memory reference) we may have for that level of feeling. The brain basically asks the question "Have I felt this way before?" If so, pull the file.

This explains why many people can only reach so far in a relationship. As they become emotionally closer, the brain may look for a file reference.

Example:

New/current relationship

Strong feelings —— ? (brain looks for a reference, finds the file below)

Memory file: “First Marriage” That file contains strong feelings ——> verbal/physical abuse ——> separation ——> divorce. Pulling that old file in the new relationship puts your emotional and romantic progress at a halt.

When we see what’s in the “first marriage” file, it’s easy to see how the individual would become uneasy, upset, and even defensive in the new relationship. This is why people become “bogged down” in relationships. If we develop odd feelings or attitudes that don’t seem to fit the situation, look for a file that may be out. If you are thinking “Every time I feel this way...” and then predict the future, you’ve got a file out.

## **Developing a Treatment Plan**

Let’s suppose we have a strong Emotional Memory (EM), perhaps the result of an automobile accident, a childhood trauma, a life-threatening experience, a physical assault, a public embarrassment, or something equally emotionally traumatic. We can develop a treatment plan to eliminate the “emotional” part of the memory. We can never eliminate the details of the memory/experience — only brain damage or disease wipes out complete memories. The goal in the treatment of Emotional Memories is to eliminate the emotional component — the part that causes us emotional pain. If the emotional component/part is taken away, we can relate the story without fear of being upset or returning to that mood.

Keep in mind the goal with Emotional Memory (EM): **Eliminating the emotional part of the memory**. One of the fastest and easiest ways to complete that task is to “water down” the emotional part of the memory. To do this, imagine having a letter saved on a computer word processor. Each time you retrieve the letter — it looks the same, reads the same,

and says the same thing. If we pull it up on the computer screen, read it, then save it — nothing has changed. This is what happens when we relate Emotional Memory (EM) events to others without adding to the memory or file.

What happens if we pull up that word processor letter each day? Each time we pull it up on the screen, we add one long sentence to the letter — a sentence that is silly, unrelated to the letter, or just a bit off-base — then save it again. After two weeks we've added 14 sentences to the letter and the original letter is now gone. It's something totally different now. We use this technique to eliminate emotional parts of Emotional Memory (EM).

**Technique:** Each time we pull a bad Emotional Memory (EM) file, we add something to it. A comment, a joke, a physical gesture, etc. The brain will automatically save the file due to the new/added parts.

## **Sample Treatment Plan**

**Event:** We have been violently assaulted by someone.

**Emotional part of the memory:** The emotional component contains fears of dying, a fight-for-my-life feeling, panic, and severe anxiety.

**Procedure:** Each time we bring up the Emotional Memory (EM) of the event, we add something — the funnier the better. For example: "After that assault, I've canceled my scheduled bout with Mike Tyson. I'm just not up to it." Or, "I've decided to market a line of assault-proof underwear. You think JC Penneys would be interested?" Or, "I haven't had a fight like that since I used my brother's Beatles albums as Frisbees!" It's like adding a sentence each time we review the word processor letter — watering down the original content over time. We can make up or imagine part of the event as a humorous addition, for example "I just kept thinking during the attack, my taxes are due!!" The reactions of

others to your humor will also be added to the file. This is why a World War II vet can talk calmly about horrible events during the war at the American Legion — he's discussed it so often, in so many different circumstances, that the emotional part has gone. Only the details remain. In Emotional Memory (EM), we naturally do this technique, commonly known as "getting over it". This paper just tells you how to do that faster and more efficiently. Any Emotional Memory (EM) can be approached in this manner and "watered down".

## **Summary**

We are a collection of memories — that's who we are, what makes up our personality, what controls our behaviors, and what often produces our moods. The good Emotional Memory (EM) is a blessing to us, remembering good times during childhood, our favorite songs/events, and old friends. However, we have all collected bad or often traumatic Emotional Memory (EM) files as well. The goal of Emotional Memory Management is to control or eliminate the emotional part of those files. If we can do that, our history of bad experiences becomes just that — history. Those files become a record of where we've been and experienced, not something that continues to control our moods and behaviors.

In daily living and especially during times of stress, our memory file system is very important. It is a system that is active every second, works automatically, and can change our mood within two minutes. We have presented the above information with the hope that you can lower your stress and live more effectively by controlling your emotional memory files rather than allowing them to control you! Remember — our emotional file system is like our breathing, it will operate on automatic or we can take manual control. Knowing how the system operates allows us more control over our memories and daily lives.

**1. Breath deep.** More air in means more oxygen in the blood and therefore in the brain. Breath through your nose and you'll notice that you use your diaphragm more, drawing air deeper into your lungs. Several deep breaths can also help to relax you, which is conducive to clearer thinking.

**2. Meditate.** A simple meditation you can do right now is just closing your eyes and paying attention to your breath. Tensing up your muscles and then relaxing them to start may help. When your mind wanders, just bring your attention back to your breath. Five or ten minutes of this will usually relax you, clear your mind, and leave you more ready for any mental task.

**3. Sit up straight.** Posture affects your thinking process. Prove it to yourself by doing math in your head while slouching, looking at the floor and letting your mouth hang open. Then do the mental math while sitting up straight, keeping your mouth closed and looking forward or slightly upwards. You'll notice that it's easier to think with the latter posture.

**4. Phosphatidyl Serine (PS).** This supplement has been shown in clinical studies to increase lucidity and rate of learning. It activates cell-to-cell communication, helps regulate cell growth, improves the functioning of the special receptors found on cells, and prepares cells for activity. In other words, it can help your brain power. It's also thought to reverse memory decline. Phosphatidylserine has no known adverse side effects.

**5. Vinpocetine.** This extract, derived from an alkaloid found in the Periwinkle plant, is used as a cerebral vasodilator. It increases blood flow to the brain, which improves its oxygenation and thereby increases mental alertness and acuity. Research suggests it may also be the most powerful memory enhancer available to date.

**6. Gingko Biloba.** The leaves of this tree have been proven to increase blood flow to the brain. The trees are often planted in parks. My friends and I used to eat a few leaves when we wanted a brain boost. It is also inexpensive, if you buy the capsules or tea at any health food store.

**7. Saint John's Wort.** This is a common weed that may be growing in your yard. Although its brain enhancing qualities are less documented (studies do show its usefulness for treating long-term depression), many people swear by its temporary mood-elevating effect, and our brains tend to function better when we are happy. It is inexpensive, but I used to just collect it in the yard and make tea of it. (Hypericum Perforatum, if you want to look it up by its botanical name.)

**8. Good thinking habits.** Just use a problem solving technique for several weeks and it will become a habit. Redesign everything you see for a while, and that will become a habit. You can develop many good thinking habits with some effort, and then be more resourceful effortlessly from that point on. Use the power of habit.

**9. Use dead time.** This is time that is otherwise wasted or just under-utilized. Driving time, time spent in waiting rooms, or even time spent raking your yard can be included in this. With a tape player and a trip to a public library, you can start to use this time to listen to books-on-tape. You may spend 200 hours a year in your car. What could you learn in that time?

**10. Learn a language.** Learning a new language has been shown to halt the age-related decline in brain function. It also introduces your mind to new concepts and new ways of looking at things (in English we are afraid, whereas in Spanish we have fear). It is one of the best brain exercises.

**11. Rosemary.** This common herb may have an effect on the brain when the scent is inhaled. We are waiting for the research, but some people swear that just sniffing rosemary wakes up their brain. It seems safe, so if you have rosemary in your spice

rack, give it a try.

**12. Mindfulness exercises.** Concentration and clear thinking are more or less automatic once you remove distractions. Learn to stop and watch your busy mind. As you notice things that are subtly bothering you, deal with them. This might mean making a phone call you need to make, or putting things on a list so you can forget them for now. With practice, this becomes easier, and your thinking becomes more powerful.

**13. Write.** Writing is good for your mind in a number of ways. It is a way to tell your memory what is important, so you'll recall things more easily in the future. It is a way to clarify your thinking. It is a way to exercise your creativity and analytical ability. Diaries, idea-journals, poetry, note-taking and story-writing are all ways to use writing to boost your brain power.

**14. Listen to Mozart.** In a study at the University of California, researchers found that children who studied piano and sang daily in chorus, were much better at solving puzzles, and when tested, scored 80% higher in spatial intelligence than the non-musical group. In another study, 36 students were given three spatial reasoning tests on a standard IQ test. Just before the first test, they listened to Mozart's sonata for Two Pianos in D Major, K. 448 for ten minutes. Before the second test, they listened to a relaxation tape. Before the third, they sat in silence. The average scores for all 36 students: 1st test: 119. 2nd test: 111. 3rd test: 110. A nine-point boost from Mozart!

**15. Develop your intuition.** Intuition can be an important part of brainpower. Einstein and others have relied heavily on their intuitive hunches. See [Chapter 25](#) for tips on how to develop your intuition.

**16. Avoid foods that cause subtle allergies.** These can include wheat, corn, peanuts and dairy products. Watch yourself to see if you have a problem with any of

these. They cause digestive problems and brain fog in some people.

**17. Sleep better.** As long as you get a certain amount of sleep - probably a minimum of five hours - the quality seems to be more important than the quantity. Also, short naps in the afternoon seem to work well to recharge the brain for some people.

### **The Secrets of Powerful Sleep**

Sleep LESS and have MORE energy by optimizing your sleep patterns in order to create an abundance of energy in your life. [Learn more here...](#)

**18. Caffeine.** The research shows higher test scores for students who drink coffee before major exams. My chess game gets better. In other studies, it has been shown that too much caffeine leads to poorer quality decisions. Caffeine affects individuals differently, and has some nasty long-term side effects for some of us, but short-term - it works!

**19. Avoid sugar.** Any simple carbohydrates can give you "brain fog." Sometimes called the "sugar blues" as well, this sluggish feeling makes it hard to think clearly. It results from the insulin rushing into the bloodstream to counteract the sugar rush. Avoid pasta, sugars, white bread and potato chips before any important mental tasks.

**20. Hypnosis audios.** The power of suggestion is real, and one way to use it is with hypnosis tapes, CD's or downloads. This type of brain "programming" has more evidence for it than subliminals.

**21. Speed reading.** Contrary to what many believe, your comprehension of material often goes up when you learn to speed-read. You get to learn a lot more in less time, and it is definitely a good brain exercise.

**22. Exercise.** Long term exercise can boost brainpower, which isn't surprising.



Anything that affects physical health in a positive way probably helps the brain too. Recent research, though, shows that cognitive function is improved immediately after just ten minutes of aerobic exercise. If you need a brain recharge, you might want to walk up and down the stairs a few times.

**23. Imaginary friends.** Talking to and getting advice from characters in your mind can be a great way to access the information in your subconscious mind. Imagine a conversation with a person who has a lot of knowledge in the area you want advice in.

**24. Develop your creativity.** Creativity gives power to your thinking. Raw computation can be done by computers now, but humans provide the creative thought that shapes our world. See [Chapter 24](#) for tips on developing your creativity.

**25. Learn more efficiently.** When you decide to learn something, take notes from the start. Leave each "learning session" with a question or two in mind, to create anticipation and curiosity. Take short breaks, so there will be more beginnings and endings to your studies (Things learned at the beginning or ending of a class or session are remembered better).

**26. Use techniques for clear thinking.** Cluttered rooms and offices can contribute to cluttered thinking. Organize a space for mental work. Sigh, stretch, and take a deep breath before you start on a tough mental job. Plan some distraction-free time for brainstorming.

**27. Brain wave entrainment.** The newest brain wave entrainment products are powerful tools for altering your brain function. Some will almost immediately relax you, while others will put your brain waves in a pattern that is most conducive to analytical thinking.

[Free 15-minute Brainwave Entrainment Audio](#)

Calm your mind, reduce your stress and boost your creativity automatically with this

free

MP3.

[Learn more here...](#)

**28. Creatine.** This is a compound found in meat, used by athletes to help build muscle. Now the evidence is here to show that it helps your brain as well. Proceedings B , a journal published by the Royal Society reports that the research showed improvement in working memory and general intelligence resulting from creatine supplementation. The dose used in the study was 5 grams per day. This is about the level used to boost sports performance, and is as much as you'd normally get in four pounds of meat, according to lead researcher Dr. Caroline Rae.

**29. Talk.** Talking is only good for the brain if you are actually exercising it, of course. Try explaining something that you don't understand very well to a friend, though, and you'll notice that the process of explaining will help you clarify your understanding.

**30. Do something you enjoy.** This is a way to both lower stress and rev up your brain. The key is to do something active. Watching TV doesn't count. Whether it is playing Scrabble or building birdhouses, when you are actively engaged in an activity that you enjoy, you worry less about things and you start to think better.

**31. Adjust your beliefs.** Believe you are smarter, and you'll become smarter. For this, affirmations may work, but even better is evidence. Make a note of your successes. Tell yourself, "Hey, that was really creative," when you do something creative. When you have a good idea, make a note of it. Gather the evidence for your own intelligence and you'll start to experience more of it.

**32. Brain exercises.** Do math in your mind while driving. Think of a new use for everything you see. Regular use of the brain has been shown to generate new neuronal growth, and even halt the decline of mental function that often comes with age.

**33. Learn new things.** This is another way to exercise the brain. It can also be done with little time investment if you use books-on-tapes while driving.

**34. Walk.** Exercise has been shown to benefit the brain, and walking is one of the best exercises for many. It is low impact, and the rhythmic nature of it seems to put you in a state that is very conducive to clear thinking. In fact, carry a tape recorder with you to take notes, and a twenty minute walk can be a great way to solve problems.

**35. Model others.** Find others that are creative, intelligent, or very productive. Do what they do, and think what they think. This is a key principle of neuro-linguistic programming. Be careful about taking their advice, though. Successful people often don't really understand why they are successful. Do what they do, not what they say.

**36. Eat fish.** Eating fish actually speeds up brain waves, and improves concentration. Researchers have also found an almost perfect correlation between intake of fish and lowered levels of depression in the various countries of the world. The U.S. has 24 times the incidence of depression as Japan, for example, where fish intake is much higher.

**37. Avoid unnecessary arguments.** When you defend a position too vigorously, especially when it is just to "win" the argument, you invest our ego into it. This is not conducive to the easy acceptance and use of new information. In other words, you put your mind in a rut, and you dig it deeper with each argument. Debate can be a valuable thing, but when the ego takes over, the mind closes a little. This is not a recipe for better thinking.

**38. Laugh.** The release of endorphins caused by laughter lowers stress levels, which is good for long term brain health. Laughter also tends to leave you more open to new ideas and thoughts.

**39. Play.** Stimulating the brain causes measurable changes in the structure of the brain. New connections are made and new brain cells are grown. Intellectual play, as well as any playing that involves hand-eye coordination stimulates the brain.

**40. Do puzzles.** Crossword puzzles, lateral thinking puzzles, and even good riddles are a great way to get brain exercise. You can work on them while waiting for a dentist appointment, or on the bus, if you are short on time.

**41. Sing.** When you are alone in your car, try singing about something you are working on. This taps into and exercises your right brain. Have you ever noticed how it is easier to rhyme when you sing than when you just speak or write? This is because the right brain is better at pattern recognition. By doing this brain exercise regularly you can train yourself to tap into the power of the right brain. This will make you a more effective problem-solver. If you doubt the distinction between the hemispheres of the brain, look at how stutterers can stop stuttering as soon as they start singing. Try it.

**42. Nuts.** University students in Brazil and other South American countries often eat several Brazil nuts before an exam, believing they are good for their mental power. The evidence is starting to confirm this. Other nuts that have minerals and amino acids that are beneficial to the brain include almonds and walnuts.

**43. Olive oil.** High in mono-unsaturated fat, olive oil has been shown to improve memory. A cheaper alternative is canola oil, but this hasn't been studied much yet.

**44. Vitamin supplements.** In studies, children scored higher on tests when on a regimen of daily vitamin supplements. "Experts" will tell you that if you eat a balanced diet, you don't need supplements, which, given the culture here, is really just a sales pitch for vitamins, isn't it? Who eats a perfectly balanced diet?

**45. Fiber.** It isn't just what goes in, but what comes out that is important to brain function. Toxic build-up in the body and brain can cause "brain fog." People often report clearer thinking as one of the benefits of curing their constipation.

**46. Self awareness.** This may not seem important to brain power, but it is. When you know yourself better, you can avoid the usual effects of ego and emotion in your seemingly "rational" thinking. Or you can at least take it into account. Watch yourself, especially as you explain things or argue.

**47. Motivate yourself.** Motivation is as important to mental tasks as it is to any other. Learn a few simple techniques for self motivation. You can start with those in [Chapter 8](#).

**48. Avoid too much stress.** Neuropsychiatrist Richard Restak, M.D., from the George Washington University School of Medicine and Health Services, sums up the research thus: "Stress causes brain damage." Long term stress has repeatedly been shown to hurt the brain, not to mention the rest of the body. Learn a few stress reduction techniques if you get stressed out often.

**49. Get educated.** Scientists have known for a while that the less educated get Alzheimer's more frequently. Education in any area seems to make the brain stronger.

**50. Avoid too much fat.** In laboratory studies, animals consistently learn slower when they are on a diet high in fat. Type of fat may make a difference, so you may want to stick to using olive oil and other non-saturated fats. Saturated fats have been shown to actually stunt the growth of brain cells.

**51. Eat less.** Overeating has the immediate effect of redirecting more blood to the digestive process, leaving less for the brain. Long term, it can cause arterial obstructions that reduce blood flow to the brain permanently. In at least one study,

rats on a restricted-calorie diet had more brainpower.

**52. Avoid suspect foods.** There is evidence that the following foods can be bad for your brain: Artificial food colorings, artificial sweeteners, colas, corn syrup, frostings, high-sugar drinks, hydrogenated fats, sugars, white bread, and any white-flour products.

**53. Eat breakfast.** When kids who didn't eat breakfast started to eat it, researchers found that their math scores went up a whole grade on average.

**54. Avoid diabetes.** The development of diabetes coincides with a dropping of IQ scores. In other words, if you want to maintain your brain power, follow your doctors dietary recommendations for preventing or treating diabetes.

**55. Eat foods high in antioxidants.** Antioxidants protect all your cells, including brain cells. Some of the foods highest in antioxidants include: prunes, raisins, blueberries, blackberries, garlic, kale, cranberries, strawberries, spinach, and raspberries. In one test, rats had age-related mental decline reversed by eating the equivalent of a 1/2 cup of blueberries per day.

**56. Drink wine.** In moderation, red wine can be good for the brain, it seems. It is rich in antioxidants, which protect brain cells. One glass per day for women and two for men is usually considered a safe and moderate amount.

**57. Use alcohol in moderation.** In a study at the University of Indiana School of Medicine, elderly light drinkers (fewer than 4 drinks per week) scored higher on tests of thinking abilities than non-drinkers. Those who drank 10 or more drinks per week scored lower. It is known that alcohol can kill brain cells, so moderation seems to be the key.

**58. Folic acid.** According to one study, 200 micrograms of folic acid, the amount

found in 3/4 cup of cooked spinach, alleviates depression and reverses memory loss.

**59. Potential brain foods.** Other foods that may be good for your brain include: Avocados, bananas, lean beef, brewer's yeast, broccoli, brown rice, brussel sprouts, cantaloupe, cheese, chicken, collard greens, eggs, flaxseed oil, legumes, oatmeal, oranges, peanut butter, peas, potatoes, romaine lettuce, salmon, soybeans, spinach, tuna, turkey, wheat germ, and yogurt.

**60. Vitamin E.** Jean Carper, in researching her book, "Your Miracle Brain," found that many brain researchers are taking 400 I.U.s of vitamin E daily. It is an antioxidant, and reduces the clogging of blood vessels, including those going in the brain.

**61. Vitamin C.** Taken in the form of orange juice in a study at the Texas Women's University, vitamin C increased the IQ scores of children.

**62. Selenium.** 100 micrograms of selenium has been shown to be a mood-elevator. Your brain almost certainly functions better when you are in a better mood. Foods rich in selenium include Brazil nuts and garlic.

**63. Alpha-lipoic acid.** Alpha-lipoic acid (10 to 50 milligrams daily) improves memory and protects nerve cells.

**64. Inositol.** This is a safe and natural substance that is often grouped with the B-vitamins. It reduces stress and promotes clear thinking. It contributes to energy production, and so can "wake you up." Animal studies show a measurable increase in physical activity for up to five hours after taking it.

**65. Huperzine A.** This is a compound extracted from the Chinese club moss. Researchers both in Israel and the U.S. have used it to treat alzheimer's. It improves memory and learning and seems to be very safe.

**66. Ask questions.** This is a great way to keep your brain in shape. Just get in the habit of asking questions often, even if it is only in your own mind. Why are taller buildings better? what is the purpose of curbs? Ask anything that comes to mind, and ponder the possible answers.

**67. Sniff basil.** This another of the herbs that may be good for your brain. No studies yet, but many report a brain boost from smelling basil.

**68. Temperature.** Many people have noted that they think better at certain temperatures. In general, it seems that being slightly cool, but not uncomfortable, is most conducive to good thinking. Try experimenting on yourself to see what temperature works best for you.

**69. Use systems.** From the time I was ten years old,  $12 \times 49$  was always  $(12 \times 50) - 12$ . It's easier to figure in your head this way (588, by the way). I didn't get any credit for my personal algorithms then, but they are selling these shortcuts on late-night TV now, because they work. You can find your own easier ways to do mental math or other mental tasks, or read a good book on them.

**70. Make a brainpower plan.** It takes about twenty to thirty days of repetition to establish new habits, many psychologists will tell you. This means that when you create your plan for better brainpower, be sure you plan to use that new problem solving technique, or eat those new brain foods for at least three weeks. You can use many of the brain boosters here and get immediate results, but it is creating new habits that will give you the most brainpower.



Whilst the emotional distortion of memory encoding and recall seems to be counter-productive to the maintenance of an accurate view of the outside world, their influence may be better understood in terms of how it affects our attention, and how subject of our focus in turn affects what our memories encode. Research suggests that our brains are more likely to focus on stimuli of emotional significance. This was demonstrated in a study in which participants were shown a control set of emotionally neutral images with pictures such as those depicting various injuries, eliciting an emotional response. Emotion can have a powerful effect on humans and animals. Numerous studies have shown that the most vivid autobiographical memories tend to be of emotional events, which are likely to be recalled more often and with more clarity and detail than neutral events. The activity of emotionally enhanced memory retention can be linked to human evolution; during early development, responsive behavior to environmental events would have progressed as a process of trial and error. Survival depended on behavioral Emotional Memory Management: Positive Control Over Your Memory, Page 1. Every second we are alive, our brain functions. At a very basic level it maintains our breathing, our blood flow, our body temperature, and other aspects that allow us to stay alive and thinking. Emotional Memory Management, or EMM, is concerned with the thinking and memory part of brain functioning and how we can use it to lead happier lives. This article by our Consulting Clinical Psychologist Dr Joseph M. Carver offers a non-technical look at emotional memory and provides practical tips. 6 Steps To Setting Good Boundaries Emotional memory can also refer to how an object, event or even a person can make us feel by triggering an existing memory that has emotional significance. For example, you might instantly take a liking to someone at a party because their perfume or aftershave is the same as that of your spouse or partner. 'Flashbulb' memories are another example of how emotion and memory are connected. In some cases this might lead to the subject re-living some traumatic event over and over in their mind, unable to store it away properly or forget it. This is a common symptom of conditions like post-traumatic stress disorder (PTSD) which may be caused by faulty emotional processing and long-term exposure to brain chemistry that's designed to deal with short-term threats. Emotional Memory Management, or EMM, is concerned with the thinking and memory part of brain functioning. Almost every aspect of daily functioning is directly related to our memory. As you read this document, your brain recognizes words and provides definitions as you read pretty fast operating when you think about it! While this discussion is not concerned with reading or word-memory, it is concerned with the manner in which the brain pulls memory files, makes those files, and how those files influence our daily life. The following discussion is based on psychological and neurological research.