

# BRAIN FOG

by Lawrence Wilson, MD

©December 2009, The Center For Development

The brain is the crowning organ of the human being. Therefore, dysfunctions involving it are always important. Brain fog is one of the most important symptoms or conditions today, although it is not listed as a diagnosis or recognized health condition in most medical or psychological textbooks. Brain fog may be described as feelings of mental confusion or lack of mental clarity. It is called brain fog because it can feel like a cloud that reduces your visibility or clarity of mind. It can cause you to become forgetful, detached and often discouraged and depressed.

*Brain fog is extremely common.* It affects thousands of people, including children as well as adults. It contributes to school and work problems, low self-esteem, accidents, unhappy relationships and often is a factor in crime and delinquency because it can cause intense frustration and inability to function well in society.

Some people have been this way for most of their life and think this is normal. In other cases, it comes on slowly or it may develop almost overnight, perhaps after a mild flu or other illness, or perhaps after a toxic exposure.

## CAUSES FOR BRAIN FOG

Brain fog can have many causes, ranging from simple physical imbalances to a number of biochemical and even emotional causes in a few cases. In my experience, the cause is usually complex and involves many factors rather than a single toxic chemical or metal, or an infection, for example. The most common causes are:

**Toxic levels of metals and chemicals affecting the brain.** Of these, a combination of metal toxicity is likely the most common cause, and often involves:

**Copper.** Excessive or bioavailable copper is strongly associated with feelings of confusion, disorientation, racing thoughts, mood swings and confusion. Some women notice this condition is worse before the menstrual period, a time of the month when the tissue and probably the serum copper level rises. However, many people, and more so women, have elevated copper levels all the time.

Copper imbalance does not show up on standard blood tests. However, it is easy to identify on a properly performed and correctly interpreted hair mineral analyses. Most often, it is hidden on hair mineral analyses. This means the hair copper level is fine, so one must infer its presence using indicators for hidden copper on a hair analysis. These include an elevated calcium level, low potassium level, high mercury level, low zinc level, four lows pattern, or a ratio of sodium to potassium less than 2.5:1. Others that are less reliable are a low or high zinc level, or a low phosphorus level.

Causes of copper imbalance include weak adrenal glands, zinc deficiency, stress, fatigue, birth control pills, copper intra-uterine devices or copper contamination of water supplies or food. Many children are born with copper imbalance today. Vegetarian diets are high in copper and low in zinc, a mineral that balances copper. These diets are also

often low in other nutrients essential for the brain such as taurine, carnitine, essential fatty acids, alpha lipoic acid, B-complex vitamins and others.

Many vegetarians believe their diet makes them feel 'spiritual', when in fact their feeling of detachment is often a symptom of brain fog brought on by their diet or other factors.

Copper imbalance cannot be corrected with just a diet or a supplement, usually. The best way is a complete nutritional program. Just taking copper antagonists or chelators often does not work well. See the article on [Copper Toxicity Syndrome](#) for more information about this common problem.

**Other toxic metals.** Toxicity with *mercury, aluminum, cadmium, lead* and other metals may also cause symptoms of brain fog. Most everyone has some of these metals today. Mercury toxicity is extremely common, as it is found in large fish like tuna in high amounts, and in dental amalgams. Aluminum is added to table salt and drinking water, and found in anti-perspirants, anti-acids and many cosmetics.

Fortunately, sauna therapy and a nutritional balancing program can slowly remove all these metals, along with many toxic chemicals. See the article on the [Dangers of Toxic Metals](#) for more information about this important topic.

**Toxic chemicals.** It is possible to be exposed to many toxic chemicals such as pesticides, solvents and others without knowing it has occurred. They can severely affect brain function in some people. A nutritional balancing program will remove all of these, eventually, without drugs. However, one must be patient and, if possible, use a near infrared sauna daily to promote their elimination completely.

**The calcium shell.** Another toxic mineral problem occurs when the level of tissue calcium goes very high. It is like living inside an eggshell or behind a wall of concrete. One usually becomes somewhat out of touch with reality. For this reason, the pattern is called a *calcium shell*. It can cause diminished awareness, heaviness, depression, mental fatigue and other symptoms of brain fog. This usually corrects quickly with a nutritional balancing program. Click here to read more about a [calcium shell](#).

**Other minerals.** Excessive levels of other trace elements such as *iron, manganese* and *chromium* may also affect brain activity and rarely give rise to symptoms of brain fog.

## **BOWEL TOXICITY AND BRAIN FOG**

This is a less common cause of brain fog. Improperly digested food rots, putrefies or ferments in the intestines. This generates powerful toxins such as indols, skatols, cadaverine and others. These slowly poison the liver and other organs as well. Some can migrate to the brain and cause symptoms of brain fog. Constipation makes the problem one hundred times worse.

One may not be aware of the toxicity, as there may be no symptoms. Even most blood tests for liver function and general health will not reveal a congested or toxic liver. However, liver toxicity is the norm today. The brain is one of the first organs affected by these toxins, as it requires a lot of blood and its functions are delicate and intricate.

Causes for bowel toxicity include an improper diet, weak digestion, a need for digestive enzymes, intestinal infections, stress, poor eating habits, or even just negative emotions.

Drinking inadequate water or worse, drinking soda pop, excessive coffee and other irritating beverages can damage or overwhelm the kidneys and impair their ability to remove poisons from the blood. *Everyone needs to drink at least three quarts daily of only distilled or spring water. All other types of drinking water may not hydrate the body as well, no matter what is claimed for them.* Just changing the drinking water helps many people to some degree by helping to release toxins that can build up in the blood and the organs.

Also, be wary of cleansing programs such as fasts to correct liver and kidney toxicity. These may give temporary relief, but usually do not address basic causes such as food allergies, toxic chemicals in the diet or environment and nutrient deficiencies. Fasting can easily cause one to become even more nutrient deficient.

The answer for bowel toxicity is a slow regeneration of the intestinal tract, which may easily take several years. It begins with cleaning up the diet, eliminating the chemicals and junk foods. Excellent eating habits and lots of rest are important as well. Most everyone needs digestive enzymes and I sometimes add a probiotic such as lactobacillus acidophilus to help restore the normal bowel flora.

A range of nutrients may be helpful, as well as milk thistle and dandelion for the liver, and saunas for detoxification. In other words, a comprehensive program is generally best. Hair analysis indicators for bowel problems include a phosphorus level less than 14 mg% or a low sodium/potassium ratio.

## **ELECTROMAGNETIC TOXICITY**

Electrical fields are very harmful for some people. They can affect sleep, school performance and can cause brain fog in selected people. Sources include computer screens, cell phones, living near cell phone towers, or occasionally just the electrical wiring in the walls of your home.

Be sure to turn off computers, televisions, radios and all electrical devices when you sleep. Especially keep all electrical devices at least 8 feet away from your head when you sleep and, if possible, where you work. Sit as far away from computers as possible, and get up frequently if you must use them all day.

If you notice you feel better away from home or out of doors, investigate this cause further. There are people who specialize in checking and fixing electrical and electromagnetic disturbances in houses, offices, cars and elsewhere.

## **ADRENAL BURNOUT AND BRAIN FOG**

Adrenal burnout differs from fatigue in that it is a deeper derangement of the body's energy system. It is incredibly common today. In fact, the majority of mineral analyses I review show some degree of adrenal exhaustion. On a hair mineral analysis, the calcium and magnesium levels are elevated while the sodium and potassium levels are generally quite low.

Adrenal burnout is often the underlying cause for toxic metal accumulation such as copper, mercury, lead, cadmium and others. It is also usually the underlying cause of a calcium shell pattern, and for iron and manganese toxicity.

Burnout is extremely common and cannot be corrected simply by having a few good nights of sleep. It is sometimes called chronic fatigue syndrome or CFIDS.

It requires a complete program of diet, nutritional supplements and rest. I also highly recommend infrared lamp saunas to help rebuild the body's energy system. See the article on [Adrenal Burnout](#) for more information.

In adrenal burnout, the body is nutritionally depleted, toxic metals have replaced vital elements, chronic infections have often set in and many biochemical imbalances may be present. These include impaired thyroid activity, weakened adrenals, impaired digestion, heavy metal toxicity, chronic candida albicans infection, chronic viral infections and others. While the burnout itself can cause symptoms, often it is these secondary imbalances that cause symptoms. Let us discuss a few of these.

*Candida albicans infection.* This is a common fungus that often causes vaginal and skin yeast infections. However, it may also overgrow in the intestines and become chronic. It produces alcohol and acetaldehyde, both of which are toxic to the nervous system and often contribute to symptoms of brain fog.

A person may behave as if slightly inebriated, although they consume no alcohol. The symptoms are often worse if one eats a lot of carbohydrates, especially sugars including sweet juices and fruits. Starches and sugars feed the yeast organisms. In extreme cases, the yeast can actually invade the brain.

Occasionally, brain fog may be caused by yeast die-off. This may occur due to a dietary change or health program, or just a shift in metabolism. As the yeast die, they may release various toxins that induce temporary symptoms of brain fog. See the article on [Yeast Infections](#) for more information.

## **HYPOGLYCEMIA AND BRAIN FOG**

Hypoglycemia is often associated with brain fog, copper toxicity and adrenal exhaustion. When the level of glucose in the brain become too low, the brain essentially starves for fuel. The brain uses about one-third of all our calories. Unlike the muscles, the brain does not store any fuel. Therefore, it must have a continuous supply. If for any reason the supply varies, it is like someone varying the voltage of a computer or other piece of delicate electronic equipment.

Common symptoms of low blood sugar include confusion, irritability, forgetfulness and even blackouts. One patient who called me during a hypoglycemic episode could not remember her own name. Symptoms usually occur several hours after a meal, and may come on suddenly.

Eating something that contains sugar may relieve the symptoms in a few minutes, but only temporarily. Sweet cravings are a symptom of hypoglycemia. However, eating sweets is one of the main ways to perpetuate candida albicans and adrenal problems.

Many people, including school-age children and many adults, experience huge blood sugar swings all day long! Their breakfast of sweetened cereal, donuts or juice drives up their blood sugar. This is followed by a drop at mid-morning that is relieved by a sweet snack, more juice, soda pop or a cup of coffee. This rockets the sugar up again, followed by a fall around noon.

Lunch may include soda pop, sweetened ketchup, mustard, sweet salad dressing, sweetened rolls, chocolate milk, fruit or other sugary food. The sugar rises again, then falls rapidly at mid-afternoon. It is time for another pick-up, or maybe time for happy hour, since alcohol will lift the blood sugar again for a short time. And we wonder why many students have difficulty learning, and why thousands can't think clearly?

## **FOOD OR CHEMICAL ALLERGIES**

This can be a cause of brain fog in some cases. Here is a short case history: *Cindy had always had boundless energy and was ready to take on the world. She ate a lot of salad greens, which she thought were very healthful. However, two years ago she became exhausted and developed brain fog. She finally traced the problem to perchlorate, a chemical that was added to the town's water and became very concentrated in leafy green vegetables. It interfered with her thyroid. When she switched to bottled water and reduced her salad intake, her mind cleared and her energy returned.*

Nutrasweet (also labeled as Equal, Canderel, Spoonful, aspartame, aspartic acid or phenylalanine) is notorious for causing brain fog, fatigue, dizziness, depression and panic attacks, to name just a few of its symptoms. It is found in over 5000 products and affects some 25% of Americans who use it. It is often hidden in prescription medication, vitamins, toothpaste, breath mints and all types of diet products. Everyone should avoid this food chemical. See the article on [Caffeine and Sugar Substitutes](#).

Other food chemicals that affect sensitive people include excitotoxins such as MSG (monosodium glutamate), caffeine, pesticide residues, bacterial and fungal toxins, fluoride, chlorine and hundreds of other substances that either contaminate or are added to drinking water and food. Caffeine and other stimulants can give one a boost, but eventually contribute to adrenal exhaustion.

Not only the chemicals added to foods, but the foods themselves can cause brain fog symptoms. The most common allergic foods are wheat, spelt, soy and cow's milk dairy products. Anyone with brain fog ought to try eliminating these foods from the diet, as this will often help speed recovery. Gluten-containing foods such as rye, oats, wheat, kamut, spelt and barley also cause reactions in susceptible individuals that may affect the brain.

## **PHARMACEUTICAL AND OTHER DRUGS**

A long list of prescription and over-the-counter drugs can cause mental confusion and other brain fog symptoms. The list includes drugs for allergies, pain, high blood pressure, heart arrhythmias, glaucoma, infections, depression, anxiety, inflammation and other disorders.

Many people are taking two to five of these drugs at once. Combinations of drugs may be toxic in ways that no one can predict. Combining medication with alcohol or recreational drugs may also produce unusual symptoms.

If you must take medication, check the side effects and know that there may be side effects that are not listed on the label. Also, know that combinations of drugs are a complete unknown in terms of adverse effects. Try to avoid them as much as possible.

## **NUTRIENT DEFICIENCIES**

The brain requires many nutrients, including proteins, high-quality fats and starches, many vitamins and two dozen or more minerals. Among the most important nutrients are calcium, magnesium, zinc, chromium, selenium, iodine, L-glutamine, L-tyrosine, choline, thiamine, B6, B12 and other B-complex vitamins.

For example, in the famous *Merck Manual*, a doctor's handbook, symptoms of B-vitamin deficiency include confusion, irritability, stupor and death. Vitamin B-12 deficiency can cause symptoms of brain fog and is quite common, especially in vegetarians and older people or those with severe digestive problems. Correction is quite simple and inexpensive.

The author recalls a 7-year old patient who had recurrent ear infections. The ear infections cleared up on a nutrition program. During a follow-up visit, her mother mentioned the girl's school grades also went from Cs to As. This is not an unusual story. Though part of the reason may have been better school attendance, improved brain function is often a side effect of nutritional correction.

## **LACK OF GROUNDING AND BRAIN FOG**

This is not really a cause, but it may contribute to feelings of confusion, lack of clarity and even depression. Many people are overstimulated and perhaps easily distracted. Some would be called ADD today, but that is not a helpful assessment, in my view.

Staying overstimulated and distracted can become a mental habit or way of life. Many bright, loving people are this way because they are very sensitive and respond quickly to many stimuli in their environment. Their weakened body chemistry and high copper level, in particular, may make them even more prone to this condition. The ancient Taoists would say "their chi is in their heads".

The solution to this problem, and it is recommended for everyone, is to set aside time each day for a practice such as meditation. However, not any meditation will do, as many types of meditation just keep one floating in one's head.

I recommend an [Observation-Meditation Exercise](#) because it is grounding and helps develop a quality called the witness. This is most helpful. Writing each day in a journal is also helpful for some people. Other techniques to assist grounding are gardening, slow deliberate walking, yoga, tai chi or chi kung. One should do these on a daily basis, as part of your routine, to reap the benefit.

## **BRAIN PARASITES**

This cause of brain fog is due to Lyme spirochetes such as borrelia and others, trichina worms or cysts from consuming pig products, and even fish tapeworms and other parasitic organisms that are very common today. This cause is subtle and hard to detect with any standard testing procedure. In my experience, however, a nutritional balancing program, especially with GB-3 and the use of a near infrared light sauna daily, will slowly kill and remove parasites from all areas of the body.

Drugs to kill the parasites are rarely necessary or helpful, as the drugs themselves are usually quite toxic and must be removed from the body for complete healing to occur. However, they may help in some cases.

## PSYCHOLOGICAL CAUSES

Brain fog can also be due to mental or emotional conflicts, unresolved traumas or other psychological causes. These can be subtle, and one may only figure them out with help from a trained professional in counseling, hypnotic regression or other psychological specialties.

Essentially, in such cases, one does not really want to see or think clearly about something or someone. Thus brain fog becomes one's defense mechanism. This use of brain fog as a psychological defense is more common than might be imagined.

Developing brain fog is one way to deal with conflict or an overload of information, especially if you have difficulty sorting out what is true. Brain fog may also be your way to deny reality when your life is not going well.

I recommend to always ask for and seek the truth, and cultivate a belief that "the truth will set you free". This does not mean the truth will be pretty. However, seeing and accepting the truth about oneself and everyone else does lead to clearer thinking and eventually, to happiness, in my experience. I hope the articles on this website will help you sort things out, as I have had to do this for some thirty years.

**I am stupid.** Another psychological/spiritual aspect of brain fog has to do with a belief that one is stupid and cannot think clearly. This can be a result of parental or school influences. While there are a few exceptions, I believe the public school system, with its authoritarian style, its emphasis on grades instead of on learning, its one-size-fits-all approach and its lack of spiritual focus damages thousands upon thousands of children's brains. See the article [Why is the School System in Trouble?](#) Particularly the [Indigo Children](#) often suffer through school, which number in the millions today. Some come to believe they are stupid and may give up on clear thinking. The school issue is very important today because:

- Parents are often not helping their children with school work as much as in earlier generations because they are exhausted, or too busy, or in one-parent households.
- Television and computers further confuse and overload the children's brains.
- So many children are not functioning as well to begin with due to nutritional and other biochemical imbalances.

Several methods can help one let go of negative programming that one is incapable of clear thinking. The most important is to make a decision that you are loved by your creator, and that you have many gifts and skills. This must first be an intellectual

*decision.* Usually, one will only begin to feel it later. Counseling, of course, may be helpful, as may bodywork, meditation, nutritional balancing and other techniques.

## OTHER CAUSES FOR BRAIN FOG

- **Chiropractic subluxations.** Although less common, misalignment of the spine, or any impingement on the cranial, cervical or other nerves may cause or contribute to symptoms of brain fog.
- **Reduced oxygen to the brain.** This may be due to clogged arteries, low blood pressure, shallow breathing or holding one's breath. Fear and worry can cause shallow breathing. Sometimes a physical disease such as asthma, chronic bronchitis or emphysema impairs breathing.
- **Chronic infections** might also contribute to brain fog. Nutrient deficiencies, along with fatigue, often permit viral and other infections to take hold. Many can directly or indirectly affect the brain such as Epstein-Barr virus, cytomegalovirus, hepatitis C, Lyme disease and others. Even a chronically infected root canal or cavitation in the jaw (a pocket of bacteria) can secrete toxins that affect the brain. See the article on [Infections](#) for more information.
- **Other illnesses.** Brain fog is occasionally caused by an illness such as a brain tumor, epilepsy, meningitis or encephalitis.
- **Vision problems** may affect mental clarity and cognition.
- **Dyslexia and autism syndromes** may cause confusion, though they may also be the result of causes listed above. For example, many autistic children improve when the factors above are addressed.
- **Emotional conditions such as neuroses, paranoia or mental fixations** might contribute to brain fog.
- **Rarely, too much sweating** during exercise is an unusual cause of brain fog. It occurs due to electrolyte imbalances.
- **Rarely, poor circulation to the brain** due to low blood pressure or arteriosclerosis could cause brain fog.
- **Rarely, kidney problems**, even from not drinking enough water, could result in metabolic waste products in the blood that could travel to the brain and interfere with its functioning.

## CORRECTION OF BRAIN FOG

If one is fortunate, brain fog improves in a few weeks on a nutritional balancing program. All that may be needed is to clean up one's diet, rest more, breathe more deeply and make other simple lifestyle changes.

In other cases, one must deeply remove many toxins from the brain, liver and kidneys. This can easily take several years. I don't know that it is possible to know in advance how much healing will be needed in a particular instance, so I advise clients to just begin a complete program to rebalance and strengthen body chemistry. Time tends to pass rapidly as one usually begins to feel a little better each day.

Rarely, the brain is so damaged with drugs, for example, such as marijuana, that complete recovery will never occur. This is not to discourage anyone, but just stating a fact. It is important to know facts so you can tell others the truth.

**The best treatment.** Most often, a nutritional balancing program is excellent. However, if emotional causes are foremost, then meditation, counseling and other emotional therapies may be more critical, at least at first. However, in most cases, nutritional approaches will assist any other therapy to succeed best.

In addition to the standard nutritional balancing regimen, one may wish to supplement with coenzyme Q-10 and more anti-oxidants or B-complex, provided they do not upset the mineral balance. The brain is quite prone to oxidant damage, usually due to the presence of toxins that damage the tissues.

Adaptogen herbs such as ginkgo biloba and garlic may also be helpful, provided they do not upset body chemistry. Be careful with most herbs, however, as they can be somewhat toxic if taken for long periods of time. Think of them as medication to be handled gingerly.

Often, quality chiropractic, osteopathic manipulation, craniosacral therapies, Rolfing or other structural therapies are helpful as well. At times, they are essential as part of a complete healing program. Among the very best are detoxification methods such as sauna therapy, colonic irrigation and coffee enemas. See the article on [Sauna Therapy](#) for more details on this excellent detoxification method. [Detoxification Procedures](#) are available on this site.

If you are not yet ready for nutritional balancing, then improve your diet and lifestyle as recommended on this website, rest a lot more, and meditate as we recommend twice or more daily. These are simple but powerful ways to improve your brain and the entire body as well.

In a few cases, more extensive testing for brain diseases may be necessary. Physicians often begin with a CAT scan or an MRI. However, in my experience, almost all cases of brain fog will clear up without these costly tests by correcting the factors discussed above such as diet, lifestyle, infections, toxic metals, chemical toxicity and psychological/emotional stress factors.

## References

While there are a limited number of references to brain fog on the internet, I have not found much medical research on the subject. It needs more! This article represents my experience and that of other clinicians with whom I have worked or whose work I have studied. Some of the other articles on this website referred to above contain long lists of references as well.