

# Program for a Healthy Brain

*Dr. Russell Blaylock, MD, CCN.*





Balanced Bioactive  
Nutritional Supplements

**Program for a Healthy Brain.** Copyright © 2008 by Dr. Russell Blaylock M.D. All rights reserved in the United States of America. No part of this book may be used or reproduced in any manner whatsoever without written permission except in the case of brief quotations embodied in critical articles and reviews.

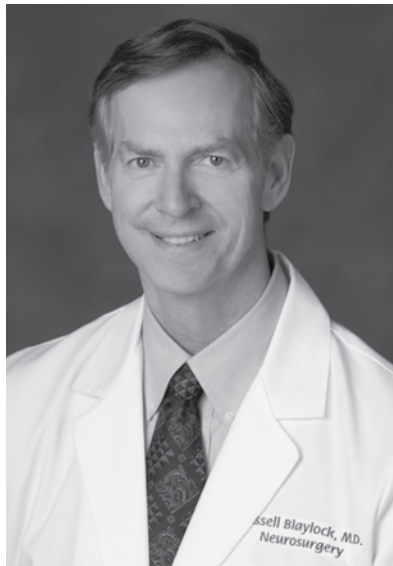
For information contact  
Newport Nutritionals (Publishers),  
PO Box 8679 Newport Beach California 92660.

[www.newportnutritionals.com](http://www.newportnutritionals.com)

# *Contents*

About Dr. Blaylock.....	1
A Program for a Healthy Brain.....	5
Bad Fats and Good Fats.....	9
The Bad Fats.....	11
The Good Fats.....	15
Meats, Proteins, and Amino Acids.....	21
Fruits and Vegetables.....	27
What are Nutrient-Dense Fruits and Vegetables?.....	31
The Best Way to Prepare Your Fruits and Vegetables.....	33
What About Sweeteners and Sugar?.....	37
What Should I Drink?.....	41
Food Additives.....	45
The Benefits of Fasting.....	49
Exercise.....	51
Conclusion.....	53

# *Is Memory Loss Telling You... Your Brain is Starving?*



My name is Russell L. Blaylock, MD, CCN. Some of you may already know me from my lectures, books or my monthly 'Blaylock Wellness Report'. After practicing neurosurgery for 24 years, I retired to concentrate on the study of neuroscience and how to treat and prevent neurological disorders.

During these studies I've found a strong link between diet and the risk of devastating diseases.

I've also discovered that specific nutrients and plant extracts can alter many abnormalities found in diseased brains. Research also shows that the sooner we start a brain maintenance/repair nutritional program, the better protected we will be.

A common condition called age-related memory loss is robbing millions of middle-aged people of their ability to remember and think clearly. And diseases such as Alzheimer's and Parkinson's are occurring at younger ages, even in the early twenties and thirties.

The good news is that having these risk factors is not a hopeless situation. Studies show that diet and certain supplements can reduce risk. The powerful anti-inflammatory supplements that I use in my unique pharmaceutical grade O3 Balance, Brain Repair Formulas, when combined with a brain healthy diet, will maximize your brain's ability to heal and reduce inflammation (a central mechanism of these devastating neurological disorders).

In my formula I have added nutrients that are known to promote the repair of brain cells and their connections, called synapses. Reducing

chronic inflammation also reduces both the risk of brain degeneration and suppresses the central mechanism of neurodegeneration.

This formula also includes a number of nutrients that have been shown to aid in the repair of damaged brain cells, such as: specific phospholipids, antioxidants, vitamins, and special brain metabolic stimulants. Finally, I have added a mixture of nutrients known to promote DNA Repair, since damage to DNA is widespread in all neurodegenerative disorders.



Go to **[www.newportnutritionals.com](http://www.newportnutritionals.com)** to find out more.  
OR CALL **1-800-SPECIAL** (1-800-773-2425)

## ***Dr. Russell Blaylock, MD, CCN.***

Dr. Blaylock was a practicing neurosurgeon for 24 years, after which he retired to devote full time to writing, lecturing, and research. He attended Louisiana State University School of Medicine in New Orleans, Louisiana and completed his surgical internship and neurosurgical residency at the Medical University of South Carolina. He trained with the esteemed neurosurgeon, Dr. Ludwig Kempe and developed a lifelong friendship with this world famous teacher and neurosurgeon.

Dr. Blaylock has published over 35 papers in scientific and lay journals and has written three books on health and nutrition. He also written and illustrated a patient care manual on multiple sclerosis, lectured extensively in the United States and has appeared on nationally syndicated radio

and television programs. In addition he writes an international best-selling wellness newsletter.

Dr. Blaylock serves on the Scientific Advisory Board of the **Life Extension Foundation** as an editor for the **Journal of American Physicians and Surgeons**, is on the editorial staff of the **Journal of the American Nutraceutical Association** and the journal **Fluoride**, the official quarterly journal of the International Society for Fluoride Research. He is the 2004 recipient of the **Integrity in Science Award** by the Westin A. Price Foundation. At present he serves as a lecturer on the staff of the **Fellowship for Anti-aging and Regenerative Medicine** and is a Visiting Professor of Biology at **Belhaven College** in Jackson, Mississippi.

# *A Program for a Healthy Brain*

It may surprise many readers that the incidence of degenerative diseases of the brain (called neurodegenerative diseases) such as Alzheimer's dementia, age-related memory loss, Parkinson's disease, Lewy body disease, and Lou Gehrig's disease are increasing at a tremendous rate, especially over the past several decades. Even more frightening is that the onset of these devastating brain destroying disorders is occurring at a much younger age than ever before, even in the twenties. Over the next decade, according to neurologists, we can expect an even greater rise in these devastating disorders.

There are many reasons for this explosion of degenerating brain diseases, including: ingestion of brain toxic metals (which includes vaccines), exposure to pesticides/herbicides and industrial

chemicals, massive ingestion of harmful food additives, excess vaccination, and avoiding sunlight mainly through the use of sunscreens.

These are mostly things that people recognize as harmful or at least undesirable. Most have little idea as to just how harmful. Yet, of greater importance is our diet. Neuroscience, as well as centuries of experience, has demonstrated that our diet can either protect and enhance our brain's health and function or it can harm it.

The typical American diet, high in polyunsaturated fats, food additives, sugar, and processed carbohydrates is one of the most brain-harming diets one could design. New research is confirming what our rural grandparents tried unsuccessfully to tell us - that fresh air, plenty of sunshine, and fresh foods would make us healthy.

We have also learned that exercise and fasting, especially if both are used, can powerfully protect the brain.

Take a look at the Clinical Research that  
supports the statements in this book...  
<http://www.newportnutritionals.com/refs.html>

## *Bad Fats and Good Fats*

Actually, dividing fats into “good fats” and “bad fats” is artificial. All natural fats, in the proper amounts are “good” in the sense that they are needed for proper functioning of the brain. The key phrase is “in proper amounts.”

We know that brain cells use many types of fats for their normal function and that we get these fats either from our diet or our body is able to manufacture the fats from other dietary substances. Some fats can only come from the diet. We call these fats “essential fats.” Others can be made in the body. We call these “non-essential fats.”

For many years doctors and even scientists preached this distinction of essential and non-essential fats. Recent studies have shown that in most people this distinction does not hold and that many fats considered as “non-essential” become

essential when a person is sick, especially if they are chronically ill. Babies and small children are often unable to make non-essential fats. This is because during illness massive amounts of free radicals and lipid peroxidation products are generated. These very harmful products damage the enzymes needed to make “non-essential fats.”

Therefore, babies, small children, and the chronically ill need all of these fats in their diets.

## *The Bad Fats*

**T**here are two classes of bad fats: polyunsaturated fats and trans fats. The polyunsaturated fats are fats that contain a number of unsaturated bonds in their chemical structure. What you need to know is that these fats can be dangerous because they are very easily oxidized (rancid) and oxidized fats can unleash havoc in the body. In fact, they cause much of the damage associated with diseases such as diabetes, autoimmune diseases, strokes, head injury, brain infections, pulmonary diseases, heart attacks, atherosclerosis, and toxic metal damage.

Things in medicine and nutrition are never as simple as they may seem at first. This is also true with fats in health. There are “good” and “bad” polyunsaturated fats. The bad ones are called omega-6 fats (now called N-6 fats) and include seed oils such as corn, safflower, sunflower, canola,

peanut, and soybean oils. The good ones are the omega-3 oils (N-3 oils), often referred to as fish oils. Flaxseed oil is also an omega-3 oil.

Remember, the body needs both N-6 and N-3 oils for health. The problem is that the average American is consuming 50-times more N-6 oils than he should for good health. He is also eating very little of the N-3 oils. This imbalance triggers brain inflammation and abnormal brain function which can result in poor memory, confusion, cloudy thinking, and even abnormal behavior such as depression, suicidal thoughts, homicidal thoughts, addictions, and even criminal behavior.

A growing number of studies are showing that diets high in N-6 fats and low in N-3 fats increase one's risk of developing Alzheimer's disease as much as six-fold. Likewise, research is also showing that diets with a proper ratio of N-6 to N-3 fats have a greatly reduced risk of developing Alzheimer's disease. The normal ratio is somewhere between 3:1 to 2:1- N-6 to N-3 oils.

People eating the proper ratio of these oils also have a reduced incidence of depression and

suicidal behavior. This is especially so in women following the birth of their babies (post-partum depression). Because babies use so much N-3 oils for the formation of their brains, they steal a great deal from their mom during pregnancy. With each pregnancy, the amount of N-3 oils in the mother's body and blood falls, that is, if she does not supplement or eat a diet high in N-3 oils.

As a result, mom not only becomes progressively more deficient in N-3 oils, so do the babies, especially the last baby to be born. It is important to keep in mind that N-3 oils are essential for the baby's brain growth and development.

It has also been shown that a diet high in N-6 oils interferes with brain function and can also lead to depression, suicidal thoughts, and other behavioral problems. A high intake of N-6 oils crowds out the N-3 oils in brain cells and it takes months for the proper ratio of the oils to be incorporated within the brain once a good diet is started.

The polyunsaturated oils play a major role in brain cell membrane function as well as how special

signals are transmitted within the cells. This is why a proper balance of these oils is so critical.

It should also be appreciated that most of the bad fats we eat come in hidden forms, that is, fats that are used in processed foods such as potato chips, baked goods, breads, pizza, and salad dressings. Everyone needs to become a label reader.

## *The Good Fats*

In general, the N-3 fats are considered good. Again, it depends on a number of conditions. The most beneficial of the N-3 fats are composed of components called DHA and EPA. Flaxseed is an N-3 oil, but it must undergo conversion by special enzymes to produce the beneficial DHA and EPA components. And therein lies the problem. Babies, the elderly, and those with chronic medical conditions have insufficient enzymes to make the conversion. Not only does this prevent the manufacture of the beneficial DHA and EPA, but it also can increase inflammation. At best, only a small amount of the flaxseed oil is converted to the beneficial oils.

Despite these dire comments, a number of studies have shown benefit with taking flaxseed oil. Still, I do not promote its use. That brings us

to the fish oils. Fish oil contains the DHA and EPA components directly. Of the two, DHA has the most beneficial effects on health and EPA has the most harmful side effects. The brain only contains DHA, which is used in brain cell membranes, especially the synapse, the mechanism used in brain cell communication.

In general, I only recommend DHA or high DHA-containing oils. So where does DHA come from? In nature it comes from algae, which is where the fish get it. The problem with EPA is that most of the blood-thinning effects, immune suppression, and worsening of diabetes control comes from this component. The greatest worry is with excessive immune suppression, since that will make it more likely that you will suffer from infections such as colds, flu, or bacterial infections and it will be harder to recover from them.

Sometimes you want to suppress immunity, as in the case of autoimmune diseases. Lupus symptoms get much better when a person is taking high EPA oils. It is also why Eskimos and others living on a high fish diet rarely get autoimmune diseases.

Another worry is with brain hemorrhages, which are significantly more common in Eskimos and the Intuits of Greenland. This is because the EPA thins the blood over a long period of time. Brain hemorrhages become more common the older we get, so you do not want to do anything that increases your risk.

Some worry that eating a high intake of polyunsaturated N-3 oils will increase one's risk of oxidizing these oils in the tissues, especially in the brain. A recent study found that this was true with EPA, but not pure DHA. DHA, in the brain, is metabolized into a series of brain protecting chemicals that are quite potent as protectors.

No polyunsaturated oils should be used to cook with, especially fish oils and flaxseed oils. When heated in the air they quickly oxidize and become rancid. In fact, they should not be used as salad dressing or in any way exposed to the air.

What about other safe oils? Extra virgin olive oil protects the brain, as does extra virgin coconut oil. They both contain brain protectant antioxidant flavonoids. Adding turmeric to these

oils not only increases their taste but protects them from oxidizing. Turmeric contains curcumin, a powerful brain protectant, anticancer agent, and anti-inflammatory.

So, you might ask, “What about saturated fats? My doctor says they are associated with heart attack risk.” In fact, the scientific studies show very little link between saturated fat intake and heart attack or stroke risk. My only problem with saturated fats is that they come mostly from animals and the animals are exposed to a number of pesticides and herbicides, which being fat soluble, are stored in the animal’s fat tissue. Eating a lot of these fats will, in turn, increase the concentration of pesticides and herbicides in your body. It is important to appreciate that 60% of the brain is made of fats.

Pesticide exposure has been shown recently to be a major risk factor for developing Parkinson’s disease and other studies have linked these chemicals to other neurodegenerative diseases such as Alzheimer’s disease and Lou Gehrig’s disease (ALS). Since hundreds of millions of people use pesticides and herbicides in and around their

homes, most people are at risk.

Several studies have linked a high intake of saturated fats with memory problems and difficulty thinking clearly. Since, in most of these studies, the source of the saturated fats are animals, it may be that it is the high intake of iron and glutamate from the meat that causes the problem and not the fat.

Vegetable sources of saturated fats do not seem to be related to human disease. This is especially so for extra virgin coconut oil, which contains beneficial medium chain fatty acids and a number of healthy flavonoids.

## *Meats, Proteins, and Amino Acids*

Amino acids are the building blocks for proteins and meats are composed of a mix of proteins, fats, and some carbohydrates. In this discussion I will go backwards and start with meats.

We have seen that fatty meats (marbleized beef, etc.) can contain a considerable amount of saturated fats if the animal is fed grasses, N-3 fats, and CLA type fats (conjugated linoleic acid). The latter two are brain healthy fats. My main concern with a high meat diet, especially red meats such as beef, is that they contain high levels of iron and glutamate, both of which can be brain toxic in higher concentrations.

Studies have shown that glutamate in the diet can damage the brain if it raises the blood glutamate levels appreciably. The effect of eating meats depends on one's health. People with certain

neurodegenerative diseases, such as ALS and Alzheimer's disease, will develop blood levels of glutamate twice as high as healthy people.

The juices from meats contain the highest levels of glutamate, so you should avoid using meat juices as gravy, or basting the meat in its juices. I know that this makes the meat taste scrumptious, but the reason it does is that the glutamate in the juice stimulates the taste buds. That is why the food manufacturers add it to almost all their foods.

Beef has the highest levels of glutamate, with pork a close second. Chicken, turkey, and duck have lower levels. You should eat no more than 4 to 6 ounces of meat a day. If you are exercising heavily, you can eat as much as 8 ounces, twice a day. When you exercise, your muscles use up the glutamate, thus protecting your brain.

Another problem with at least some meats is the risk of prion diseases, so called mad cow disease. The problem appears to stem from cattle that are fed grains, especially if they also contain rendered meats (road kill). Grass fed cattle such as Angus and organically raised beef have not been

reported to carry the disease.

As for protein shakes and amino acid concoctions, I would avoid them. Many of the amino acids can trigger intense hypoglycemia in people who suffer from reactive hypoglycemia (low blood sugar). This is especially a problem in children and young adults. It is estimated that 50% of the population suffers from reactive hypoglycemia, a food-triggered dramatic fall in blood sugar.

Even individual amino acids can precipitate hypoglycemia, the worst being glutamine, cysteine (also an excitotoxin), leucine, isoleucine, and valine. In some infants, leucine can trigger fatal reactions due to drastic lowering of their blood sugar. Some adults will have such drastic falls in blood sugar in reaction to these amino acids that they can suffer a seizure, a coma, or even a stroke.

Soy protein shakes are all the rage. Ironically, they contain one of the highest levels of glutamate, as well as other brain toxins such as high levels of manganese and fluoride. One long-term (25 year) study found that those who ate the most soy-containing foods had the greatest brain shrinkage

(brain atrophy). Soy has also been shown to trigger violent rage attacks in monkeys when fed from childhood.

Soy, because it contains isoflavones (estrogen-like compounds), can also cause abnormal development in the brains of male babies. This is a major concern in male babies fed soy formula. It can also cause premature development of young girls' breasts and an early onset of menses as well. You will notice that the phospholipids in the Brain Lipid Repair Formula are derived from soy. It is important to understand that these are highly purified phospholipids and have had all the harmful components of soy removed by a special technical process.

## *Fruits and Vegetables*

**F**ruits and vegetables contain substances that have been shown to not only protect the brain, but to stimulate its healing. When I switched people from their usual Western diet to a healthy diet, one of the first things they told me was how much clearer their thinking became. Many people think it is normal to have cloudy thinking, what many call “brain fog.” It is not normal, but rather is the result of a high intake of the bad fats, excessive sugar, and too few fruits and vegetables. All of these bad foods cause the brain to become inflamed and function poorly.

One of the main problems causing the brain not to function normally, and eventually leading to one of the neurodegenerative diseases, is chronic brain inflammation. A great number of things cause the brain to become inflamed, including toxic

metals (aluminum, fluoride, lead, cadmium and mercury), foods containing high levels of N-6 fats and inadequate intake of vitamins and minerals.

Surprisingly, one of the most common causes for brain inflammation is aging, just getting older. As we age the entire body becomes more inflamed-especially the brain. This is why neurodegenerative diseases increase dramatically as we age. For example, the incidence of Alzheimer's disease goes from 15% at age 70 to almost 50% after age 80.

Diet plays a major role in this age-associated inflammation. Older people generally eat poor diets, avoid the sun (resulting in vitamin D3 deficiencies), and they experience a growing number of vitamin and mineral deficiencies.

Special substances in fruits and vegetables, called flavonoids, are very powerful and versatile antioxidants that powerfully reduce inflammation and protect the DNA, something under increased attack as we age. Free radical damage to DNA after age 75 is 15 times higher than at age 25. Fruits and vegetables contain hundreds of flavonoids, vitamins, and minerals all in a perfect balance to

protect the brain and the brain's DNA.

Recent studies have shown that blueberries and spinach extracts not only protect the brain from age-related damage, but also make the brain younger. A great number of fruits and vegetables do the same thing such as pomegranates, apples, virtually all berries, and nutrient dense vegetables.

## *What are Nutrient-Dense Fruits and Vegetables?*

**N**ot all vegetables are created equal. Some have a very high density of protective flavonoids, vitamins, minerals, and special protective chemicals such as glycoproteins. Because they have so many protective chemicals packed in them they are extremely healthy.

The most protective for the brain include Brussels sprouts, broccoli, spinach, collard, mustard and turnip greens, cabbage, garlic, onions, celery, asparagus, parsley, kale, and artichoke. Of the fruits, all berries, especially blueberries, strawberries, raspberries, pomegranates, black and red currants, apples, muscadine grapes, oranges, tangerines, cranberries, grapefruits, and sour cherries have the greatest brain health enhancement.

In general, you should eat at least 10 servings of

fruits and vegetables a day. So, many ask, what is a serving? It depends on the fruit or vegetable. For leafy vegetables such as greens, a full cup is a serving. For more compacted fruits and vegetables such as berries and broccoli, a half-cup is a serving. Until you are eating at least 5 servings of fruits and vegetables a day, you are getting no healthy benefits. The older you get the more you will need.

## *The Best Way to Prepare Your Fruits and Vegetables*

Most are aware that cooking fruits and vegetables can destroy some of their nutrients and some are lost in the water in which they are cooked, as in the case of vegetables. The debate between raw or cooked goes on. Some vegetables should at least be steamed, because they contain harmful substances when eaten raw.

For example, kale, broccoli, and Brussels sprouts contain a substance that inhibits the thyroid gland, resulting in hypothyroidism. This can leave you weak, tired, and suffering from difficulty thinking. Cooking these vegetables destroys the factor causing thyroid suppression. Steaming vegetables is probably the most beneficial.

Other vegetables can be eaten raw. Cooking has the advantage of breaking down the structure of the vegetable's cells, thereby releasing all the

healthful flavonoids. Vegetable cells have cell walls made of indigestible cellulose. This prevents us from absorbing the flavonoids from the inside.

Another way to release the beneficial flavonoids is to chew your food thoroughly. See, mom was right, chew your food. It takes a long time to chew vegetables enough to release the flavonoids, so another trick you may want to try is to blenderize your fruits and vegetables.

Several companies make a vegetable blender that can turn fruits and vegetables into a liquid. In this way you totally release all of the rich nutrients hiding in plant cells. The two main blenders are the Juicer, which separates the juice from the plant fiber and the VitaMix blender, which keeps all the vegetable material together. I prefer the latter because it gives you the benefit of all the components of the vegetables and fruits, especially vegetable fiber.

Some people just cannot drink the pure vegetable drink. In that case, I would suggest adding some fruits such as blueberries, strawberries, cranberries, or raspberries. The problem with using

too many fruits is the excess sugar, even though it is a healthier sugar than high fructose corn syrup.

Drinking 6 ounces of vegetable blend is equal to eating approximately 10 servings of vegetables. Eating vegetables allows you to absorb about 20% to 30% of them and blenderizing the vegetables allows 90% absorption.

## *What About Sweeteners and Sugar?*

A number of studies have shown that excess calorie intake, especially as sugar or simple carbohydrates, greatly increases one's risk of developing Alzheimer's dementia. The brain, while dependent on sugar for its fuel, cannot tolerate high levels of sugar. In fact, it has been shown that giving sugar to people having had a stroke makes the stroke much worse. The same is true with head injuries.

One of sugar's bad effects on the brain is the same effect we see in diabetics with high blood sugar levels. The sugar, once in the tissues and organs, triggers a dramatic release of free radicals, gumming up enzymes so that they have difficulty working. We call this gumming up process-advanced glycation end products or AGEs. High levels of AGEs have been found in the brains of

people with Alzheimer's disease.

To promote brain health, avoid sweetened drinks, desserts, sweet pastries, and other sources of refined sugar. Natural sugar is better but should also be avoided in excess. You can eat these on special occasions, but not regularly.

Some simple carbohydrates are also bad for the brain. We call these high glycemic index foods, which include Irish potatoes, white breads, white rice, and other forms of refined carbohydrates. You can get a copy of the glycemic index by going to: <http://www.glycemicedge.com/glycemicindextable.html>.

Foods with an index value greater than 60 are more likely to cause problems. You will notice that many processed foods are on this list.

Recent studies have also shown that what is most important is the amount of these high glycemic foods you eat regularly. It all goes back to "moderation in all things."

What about artificial sweeteners? Are they safe? It depends on your choice of a sweetener. Aspartame (NutraSweet, Equal, Splenda, neotame, etc.), in my opinion, are brain toxic and should

never be used. Stevia can be used, but it can trigger hypoglycemia in those with reactive hypoglycemia.

The product I like is Just Like Sugar, which is a blend of natural products that imparts a palatable sweetness without a lingering aftertaste. It can also be used for cooking. It contains no excitotoxins or known brain toxins.

## *What Should I Drink?*

Americans and others on a Western diet have a love affair with sweetened drinks. Some just cannot do without them. I grew up with sweetened iced tea. For maximum brain health you should drink water, not just any water, but filtered or distilled water.

Most municipal water supplies are contaminated with chlorine (and its breakdown toxins), aluminum, arsenic, lead, and fluoride as well as variable amounts of industrial toxins, pesticides, and herbicides. Most of these toxins accumulate in the body over time. Contaminated drinking water is the worst form of contamination because we drink a great deal of water, especially during the summer months.

Those at greatest risk are babies, small children, and the elderly; the former, because

they have such smaller body weights and their detoxification defense systems are poorly developed and the latter because they also have poor antioxidant defenses, poor detoxification, and their brains are highly vulnerable to toxins of all types.

Of great importance is removing fluoride, a major brain toxin. It has been shown that fluoride, when chemically reacted with aluminum, produces a very powerful brain toxin (called fluoroaluminum), even in extremely low levels. Aluminum is added to all drinking water systems, so when you fluoridate the water it quickly produces the fluoroaluminum toxin.

The only way to remove fluoride from water is by reverse osmosis filters, special calcium-containing filters, and distillation. Most better designed filters will remove aluminum, lead, cadmium, and other contaminants. I use the Waterwise distillation system which I have found to be excellent. It is quiet and very efficient.

Another choice of drink is white tea, especially during the winter months. During

summer you can drink iced tea made with white tea. To improve the flavor you can add blueberry tea or pomegranate tea. White tea has the highest antioxidant levels and the lowest fluoride levels. Other teas, especially the black teas, have high levels of fluoride. Tea plants absorb large amounts of fluoride from the soil. White tea is picked in a very immature state so as to minimize the fluoride content.

Studies have shown dramatic brain protection with white and green tea extracts, which are equal to drinking tea three times a day. White and green teas also contain a brain-calming chemical called L-theonine, which not only calms the brain, but also improves memory and mental clarity.

## *Food Additives*

**I**t is also important to avoid food additives, especially food dyes, excitotoxins additives, and aspartame. New studies have shown that in combination with food dyes, MSG and aspartame greatly increase toxicity to the brain. So, what are food dyes? They are much more than chemicals used to give foods color.

Food dyes are given the designation FD&C and then a color and number. For example you may see FD&C Yellow No. 5 or FD&C Blue No. 1, etc. Sometimes they use just the color and number, for example, Blue No 1. A number of studies have suggested that these dyes can cause hyperactivity in children, learning difficulties, and behavioral problems, even in very small amounts.

Dr. Bennett Shaywitz, a pediatric neurologist at the Yale University School of Medicine,

conducted a study with rat pups and found that a combination of blue, green, red, yellow, and orange food dyes produced hyperactivity in the mice and significantly impaired their learning. Previous studies have shown that FD&C Yellow No. 5 dye, called tartrazine, even in very low concentrations, could disrupt brain cell function and cause hyperactivity and learning difficulties. This may link food dyes to such learning problems as ADD and ADHD.

The food additive glutamate is what is known as an excitotoxin. The most commonly known form is MSG or monosodium glutamate, yet it is not the name used on most foods. The FDA allows food processors to use a long list of disguised names such as natural flavoring, yeast enzymes, sodium or calcium caseinate, hydrolyzed proteins, protein isolates, soy protein isolates, soy protein, etc.

What these glutamate food additives do is cause certain types of brain cells to become hyperactive and can cause them to die. More importantly, they destroy the connections between brain cells called the synapses. This is the earliest damage seen in Alzheimer's disease. Excess brain

glutamate has also been associated with major depression, suicide, addiction, brain fog, confusion, and memory problems. These additives are also known to greatly increase the growth and invasion of cancers of many types including lung, breast, ovarian, prostate, and pancreatic cancers.

The only way to avoid food additives is to eat freshly prepared foods and avoid processed foods. To many people's surprise, such innocent sounding things as stock and broth have high levels of glutamate. This also includes soy sauces and mushroom sauces. Portobello mushrooms contain high levels of glutamate and that is why they produce such scrumptious flavors-glutamate is a taste enhancer.

## *The Benefits of Fasting*

**T**he Bible often makes reference to the importance of fasting. Recent research supports this practice, showing that fasting for one day a week significantly protects the brain, slows brain aging, and causes the brain to increase its production of a number of brain growth hormones which stimulate brain repair.

The maximum benefit comes from fasting one day a week; more severe fasting is of no additional benefit. When fasting, drink plenty of water and take your vitamin supplements as usual.

A great number of animal studies have shown that reducing one's caloric intake also extends life expectancy. This is because a high caloric intake, especially from sugar and processed carbohydrates, dramatically increases free radical generation which ages the organs, including the brain. A high

protein diet, as being recommended by some, has also been shown to reduce life expectancy. Again, this is due to the high intake of iron, glutamate (and other excitotoxins), and pesticides in the animal fats.

## *Exercise*

A compelling number of studies have shown that regular exercise lowers one's risk of all of the neurodegenerative diseases, especially Alzheimer's and Parkinson's disease. It has also been shown to stimulate brain repair and brain protection. Exercise increases the number of brain antioxidant enzymes which are essential to brain protection. As we age there is a significant loss of these vital brain-protecting enzymes.

Ironically, extreme exercise such as long-distance running or jogging, intense aerobics, and similar exercises, increase your risk of brain diseases. This is because such exercises greatly increase free radical generation and lipid peroxidation, the major causes of brain degeneration. If you decide to do these strenuous exercises, you should take higher levels of antioxidants.

Moderate exercise has been shown to convey all the cardiovascular and brain protective benefits as with strenuous exercises. This can include brisk walking for 30 to 45 minutes, resistance exercises, free weights or moderate calisthenics.

## *Conclusion*

As you can see, maintaining a healthy brain requires diligence, knowledge, and persistence. A number of studies have shown that a deficiency in even one nutrient can have an adverse effect on the brain which can mean a poor memory, confusion, poor attention, and brain fog. Studies have also shown that it is what you eat most of the time that matters. The longer you stay on a healthy diet, the better it will work. By correcting your diet you will not only feel better, but you will be able to utilize your brain to its maximum. Exercise and weekly fasting, if added to the diet, will slow or even reverse brain aging and clear out the cobwebs.

**Take a look at the Clinical Research that  
supports the statements in this book...**  
**<http://www.newportnutritionals.com/refs.html>**

# Why my O3 Balance Brain Repair Formula is unique

I have seen a great number of products promoted as “brain boosters” or “**memory boosters.**” While some have ingredients that have shown benefits, the concentrations are either too low or in forms that are not adequately utilized by the brain.

I've divided my **pharmaceutical grade 'O3 Balance, Brain Repair Formula'** into two separate capsules...each with distinctly different delivery systems.



One formula is in a Caplique™, with the essential daily nutrients suspended in high DHA Omega 3 oil, **maximizing synergistic potential and absorption.**



The other nutrient formula is delivered in a water soluble vegetarian capsule which **facilitates intestinal absorption.**

This unique delivery process makes sure an optimal dose is delivered to the brain...and that the nutrients are in a form the brain can utilize with maximum efficiency.

***Dr. Russell Blaylock, MD, CCN.***



A Dietary Supplement.

Go to [www.newportnutritionals.com](http://www.newportnutritionals.com) to find out more.  
**OR CALL 1-800-SPECIAL (1-800-773-2425)**