



## Key Points

- **Caution: Food additives, designed to enhance flavor, can be poisonous**
- **One common additive, MSG, depletes retinal cells – the cells that create vision**
- **MSG has been proven to destroy brain cells**
- **Excitotoxicity is the action by which food additives destroy cells**
- **Excitotoxicity plays a role in strokes and degenerative brain diseases**
- **Know what you are eating – virtually all processed foods contain excitotoxins**

### PLUS

- **New birth control pill raises red flag**
- **Curcumin protects breasts**

### ASK DR. BLAYLOCK

- **Help for prostate cancer sufferers; care for carpal tunnel; boning up on bone supplements**

## Food Additives: What You Eat Can Kill You

It's a well-worn cliché – you are what you eat. But the truth is, you might cease to exist at all if you make poor food choices. Think the food you eat can't kill you?

Think again.

For the first time in 200 years, American children may have life expectancies shorter than their parents. This shocking reversal appears mainly to be due to rampant obesity. In addition to widespread obesity, chronic illnesses of all kinds are now appearing in astronomical rates among our youth, according to a new study appearing in the *Journal of the AMA (JAMA)*.<sup>1</sup>

And what doesn't kill you makes you weaker. Childhood asthma has increased over 200 percent, the aforementioned rate of obesity is up 400 percent and neurodevelopmental disorders, such as ADHD and autism, have gone through the roof during the past 30 years.

The survey also found that 60 percent of children had at least one cardiovascular risk factor and that 30 percent had two or more. Overall the number of chronic illnesses in young people has increased almost 500 percent in the past 40 years.

Another study found that children with chronic illnesses were three times more likely to develop acute conditions that would require hospitalization, and many would die.

Because you're older means you're out of the woods, right? Wrong. Older people have not been spared this onslaught. A recent comprehensive review found that neurological disorders have been grossly underestimated and that neurodegenerative diseases are reaching frightening proportions. Autoimmune diseases (lupus, rheumatoid arthritis, etc.), certain cancers (leukemia, multiple myeloma, and lymphoma) and a number of endocrine-related disorders have all exploded in recent years.

So, what gives? The majority of "authorities" have concluded that most of these problems have an environmental cause, which means we are doing this to ourselves.

The big question is, What environmental toxins are responsible? The evidence indicates that a wide assortment of toxins acting together in an additive or synergistic way cause these quasi-epidemics.



There are a host of industrial toxins that are the culprits. The following are just a few:

- pesticides
- herbicides
- mercury
- cadmium
- lead
- aluminum

There is general agreement that a drastic change in our diets over the decades, with heavy doses of junk foods and other foods with poor nutritional content, also contributes heavily to our problems. In addition there is the widespread use of illicit drugs, over-vaccination, and a lack of adequate regular exercise.

Over the past 20 years I have been studying a disease process called excitotoxicity. In 1995, I wrote a book about my findings called **“Excitotoxicity: The Taste That Kills.”** Excitotoxicity links all of these problems. Ironically, a number of these excitotoxin products, which play a major role in all of these conditions, have been added to our foods since 1945.

When I first wrote about excitotoxicity, only a handful in the scientific world and practically no doctors had ever heard of it. Today, it is one of the hottest topics of research, not only for neurological diseases, but for a growing number of other diseases as well.

One of the most recent findings is that glutamate receptors (responsible for receiving transmissions to the brain) exist not just in the brain, but throughout the body in every organ and tissue. This means that eating foods that raise blood level of glutamate to high levels can cause major problems.

## What Is Excitotoxicity?

In 1957, a couple of curious researchers were conducting an experiment to see if a common amino acid, called glutamate, could help repair a diseased retina.

They fed rats the glutamate (also called glutamic acid) in the form of MSG (monosodium glutamate).

What they found shocked them. The retinal cells that allow vision had been swept away as if by a great windstorm. They reported their findings in an obscure ophthalmology journal, where it was quickly forgotten.

Some 10 years later another researcher, neuroscientist Dr. John Olney, decided to use their method of destroying retinal cells in order to study visual pathways in the brain.<sup>2</sup>

To his surprise, MSG was responsible for destroying vital functions, including retinal vision cells and specific areas of the brain, primarily in the hypothalamus

In addition, Olney discovered that the glutamate was causing brain neurons to become overexcited, virtually exciting themselves to death. He named this phenomenon excitotoxicity.

Since his early discovery in 1968, a great deal has been learned about this process. We now know that glutamate is one of the most common neurotransmitters in the brain and that it acts by keeping the brain alert.

It also plays a major role in each of the following:

- learning
- memory
- endocrine system control
- emotions

The obvious question arises: If glutamate is the most abundant neurotransmitter in the brain, why doesn't it destroy the brain as seen in the previous experiments? In fact, it would, except God also installed an elaborate system to protect the brain.

Basically, glutamate is kept within brain cells and only very small concentrations are allowed to escape during everyday brain function, which are then quickly removed.

Today, this process is being discussed in virtually all neuroscience journals and journals of neurological diseases. In short, it is now mainstream. Now let us focus on some of its specific effects.

## Excitotoxins Target Humans

Anytime you hear someone try to defend the safety of excitotoxin additives in foods, it's important to know that humans are five times more sensitive to their toxic effects than the next most sensitive animal in the world, the rat.

We are 20 times more sensitive than monkeys.

That means one-twentieth the dose of MSG used to cause obvious brain injury in a monkey will do the same to you.

Humans regularly eat doses of excitotoxins that damage animal brains. This fact was admitted by a

## Excitotoxicity's Far-Reaching Effects

We now know that the excitotoxic process plays a major role in many life-threatening maladies:

- strokes
- brain injury
- brain tumors
- degenerative brain diseases (Alzheimer's, Parkinson's and Lou Gehrig's disease)
- meningitis
- neurological Lyme disease
- encephalitis
- schizophrenia
- depression
- bipolar disorder
- addiction behaviors
- multiple sclerosis

In addition, there is strong evidence that excitotoxins play a central role in autism.

group of scientists reviewing MSG toxicity in our food supply.

We must also understand that the fetus, infant, and small child are four times more sensitive to MSG toxicity than the adult. Feeding table food to a small child, for example, can be very dangerous and have life-long consequences.

I have heard a number of people remark that they are not sensitive to MSG. Usually that means it doesn't cause them to have a headache or other symptoms of the "Chinese restaurant syndrome." In fact, most of the effects of MSG occur silently and over years.

The people who develop the Chinese restaurant syndrome are the lucky ones, because they know to avoid it.

Careful studies have shown that when you combine foods containing MSG with aspartame, blood glutamate levels are double what they would be if you ingested MSG alone.

Let's say you eat several foods containing MSG, such as corn chips, a frozen dinner, and a commercial soup. Your blood glutamate will rise, let's say 20-fold. If you add a diet drink, it then increases to 40-fold or 4,000 percent! People do this all the time, especially young people.

Because of the way excitotoxicity works, we know that people who have poor nutrition,

chronic diseases, chronic stress, or are exposed to other toxins, are much more affected by the excitotoxin food additives. Some lucky few are born with powerful detoxification and antioxidant systems, which afford them much protection.

You must also understand that virtually all processed foods contain one or more excitotoxins. Many contain three to as many as five. When combined, their toxicity is magnified. This is very common in soups, frozen dinners, and chips.

## MSG Lurks in Your Food

It is also important to know that federal law says that any food containing less than 99 percent pure MSG can be labeled by any name the manufacturer wishes.

We frequently see MSG hiding behind such innocent-sounding names as hydrolyzed protein, vegetable protein, soy protein isolate, soy protein concentrate, whey protein, and natural flavoring, spices, enzymes, autolyzed yeast extract, stock, broth and carrageenan.

As you can see, people are at great danger from these excitotoxic food additives.

Nothing has been done about this problem because it is a multibillion dollar business that involves the makers of the additives as well as all food processors, supermarkets, food warehouses and Wall Street itself.

Food stores and processors spend billions each year, advertising in virtually every media outlet available, including newspapers, TV, radio, magazines, and even scientific journals. They do not want to lose advertising dollars by doing a story on the dangers of one of the most commonly used food additives.

## Young People Especially Susceptible

Many studies have shown that glutamate plays a major role in how the brain is formed during development.<sup>3</sup>

There is a programmed rise and fall in brain glutamate levels during brain formation, which occurs in humans not only during intrauterine life, but until the age of 27.

This oscillation in brain glutamate is very critical, and any disruption in glutamate levels has dire consequences.

It has been shown that during pregnancy, a diet high in MSG increases the developing baby's

glutamate levels to those twice as high as the mother's. This can significantly alter how the baby's brain forms and functions.

Very high MSG intake (of any excitotoxin) can cause abnormal learning, addiction risk, and behavioral, emotional control, and endocrine problems later in the baby's life.

We now know, for instance, that glutamate is the main control neurotransmitter for the hypothalamus. This section of the brain controls most of your hormones, eating behavior, temperature control, pain regulation, and sleep habits, as well as the autonomic control of your heart, GI tract, lungs, and bladder.

When animals are fed MSG early in life, they develop severe abnormalities, which include a short stature, small endocrine organs (pituitary, adrenal glands, thyroid, ovaries, testes and pancreas), and a high risk of seizures and impaired learning.

While I do not believe dietary excitotoxin food additives are the primary cause of autism, I firmly believe that they greatly aggravate it.<sup>4</sup> It also most likely plays a significant role in ADHD and similar learning problems. My beliefs are supported by a great number of experimental studies.

Some of these injuries caused by excitotoxins are reversible, but some are not. The degree of harm depends on the timing of the exposure and the dose. For example, we now know that exposure within the mother can have devastating effects on the child's brain development and result in major problems. Exposure later in life cause a different series of problems, and many of these are reversible.

## MSG's Toxic Effects

Combined with the excessive use of vaccines, which also triggers excitotoxicity within the brain, dietary excitotoxins can have devastating effects on brain function.<sup>5</sup>

This is especially true if the vaccine contains mercury, such as the flu vaccine. It is also important to recall that most children are exposed to a number of pesticides and herbicides both within the home and outside the home. Many of

### It's Smart to Avoid MSG

It is important to realize that when humans eat a meal containing MSG, their blood glutamate levels rise 19 times to as much as 50 times higher than normal. This is sufficient to cause brain injury.

these chemicals have been shown to damage the brain by triggering excitotoxicity even in very small concentrations. These chemicals also accumulate in the brain.

A recent survey found that over 65 percent of Americans are overweight, as are 30 percent of children. Some

18 percent of these children are grossly obese. Everyone talks about obesity, but few have looked at one of the most likely causes — excitotoxins in the food and drinks.

In the original studies by Dr. Olney in 1968, it was observed that all the animals that were fed MSG as infants became grossly obese. Over the years this has been observed in virtually every animal species. In fact, it is so reproducible it is the method scientists use to produce obese animals in doing obesity research.

Since the 1980s, Americans have consumed 282,000 metric tons of MSG and 800 million pounds of aspartame every year. The amount of MSG consumed every decade doubles. Both are excitotoxins and are found in foods, drinks, medications, vaccines, and even fertilizers.

Following a comprehensive review of all studies on MSG toxicity, it was noted by the prestigious Life Sciences Office of the Federation of American Societies for Experimental Biology (FASEB) that infants and small children were receiving a dose of MSG from commonly eaten foods that equaled those amounts regularly used to produce brain lesions in animals.

Despite this shocking admission, the public was kept in the dark concerning this growing danger. Since this 1993 study, a large number of well-done studies from all over the world confirmed all that I will be telling you in this newsletter.

The obesity caused by MSG (all excitotoxins) exposure in animals is the very same as we are seeing in our youth. This obesity is very difficult to combat via dieting; exercise also has little effect. Animals with diets high in MSG tend to favor sweetened foods over their traditional diets, just as we see in our children.

MSG has one other characteristic that makes it especially dangerous — it is associated with

insulin resistance (Type-2 diabetes), hypertension, and grossly abnormal blood lipids — especially a high VLDL and LDL-cholesterol.<sup>6</sup> This constellation of findings is called the metabolic syndrome. You may recall from one of my previous newsletters that 45 million Americans are suffering from this syndrome. The numbers continue to grow, especially among our youth.

This leads us to another link between food-based excitotoxins and disease, and that is atherosclerosis, also known as hardening of the arteries. We can expect a growing epidemic of very young people dying from cardiovascular diseases and strokes. By this, I mean 20- and 30-year-olds having heart attacks and strokes in mass numbers.

We know that Type-2 diabetes alone increases one's risk of having a heart attack by over 360 percent, as well as increasing the risk of blindness, impotence, stroke, heart failure and early death.

Even newer studies have shown that feeding MSG to animals not only dramatically increases the free radicals and lipid peroxidation products in the walls of their arteries, the increase lasted for what would be the equivalent of decades in humans.<sup>7</sup> In most cases, the MSG exposure was early in life and limited to six to 10 days.

Similar studies have also shown that MSG also causes the prolonged generation of free radicals in the following:

- liver
- kidneys
- brain

This is one of the most frightening things yet discovered concerning this excitotoxic food additive. And remember — aspartame coupled with MSG-laced foods doubles the risk.

In essence, this means a diet filled with food additive excitotoxins causes you to age much faster and more intensely than normal, which increases your risk of developing a chronic disease.

## MSG's Effects on Sexual Function

Exposure early in life to MSG disrupts the endocrine control system located within the hypothalamus of the brain, and can last for a lifetime. Not only are the hormones that regulate reproduction and sexual function disrupted, but MSG can also change the very wiring within these critical brain areas. This can have a crucial effect on development of a child's sexual characteristics.

Animals exposed to MSG early in life have significant problems with reproduction, including infertility. Disruption of regulatory factors in the brain plays a major role, but recent studies have shown that the male reproductive system (testes, seminiferous tubules, spermatocytes, etc.) and female reproductive system (ovary, follicles, fallopian tubes, and uterus) are controlled by glutamate receptors. High blood levels of glutamate can cause destruction of these important receptors.<sup>8</sup>

Because of the abundance of glutamate receptors within the uterus, menstrual problems are to be expected. Combine this with xenoestrogens (estrogen-like substances) in plastic products contaminating both food and bottled water, and we can better understand why there are so many female health problems in this country.

High amounts of glutamate in the diet can also cause abnormal spasms of the uterus, which could lead to cramping and excessive bleeding during menstruation.

Americans, especially women, are obsessed with soy foods and products, based on lies they have been told by the popular media. Soybeans contain one of the highest glutamate levels of any plant, and when the bean is processed, the glutamate is released.

Studies have shown that feeding soy to infant monkeys increased aggression 67 percent and led to animals that were antisocial.<sup>9</sup> Another study, lasting some 25 years, found that people who ate the most soy had the greatest brain atrophy (shrinkage).<sup>10</sup> A large percentage of women are feeding their babies soy formula, never realizing the danger.

For men, a number of countries have done studies that have found abnormal sperm and reduced sperm production.

## Multiple Sclerosis and MSG

There is no evidence that MSG causes MS, but there is compelling evidence that it is primarily an excitotoxic disorder. Thus, dietary excitotoxins can worsen it.<sup>11</sup> The disease causes the brain to release large amounts of glutamate around nerve fibers, and this destroys the covering of the nerve (myelin sheath).

MS is a disease characterized by alternating periods of worsening with long periods of

## What Your Doctor Doesn't Know . . .

Most practicing physicians have never heard of excitotoxicity and hence, dismiss it as unimportant. This is true despite the fact that excitotoxicity plays a major role in a great number of diseases other than brain disorders, including the following:

- diabetes
- glaucoma
- migraine headaches
- metabolic syndrome
- atherosclerosis
- menstrual disorders
- infertility
- asthma
- immune problems
- cancer

improvement. At the sites of the damage, called MS plaques, there is no protective blood-brain barrier to shield the area from toxins in the blood. When foods or drinks containing excitotoxins are consumed, the blood glutamate and aspartate rise to very high levels, as we have seen. This enters at the site of the plaques, causing significant worsening for very long periods.

People with MS should avoid all excitotoxin food additives and even foods that are naturally high in glutamate, such as pureed tomatoes, cheeses, and mushrooms (especially portabello mushrooms). I have witnessed a number of MS patients undergo dramatic improvements by following a diet free of excitotoxins.

### Excitotoxins and Alzheimer's, Parkinson's, and Lou Gehrig's Disease

The bulk of the research into these devastating diseases indicates that excitotoxicity plays a significant, if not central, role. A number of associated environmental exposures also increase the risk of each of these devastating diseases. For example, in each of these disorders, studies have suggested a link between elevated mercury levels in the brain as well as exposure to pesticides and herbicides.

In the case of Parkinson's disease, several pesticides — rotenone in particular — can produce symptoms in experimental animals that closely resemble the disease seen in man. Cases of rapid

onset Parkinson's disease have also been associated with pesticide exposure in the home of six people, as reported in a prestigious neurology journal.<sup>12</sup>

Studies have shown that the pesticides not only trigger excitotoxicity within specific areas of the brain, but they also increase activation of cells called microglia cells that are closely associated with neurodegenerative diseases. Microglia cells are the brain's immune cells. Mercury acts in the same manner, and blocking glutamate receptors blocks most of mercury's toxic effects.

What this shows is a close link between the excitotoxic process and neurodegenerative diseases.

The reason not all people develop Parkinson's or other neurodegenerative diseases following these toxic exposures is that only people with a hereditary or congenital defect that hinders detoxification are sensitive. Yet, everyone will develop some damage, and many will suffer from memory loss and have difficulties concentrating.

In addition, many interacting events occur as we age:

- Inflammatory cytokines increase throughout the body
- Our antioxidant defenses begin to decline
- Studies have shown that DNA oxidation is four times higher in the aged brain
- Mitochondrial DNA is 10 times more sensitive than the cell's nuclear DNA

This means that as we age, especially after 70, the rate of free radical damage to our cells increases dramatically.

Subsequently, as we age we need considerably more antioxidants in our diets and from supplements. Likewise, our cells become more sensitive to the damage by excess glutamate. Nutrients can protect us from this damage.

### Seizures and Excitotoxins

Recently, one of the Supreme Court justices was struck down by an unsuspected seizure. This type of incident is not very rare. It is estimated that 2 percent of people will have a seizure during their lifetime.

Seizures can be caused by head injuries, strokes, toxic exposures, metabolic diseases, congenital and hereditary diseases, and over-ingestion of brain stimulants, such as caffeine, cocaine, methamphetamine, and excitotoxins in our food and drink.

In my career as a neurosurgeon, I have treated a great number of people with seizures, and I have discovered that most can be controlled nutritionally, often without medication.

Most studies have shown that seizures are caused by overactivity of the glutamate neurotransmission system in the brain. After all, glutamate is an excitatory transmitter.<sup>13</sup> It is important to note that most of the newer anti-seizure medications either block the glutamate receptor or lower brain glutamate levels.

The problem with that approach is that glutamate is critical to memory, learning and many functions of the frontal lobe. Nutritional approaches do not radically block glutamate function in the brain, but rather, modulate it.

I have found that most patients who have intractable seizures (called status epilepticus) consume large amounts of glutamate additives in their food and drink. A number of young women have had seizures after drinking large amounts of aspartame-sweetened drinks.<sup>14</sup> Aspartame can produce the same brain lesions as MSG.

By removing most excitotoxins from their diet, many patients either stop having seizures or have far fewer and less intense seizures. It all makes perfect sense, but, most doctors, including neurologists, just don't get it.

If glutamate excess is driving the seizures, as modern neuroscience believes, what sense does it make to raise the blood glutamate level 19-fold to 50-fold by eating diets high in glutamate?

I remember a young couple that came to me in great distress. The bride-to-be developed a grand mal seizure weeks before their wedding. She did not want to ruin her honeymoon, which the proposed medication would have done.

I placed her on a diet low in glutamate and high in antioxidants, plus a few nutrients that are known to reduce excitotoxicity. She never had another seizure and takes no medication.

## Sudden Cardiac Death

A number of young people, mostly athletes, have died from a condition that is increasingly called "sudden cardiac death."

Studies indicate that these young people could either have a congenital defect in the electrical system of the heart or other structural heart problems. For many, no cause is found.

Experimental studies have shown that if an animal's magnesium level is lowered and then the animal is subjected to a fright, about 50 percent to 60 percent will suddenly die. They die of cardiac failure, just like these young people. But if you add magnesium to their diets and repeat the fright, none die.

One recent study seems to have found the answer to this mystery. It found that when magnesium is lowered, the glutamate receptors in the heart become overactive and throw the heart muscle into abnormal beating patterns (called arrhythmia).<sup>15</sup> The heart muscle also becomes quite inflamed. Blocking the glutamate receptors prevents these reactions.

It has been noticed that people who succumb to sudden cardiac death often die after eating a meal. It's possible that when people who have low magnesium levels eat a meal high in glutamate, glutamate levels rise enough to produce the same deadly effect seen in the animals. We know this happens in the brain, and that the heart's electrical system contains numerous glutamate receptors.

There is also evidence that overstimulation of glutamate receptors within the walls of the coronary arteries can cause the arteries to go into severe spasm, leading to a heart attack. Low magnesium plays a critical part. One of magnesium's functions is to prevent the glutamate receptors (the NMDA receptor) from becoming overactive.

## Excitotoxins and Cancer

One of the most interesting aspects of excitotoxin food additives and disease is the connection to cancer growth, invasion, and spread. This was first discovered with malignant brain tumors (glioblastoma multiforma). It was shown that elevated glutamate levels in the vicinity of the tumor caused the tumor to invade the surrounding brain, and consequently result in death much faster.

Recent research has discovered that a multitude of cancers, including lung, breast, prostate, colon, and melanoma, contain glutamate receptors. Those with more receptors had a much worse prognosis.<sup>16</sup>

For example, in a study of people with oral cancers, those with the highest level of glutamate receptors had larger tumors, higher rates of metastasis, and a much poorer prognosis.

One of the most horrifying cancers of children is the medulloblastoma. Studies have shown that

prognosis is highly dependent on glutamate receptors. Those without protective receptors have the worst type of tumor.

Melanoma is one of the most deadly cancers. Melanomas not only contain glutamate receptors, they also secrete high levels of glutamate. Prognosis is strongly dependent on the presence of these receptors; that is, those with the most glutamate receptors have the worst prognosis.

Researchers have found that using drugs to block glutamate receptors dramatically reduces the growth, invasion, and spread of a number of cancers.

These glutamate-blocking drugs also dramatically increase the effectiveness of traditional chemotherapy medications. At the same time, they protect normal cells in the body from chemotherapy toxicity.

The irony is that cancer patients are not being told that foods containing high levels of glutamate make their cancers grow faster and make them more likely to spread. I have examined the diets recommended by cancer nutritionists in a number of large cancer centers and found that most contain large amounts of glutamate. These diets also make the traditional treatments less effective, but very few practicing oncologists are aware of this connection to glutamate.

Glutamate and other excitotoxins can trigger prolonged generation of free radicals and lipid peroxidation throughout the body, which leads to a number of chronic diseases, including obesity.

Recent studies have also linked glutamate excess to chronic fatigue syndrome, multiple chemical sensitivity, HIV dementia, glaucoma, macular degeneration, osteoporosis, pulmonary disorders, bladder problems, insomnia, and a number of behavioral problems, including addiction.

It is vital to avoid foods containing excitotoxin additives. To do that you should either eat only freshly prepared foods, as our ancestors did, or become an obsessive label reader and learn all the disguised names for glutamate. Discipline is essential. But one thing is certain: We must learn to avoid excitotoxins.

Our very lives depend on it.

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**Please note that this advice is generic and not specific to any individual. You should consult with your doctor before undertaking any medical or nutritional course of action.**

# Medical and Nutritional Updates

## New Birth Control Pill a Disaster in the Making

The older generation of birth control pills produced a number of health problems for the millions of women who took them for years, including increased rates of breast and uterine cancer, fibrocystic breast disease, and infertility. Recently, the best and the brightest in the pharmaceutical industry have created a new pill, called Lybrel, which will be an even greater disaster.

What makes this pill different is that women who take it will no longer have menstrual cycles; that is, no periods. Immediately, I saw a danger. When women have periods they lose a significant amount of blood and this rids their body of excess iron.

A number of studies have shown that this, not estrogen, is the most likely reason why premenopausal women have such a low incidence of heart disease, cancer, and stroke. After menopause, women begin to accumulate iron faster than men, and hence, they move into a very high cardiovascular and cancer risk category.

This pill will dramatically increase iron levels in women, which has been associated with a number of diseases, such as cancer, atherosclerosis, diabetes, and neurodegenerative diseases. If millions of young women take this pill, I believe we will see a dramatic rise in all of these diseases.

## New Study Finds Mechanism for Statin Brain Damage

A new study may have found the secret as to why so many men taking the cholesterol-lowering drugs called statins, are developing memory loss and even amnesia.

Brain cells utilize a considerable amount of cholesterol, which is essential to the function of cell membranes in the brain. This study found that the cholesterol in the brain was packed in special areas of brain cell membranes which were responsible for controlling brain glutamate levels. When this cholesterol was depleted using drugs similar to statins, brain glutamate concentrations

rose to dangerous levels. Simply, it triggered excitotoxicity, the same process that occurs in neurodegenerative diseases. With doctors calling for even higher doses of statins in millions of people, we can expect to see more neurological problems.

## Curcumin Protects Breasts From Radiation-Induced Cancer

Radiation is one of the most agreed-upon causes of breast cancer. Women exposed to radiation from nuclear blasts at Hiroshima had breast cancer rates four times higher than normal, and studies have shown that mammograms can increase breast cancer 1 percent to 3 percent per year. In general, I advise women to seek other types of examinations, such as thermograms and breast MRI scans.

For women determined to have mammograms, protection is essential. This study found that rats exposed to gamma-radiation (the most damaging and similar to X-rays) were significantly protected against the development of breast cancer if they were fed curcumin for 10 days prior to exposure.

I usually recommend taking 500 milligrams of curcumin powder mixed with one tablespoon of extra virgin olive oil three times a day with meals. You can mix it with your food. Curcumin is a flavonoid found in the spice turmeric and is available as an extract.

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## Ask Dr. Blaylock

### Attention Blaylock Readers:

Dr. Blaylock welcomes any questions or comments you would like to share. Each month, he will select a few to be published and answered in the newsletter. Please remember that he cannot answer every question. When submitting a question or comment, please include full name, city, and state. Please e-mail the doctor at: [askblaylock@newsmax.com](mailto:askblaylock@newsmax.com).

**Q: I was diagnosed with neurosarcoidosis after having lumps form on a nerve in my leg and on my forehead. I now take plaquenil which has given me a reasonable quality of life. Are there any supplements that will help?**

— Jim B., Yorkshire Dales, U.K.

**A:** Neurosarcoidosis represents a chronic inflammatory disorder that probably entails some part of the immune system not functioning properly. Traditional treatments using immune suppressing drugs do help, but they increase risk of other disorders including brain degeneration and deterioration of many tissues, especially with the use of prednisone for long periods.

Natural products are helpful. Quercetin, curcumin, natural vitamin E (with high gamma-E), resveratrol, grape seed extract, and green tea extract all reduce inflammation and reduce immune overactivity, especially if used in combination.

It is important to avoid immune-stimulating supplements, such as Echinacea, IP6, beta-glucan, and other immune activators.

It is also important to change one's diet. Avoid omega-6 oils (corn, safflower, sunflower canola, soybean oil, and peanut oils), eat at least five servings of nutrient-dense vegetables (kale, Brussels sprouts, cauliflower, broccoli, etc.), avoid fluoride, and drink only purified water. Avoid red meats — rather, eat only chicken, turkey, and some pork (organic fed).

**Q: I was diagnosed with prostate cancer in 1994. I am 79 years old and I am about to have a prostate biopsy. Will it increase the rate at which the cancer progresses?**

— Walter S., Penticton, B.C.

**A:** Any disturbance of a cancer can increase its spread and in the case of prostate cancer, should the biopsy needle puncture the capsule, spread becomes more likely. A number of supplements have been shown to slow prostate cancer growth and spread, including zinc, vitamin C (buffered), indole-3-carbinol, lycopene, curcumin, silymarin quercetin, selenomethionine and DHA. Avoiding all glutamate food additives is critical, since newer studies have shown that prostate cancers contain abundant glutamate receptors.

**Q: I have carpal tunnel syndrome. What supplements beside pyrodoxine can I take? Is there anyway for a paraplegic to avoid the surgery and restore his hands?**

— Don H., Kalispell, Mont.

**A:** Being a paraplegic puts extra wear and tear on your median nerves, due to the pressure. Wearing padded gloves, such as weight-lifting gloves, will help. Also, sleeping in wrist splints (specifically made for carpal tunnel) will help relieve the pressure on the nerves.

As for nutritional treatments, high doses (5,000 ug) of vitamin B-12 (methylcobalamin) help. Take it in divided doses. Also, vitamin B-1 (BenfoMax), helps heal the nerves. Vitamin B-6 should be in the form pyridoxal-5-phosphate, which is the functional form. The dose is 30 to 50 milligrams a day.

DHA, buffered vitamin C, natural vitamin E, alpha-lipoic acid, and acetyl-L-carnitine also improve nerve healing.

**Q: I've heard about bone improvements that result from the use of Boniva. What is your advice? I am also taking Bone Restore (5 tablets a day) from Life Extension.**

— Celeste C., Angle Inlet, Minn.

**A:** For most people, dietary changes, regular resistance exercises, and special supplements can prevent and treat osteoporosis.

Bone Reserve by Life Extension Foundation, contains most of the nutrients that we know are important in bone health. Yet, there are a few more.

For example, DHA is known to improve bone mineralization, as is vitamin K (K-1 and K-2), green tea extract and many of the flavonoids.

A very large study reported in the American Journal of Nutrition found that eating five servings of fruits and vegetables played the most important role in preventing osteoporosis.

It is thought that the high content of magnesium, potassium, and the ability of vegetables to alkalize the blood played the most important role in the diet.

Resistance exercises are important, since loading the bones with weights causes calcium to be deposited within the bones, rather than be mobilized.

There is abundant evidence that bone-destroying cells (osteoclasts) contain glutamate receptors. For this reason, eat a diet free of glutamate additives (MSG, hydrolyzed proteins, soy protein isolate or concentrate, caseinate, autolyzed enzymes, etc.).

High acid diets, that is, high-meats diets, mobilize calcium from the bones. People who eat little meat rarely develop osteoporosis.

**Q: I was diagnosed with brain cancer a few years ago. Can you give me any nutritional and supplemental information.**

— Charysse H., Jefferson, Ore.

**A:** Newer studies have demonstrated that primary brain tumors, such as the glioblastoma multiforme and astrocytoma, increase their growth dramatically in the presence of glutamate. So, the most important step is to avoid glutamate food additives as well as foods naturally high in glutamate, such as soy foods and drinks (especially soy sauce), pureed tomatoes, mushrooms, and broth.

A number of natural compounds have powerful anticancer effects, such as curcumin, quercetin, resveratrol, silymarin, indole-3-carbinol, natural vitamin E, buffered vitamin C, magnesium, green tea extract and ellagic acid. In combination they are even more effective. You may want to read my book, "Natural Strategies for Cancer Patients" for more information and details.

These brain tumors are made to grow faster by high sugar diets (including potatoes), fluoride, mercury, and stress. A near vegetarian diet is best, with just small amounts of turkey and chicken. Blenderizing your vegetables supplies you with high levels of antioxidants, cancer inhibiting flavonoids and plant enzymes. Immune stimulation using beta-1,3/1,6 glucan helps fight off the cancer as well.

## About Dr. Blaylock

Dr. Russell Blaylock edits NewsMax.com's **Blaylock Wellness Report**. He is a nationally recognized board-certified neurosurgeon, health practitioner, author, and lecturer.

He attended the Louisiana State University School of Medicine in New Orleans and completed his internship and neurosurgical residency at the Medical University of South Carolina in Charleston, S.C.

For the past 26 years, he has practiced neurosurgery in addition to having a nutritional practice.

He recently retired from his neurosurgical duties to devote his full attention to nutritional studies and research. Dr. Blaylock has authored three books on nutrition and wellness, including *Excitotoxins: The Taste That Kills*, *Health and Nutrition Secrets That Can Save Your Life*, and his most recent work, *Natural Strategies for The Cancer Patient*. An in-

demand guest for radio and television programs, he lectures extensively to both lay and professional medical audiences on a variety of nutrition-related subjects.

Also, Dr. Blaylock has been appointed to serve on the Scientific Advisory Board of the Life Extension Foundation. He is the 2004 recipient of the Integrity in Science Award granted by the Weston A. Price Foundation.

Dr. Blaylock serves on the editorial staff of the Journal of the American Nutraceutical Association and is the associate editor of the Journal of American Physicians and Surgeons, official publication of the Association of American Physicians and Surgeons.

He previously served as clinical assistant professor of neurosurgery at the University of Mississippi Medical Center in Jackson, Miss., and is currently a visiting professor of biology at the Belhaven College, also in Jackson.



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