

## Sept 2015 by Dr. Mercola

An estimated 5.4 million Americans have Alzheimer's disease, five times more than have Parkinson's, a severe form of dementia. The most recent data suggests over half a million Americans die from Alzheimer's each year, making it the third leading cause of death in the US, right behind heart disease and cancer.

As prevalence has increased, so have the questions about why, and the search for answers has dished up some pretty curious findings.

It seems quite clear that Alzheimer's disease is primarily diet-related, with insulin resistance, processed foods, trans fats, and unhealthy omega 6:3 ratios being the primary culprits.

However, recent research has also uncovered evidence suggesting that the disease may be the result of agricultural practices, and even more surprising, Alzheimer's could potentially be transmitted via certain invasive medical procedures.

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Dear Reader,

As an anti-aging specialist, I see more patients with Alzheimer's disease than the average doctor. It's a cruel sickness.

Alzheimer's attacks the brain, steals your memory and it can leave you completely helpless.

It has also become an epidemic. More than five million Americans over the age of 65 already have it. I'm even seeing patients in their 40s and 50s with symptoms. The latest figures show that about 200,000 Americans have "early-onset" cases.

But Alzheimer's is not a normal part of aging. It's essentially a modern disease.

Our world is full of toxic chemicals. They're in our air, water, household products, high-tech gadgets and personal-care products. On top of that, modern farming adds chemical pesticides to our food.

To make matters worse, most people today eat toxic foods. I'm talking about a diet high in breads, cereals, sugar, cheap vegetable oils and other processed foods. Our bodies weren't designed for this cheap fuel. When the Centers for Disease Control and Prevention (CDC) looked at 2,400 people, it found 215 toxins in their urine and blood. One new study suggests these factors can lead to dementia in younger people. These irritants in our food and environment create inflammation. It's how your body protects you from these toxins and unnatural foods.

But research shows there is also a clear link between all this inflammation and dementia.<sup>5</sup>

You see, inflammation causes your brain to develop sticky proteins called "plaques." They gum up your brain's circuitry and stop the information flow.

It also causes tiny tubes in the brain to collapse, blocking vital nutrients. These "tangles" starve the brain and cause it to atrophy. These plaques and tangles are the hallmarks of Alzheimer's.

And mainstream doctors will tell you there's no way to reverse it.

But our primal ancestors didn't have this devastating disease. They ate a natural-healing diet that cooled inflammation.

You can do the same thing to help prevent you or a loved one from developing Alzheimer's disease...

1. Eat a primal diet. Avoid the modern foods that inflame your body. That includes sugar, high fructose corn syrup, artificial sweeteners, vegetable oils and fried foods. Also cut back or avoid processed carbs, like breads, cereal, pasta, rolls, pastry, cakes, cookies and sodas.

Instead, eat the primal foods our ancestors enjoyed. They ate a diet rich in omega-3 fats that naturally reduce inflammation. Choose wild-caught fish like salmon, sardines, tuna, and mackerel. Also eat pastured meat, poultry, and eggs. Other rich omega-3 foods include edible marine plants like seaweeds, as well as nuts and berries.

2. Buy organic. The Environmental Working Group estimates you can easily avoid 80% of pesticides. Just stick to organic fruits and vegetables. That can significantly lighten your body's "toxic burden" and inflammation.

3. Get more vitamin C. Citrus fruits like oranges, grapefruits and lemons all have high amounts of this inflammation fighter. Red peppers are another good source. Taking extra vitamin C is also a good idea. I recommend getting 1,000 to 2,500 mg per day.

And there is also one other brain protector I recommend to patients at my Wellness Center. Today's guest article tells you all about it.

It's supposed to be impossible. But this completely natural remedy stops the inflammation process in its tracks. Then it floods the brain with healing antioxidants. Memories — and hope — return.

You won't hear about this from Big Pharma. That's because this "orange aspirin" costs less than \$10 a year. And it's natural, so it can't be patented.

### **Five Routes to Alzheimer's Disease**

At present, evidence suggests there are a number of causes of Alzheimer's, including the following:

1 Type 3 diabetes: Faulty insulin signaling is an underlying cause of insulin resistance, which typically leads to type 2 diabetes. However, while insulin is usually associated with its role in keeping your blood sugar levels in a healthy range, it also plays a role in brain signaling.

2 Researchers have found that when insulin signaling in the brain is disrupted, it results in dementia, hence the suggestion that Alzheimer's may be a brain-related form of diabetes.

Even mild elevation of blood sugar — a level of around 105 or 110 — is associated with an elevated risk for dementia. According to neurologist Dr. David Perlmutter, if your fasting blood sugar is over 95 mg/dl, it's time to address your diet to lower it, to protect your brain health.

3 Gut dysfunction, caused by a combination of excess sugars and processed foods; antibiotic exposure from food and medicine; genetically engineered (GE) grains, which create foreign proteins; and pesticide exposure, just to name a few well-known culprits

4 Trans fat consumption: Trans fat is linked to a higher risk of memory impairment. It may act as a pro-oxidant, contributing to oxidative stress that causes cellular damage.

5 Vegetable oils oxidize when heated, and when oxidized cholesterol and trans fat enter into your LDL particles, they become destructive, contributing to arterial plaque buildup in your brain.

6 Imbalanced omega-3 to omega-6 ratio: Researchers have also found a link between Alzheimer's and raised levels of an omega-6 fat called arachidonic acid.

7 They believe it interferes with the brain's nerve cells, causing over-stimulation, and that lowering levels would allow the cells to function normally.

Most experts agree that the omega 6:3 ratio should range from 1:1 to 5:1. The sad reality is that it now ranges from 20 to 50:1 for most Americans.

Omega-6 fats are found in high concentrations in factory-farmed animals as they are typically fed grains, as well as vegetable oils such as corn, canola, soybean, and sunflower oils.

8 Slow-acting Creutzfeldt-Jakob disease (CJD), the human form of Mad Cow disease, contracted either through:

a Contaminated meat

b Certain medical procedures, such as using human growth hormone extracted from the pituitary glands of infected human cadavers (a procedure now banned due to this contamination risk)

9 The first four have been discussed at length in previous articles. Here, we'll focus on the last route, which has disturbing implications for the conventional meat industry.

July 2015

For many years, we've been told that there's little we can do to prevent Alzheimer's disease and other types of dementia, however, the truth is you can reduce the risk by eating the best foods, gentle exercising like leg lifting (Read Leg Lifting in Exercise), staying mentally and socially active, and keeping stress down, and getting sufficient sound sleep which is very important. Research published in the journal of Neurobiology of Aging, suggests that people with chronic sleep problems may develop Alzheimer's sooner than those who sleep well. Read 'Sleep' in Human Health.

Proven causes of Parkinson's disease (also a brain fault) and Alzheimers is excess manganese. See Parkinson's and Manganese.

### **Choline function excerpt from AI Sears**

Your brain needs Choline for thinking and remembering.

Choline, the building block required for the synthesis of acetylcholine. This lets your nerve cells fire through the synapses between the trillions of neurons in your brain.

If you have lots of acetylcholine, your mind is sharp and your memory is clear. When you drink coffee in the morning, the release of acetylcholine gives you the buzz that gets you going.

But it will also burn you out, because it depletes your reserve of acetylcholine

Your brain has a huge appetite for choline. It's the primary building block for acetylcholine. You burn it up 24/7 as your brain uses it to maintain clear communication between trillions of neurons.

You need it for all the basics like thought, memory and sleep. It even controls how you move. Your muscles receive commands from your brain via acetylcholine. That means your sense of balance and stability is controlled by this key transmitter.

Like many nutrients, your supply of choline drops as you get older. As this happens, you can expect some or all of these symptoms:

- Poor recall and memory loss;
- Fatigue or lack of energy;
- Brain fog and/or a sense of confusion;
- Problems falling asleep, tossing and turning;
- Unable to catch on, or learn new things;
- Feeling distracted or irritable;
- Walking with a wobbly or shaky gait, unable to stay balanced.

To survive, your body will scavenge materials from other sources when it can't get enough from its main supplier. When choline levels drop off, your brain goes on a scavenger hunt and extracts choline from nerve cell membranes.

This last resort is called "auto-cannibalism" and it's very dangerous.

In the short term, your brain will use this technique to keep your memory and other functions up and running. But in the long run, your nerve cells end up badly damaged. It's not surprising that Alzheimer's patients have very low levels of acetylcholine. As the disease progresses, it's the choline neurons that show the most damage.

### **Prevention**

Low blood levels of vitamin B12 and low folate have been found in Alzheimer's patients, and in the serum and the red blood cells of sufferers.

Research from the Mayo Clinic shows that diets rich in carbohydrates are associated with an 89% increased risk for dementia, and high-fat diets are associated with a 44 percent lower risk.

Alzheimer's disease is currently at epidemic levels with 5.4 million Americans, including one in eight people aged 65 and over, living with it.

Dr. Mercola wrote that Alzheimer's has become nothing short of epidemic in USA. Could it be that some commonly eaten foods are the primary culprit? According to neurologist Dr David Perlmutter, author of the best selling book that Grain Brain, "Your diet has major implications for Alzheimer's".

He says that diets that are high in sugar and carbohydrates, and those low in fat, are devastating to the brain, and saturated fats are a critical part of a heart and brain-healthy diet. Avoid all artificial sweeteners, especially aspartame, which studies have linked to the development of Alzheimer's disease.

Dr. Perlmutter has been talking about the benefits of saturated fat for a long time. Conversely, for well over half a century, the media and a majority of health care officials have warned that saturated fats are bad for your health and lead to a host of negative consequences, including high cholesterol, obesity, and heart disease.

Avoid gluten and casein (primarily wheat and pasteurized dairy, but not dairy fat, such as butter). Research shows that gluten adversely affects your blood-brain barrier and makes your gut more permeable, which promotes inflammation and immune dysfunction, and both of these are believed to play a role in the development of Alzheimer's disease.

Optimize your gut flora by regularly eating fermented foods.

Increase consumption of healthy fats, including animal-based omega-3 fats. Make sure you're getting enough omega-3 fats, such as wild-caught Alaskan salmon, sardines, and krill oil, which helps protect your brain.

There's little doubt that this wholly inappropriate fat phobia has had a lot to do with our increasing

Alzheimer's epidemic.

The treatment performed at USA clinics is a breakthrough medical procedure where Stem Cells (cellular building blocks) are usually administered intravenously and subcutaneously (under the skin) in Alzheimer's patients. The whole procedure takes approximately one hour and has no known negative side effects.

### **Caregivers**

In the early stages of Alzheimer's disease, caregivers often focus on keeping loved ones safe and comfortable. As the disease progresses, however, you might face difficult end-of-life questions. When is it time to choose comfort care over lifesaving care for your loved one? When does medical care merely prolong a person's dying? Here's help considering these and other end-of-life questions.

### **Record Directives**

These are written instructions regarding your loved one's preferences for medical care at the end of life. Ideally, discuss these preferences with your loved one while he or she is still able to communicate. Later, make sure copies of advance directives are included in your loved one's medical charts. This is important if your loved one moves to a nursing home or other facility for long term care or needs care in a hospital or emergency room. The advance directives will help the staff know what is, and isn't, to be done in medical emergencies.

### **Focus on comfort, not life extension**

As Alzheimer's progresses, your loved one might not be able to communicate that he or she is in pain. Look for clues, such as a sudden increase in disruptive behaviour or trouble sleeping. Physical signs might include sores, swelling or pale skin. Speak to the medical team about adjusting your loved one's treatment plan to ensure his or her comfort.

Eventually, you might need to weigh your loved one's comfort against the benefits of prolonged life. In some cases, efforts to prolong life — such as dialysis, tube feeding and antibiotics to treat bacterial infections — might result in unnecessary suffering for people who could otherwise reach the end of life in relative comfort and peace.

The study concluded that current evidence does NOT support guidelines that encourage low consumption of saturated fat for heart health. Saturated fats, which have the longest history of being (wrongfully) demonised, were in fact found to have NO adverse effect on heart disease risk.

"We've been led down the wrong road," Dr. Perlmutter says. "[Saturated] fat is your friend. You desperately need fat. You desperately need to have good cholesterol in your body. That war on cholesterol is a perversion of the science that was even used to tell us we should stop eating foods with cholesterol..."

We know quite well that in elderly individuals, for example, those in the highest level of blood cholesterol have about a 70 percent risk reduction for becoming demented. These are the things that are good for the heart. They're good for the immune system. Cholesterol is the precursor of vitamin D, progesterone, estrogen, testosterone, and cortisol...This is probably one of the reasons why statin drugs are so damaging. You lower cholesterol, and you set the stage for things that are very, very worrisome."

### **Diabetes doubles your risk of Alzheimer's**

Dr. Perlmutter cites a study published in the Archives of Internal Medicine, which found that women who are given cholesterol-lowering statin medication have a 44 percent increased risk for becoming a type 2 diabetic. Diabetes, in turn, doubles your risk for Alzheimer's disease.

Our ancestral diet was very high in saturated fats and virtually void of non-vegetable carbohydrates. Today, not only do we eat tremendous amounts of carbohydrates, these carbs are refined and highly processed. In the last decade, we've also shifted over to genetically engineered grains and sugar (GMO sugar beets and corn).

### **Alzheimer's is directly related to elevated blood sugar levels**

A study published in the New England Journal of Medicine in August 2013 demonstrates that even mild elevation of blood sugar—a level of around 105 or 110—was already dramatically associated with an elevated risk for becoming demented. Dr. Perlmutter believes it's very important for physicians to

become cognizant of this link, and to stop downplaying the risks associated with even mildly elevated blood sugar.

If your fasting blood sugar level is even mildly elevated (over 95 mg/dl), it's time to reduce it. Don't be average when so many of the population is severely diseased! The ideal fasting blood sugar level is around 70-85.

"It really depends on whether you have adapted your body to burning fat. People who have been on a high-fat, low-carb diet are able to tap into body fat as an energy resource. They've undergone a change called keto-adaptation. It means they're burning fat and they can get by with much lower blood sugar because they're burning fat and don't need to worry about blood sugar as much.

This notion that your brain needs sugar is really old news as well. Fat, specifically ketones, which your body produces by metabolizing your fat, is now called a 'brain superfuel.' There is even a pharmaceutical product; a medical food that you can write as a prescription, which raises the level of ketones or fat in the bloodstream of patients, offered up now as a treatment for Alzheimer's disease. Who knew? The point is the brain loves to burn fat. That's what we have to shift it over to..."

#### Intermittent Fasting Can 'Reset' Your Body to Burn Fat Again

One of the tools I've found particularly useful is intermittent fasting, which can really help jumpstart your body into burning fat instead of carbs as its primary fuel. In his book, Grain Brain, Dr. Perlmutter also starts off the intervention section with a period of fasting, which can be viewed as pressing the Reset button. He's particularly aggressive about it in patients who are insulin/leptin resistant.

I typically recommend keeping your fasting insulin level below 3. The so-called normal, however, is anywhere from 5-25 microU per mL. This despite the fact that the upper edge of this "normal" clearly indicates you have a problem with insulin resistance! Again, you do not want to be average here. You want your insulin/leptin levels to be ideal or optimal for health and disease prevention.

"If somebody has an insulin level of 26, they are in deep dudu. They need a lot of work. They need to fast. They need to drop the carbs. They need to add back the good fat. They need to add in some anti-glycating agents like benfotiamine and resveratrol. We need to hit these people aggressively. This is what works. This is what reduces their risk of converting to diabetes, and therefore has a huge role to play in protecting their brains," Dr. Perlmutter says.

#### Eat the Right Types of Fat, and Remember That Food Is Information

Avoid all trans fats or hydrogenated fats that have been modified in such a way to extend their longevity on the store shelf. This includes margarine, vegetable oils, and various butter-like spreads. Sources of healthy fats to add to your diet include:

Vegetable juicing is an easy way to virtually guarantee that you will reach your daily target for vegetables, in an easily digestible form. Raw green vegetable juice can be likened to a "living broth," as it is teeming with micronutrients that many people are lacking. Green vegetable juicing should be a regular part of your diet and consist of organic, green veggies – spinach, celery, kale, Swiss chard, etc., not fruits, which are too high in sugar.

#### **Distribution**

Mediterranean areas have lower levels of Alzheimer's than USA and New Zealand, possibly because USA and New Zealand have the USA modified wheat, and use more Glyphosate.

Some research suggests the best hope is in prevention focusing on exercise and diet, specifically replacing carbohydrates with higher amounts of healthful fats, and moderate amounts of high-quality protein.

Gluten sensitivity appears to be involved in most chronic disease, including those affecting the brain, because of how gluten affects your immune system. Glucose and fructose, (sugars) and carbohydrates can also have powerfully toxic effects.

Preventing and treating neurological disorders requires complete elimination of gluten.

Full-blown Celiac disease, which is gluten sensitivity affecting your small intestine, affects an estimated 1.8 percent of people in Western cultures. But gluten sensitivity may actually affect as much as 30 to 40 percent of all people, and according to Dr. Alessio Fasano at Massachusetts General Hospital, virtually all of us are affected to some degree.

This is because we all create something called zonulin in the intestine in response to gluten. This protein, found in wheat, barley and rye, makes your gut more permeable, which allows proteins to get

into your bloodstream that would otherwise have been excluded. That then sensitizes your immune system and promotes inflammation and autoimmunity. This kind of gut permeability is also promoted by things like antibiotics and chlorinated water.

Vitamin D is also needed to reduce the ill effects of Alzheimer's.

I believe that Alzheimer's is the worst thing that can affect a person and their spouse, relatives and friends, who can suffer even more than the patient, and for many years.

A good drystock farmer/neighbour, friend, developed Alzheimer's severely and could not do anything. His hard working wife caring for him and running their small grazing (animals to be moved, bought and sold) retirement farm, so she sold it, and moved to a nice retirement village. The stress was so that she spent three months weak and sick in hospital and died, diagnosed as caused by stress, while her husband survived, but knows little.

We know of others. Alzheimer's was brought on by EMF from sitting for years 1.5 metres from the mains power supply into their home.

A review of the world's scientific literature shows that high-sugar diets can lead to loss of mental function that increases risk for Alzheimer's disease and other forms of dementia. High sugar diets are a major risk factor for diabetes. [HERE](#)

Insulin resistance, which leads to obesity and diabetes, is aggravated by consuming sugar, which can cause Alzheimer's disease. Your brain requires both sugar and insulin to function properly. Many recent studies show that insulin is necessary for memory. Brain cells are loaded with insulin receptors, specifically in the medial temporal regions of the brain that are the source of memory. Insulin also regulates the amyloid precursor protein and its derivative beta-amyloid (abeta), that cause the senile plaques, that are diagnostic of Alzheimer's disease.

## Causes

There is no one cause.

Heavy metals in foods, water, medicines (modern pain killers in particular, not Dispirins) and some, supplements, especially the cheap ones. Levels of copper (Cu), iron (Fe) and zinc (Zn) were high in parts of the brains of affected people.

Aluminium cooking utensils, aluminium drink cans and some flu injections.

Electromagnetic fields (EMF) from power lines and any other electrical sources adversely affects brains. The USA book by Paul Brodeur called *The Great Power-line Cover-up* reveals hundreds of actual occurrences with names and locations. I know of many.

Low folate levels caused by insufficient greens. High folic acid levels if left untreated, can mask the symptoms that may lead to permanent nerve damage. There is a close link between Alzheimer's and vascular disease which includes any condition that affects the circulatory system, which ranges from diseases of arteries, veins and lymph vessels, to blood disorders that affect circulation. This means exercise, which helps keep your blood pressure and weight down.

Low vitamin B12 adverse effects are worse if combined with low folate.

Manganese which is high in wet acids soils of New Zealand stresses the brains in people and animals. Read about it in the two chapters - Elements > Manganese, and in Human Health Elements.

A lack of regular brisk puffing exercise.

Mercury in amalgam, antiperspirants and thimerosal (a preservative that is in flu injections and in many vaccines). There is mercury in many supplements of any kind, especially from Norway and USA where all their 300 rivers have more Hg than is safe for human consumption.

Smoking and secondhand smoke are the third highest cause after Cancer and

## Prevention

Avoid the above and electromagnetic fields (EMF) from all sources. [HERE](#)

Take zinc, vitamins C, E, B3, B12 and folate. Low blood levels of vitamin B12 and low folate have been found in Alzheimer's patients, and in the serum and the red blood cells of sufferers.

In USA one in five people over 65 years of age lack vitamin B12, a deficiency that can cause pernicious anaemia that is unfortunately sometimes diagnosed as Multiple Sclerosis. Blueberries are recommended by world authority, Dr Joseph Mercola. They also help eyesight, and have high levels of anthocyanin and antioxidant, so they help guard against Alzheimer's and other neurological diseases.

People who consume higher amounts of niacin from food and supplement sources seem to have a

lower risk of getting Alzheimer's disease than people who consume less niacin.

Remove amalgam mercury fillings from teeth, avoid all aluminium, including cooking utensils and refrain from drinking from aluminium cans.

Drain mercury and all heavy metals from your body. The German Heel products do it well.

Keep using your brain, take zinc (Read Zinc) and estrogen.

Eat anti oxidants (purifiers) Zn, Se and vitamin E, coloured vegetables and fruits. Tomatoes, blueberries, kumura, carrots, carotene, water, butter, red grapes. Grape seed and other seeds are very beneficial. Green tea is reported to reduce the chances of getting Alzheimer's cancer.

Avoid free radicals (pollutants).

Scientists have shown that even trace amounts of mercury can cause the type of damage to nerves that is characteristic of the damage found in Alzheimer's disease.

Things that reduce diabetes also reduce the risk of developing Alzheimer's disease. See Human Health > Sweeteners (Honey & Maple Syrup).

Take Antioxidants like selenium with vitamin E in Good Health Premium, coconut from Philippines. Read the two chapters on Selenium. Vitamin D (sunshine is best), Ginseng and Ginkgo Biloba. Elderly folks with vitamin D deficiencies have double the risk of Alzheimer's.

Most women with Type 2 diabetes have intestinal bacteria with genes that are different from those of healthy women. The genetic makeup of intestinal bacteria was a more exact predictor of diabetes than the more traditional models such as having a huge belly (waist-hip ratio) and having a high BMI (Body Mass Index), which means a lot of body fat (Nature, published online June 21, 2013).

A diet high in refined carbohydrates and saturated fats causes changes in the brain that are seen in Alzheimer's disease. This same diet caused changes seen in diabetes -

- high blood sugar levels,
- high blood insulin,
- low cerebrospinal fluid (brain) insulin seen in diabetes and Alzheimer's disease, and
- very high levels of cerebrospinal fluid unbound beta amyloid that forms the amyloid plaques found in the brains of people with Alzheimer's disease. A low saturated fat and sugar diet decreased unbound beta amyloid.

#### **Dr Joseph Mercola newsletter -**

“According to one study, the odds of developing Alzheimer's were nearly quadrupled in people who were less active during their leisure time, between the ages of 20 and 60, compared with their peers.

“Sunshine can help your mental health, while a deficiency can speed your mental decline and increase your risk of depression.

“Occasionally someone would experience nausea taking the full recommended amount of Niacinamide - Vitamin B3. Whenever this occurred (which wasn't often) I recommended that the dose be cut in half, to 500 milligrams three times daily. Only one person in 33 years had the nausea persist at the lower dose (and that person was advised to reduce the quantity even further). Everyone else had their symptoms improve, with no return of nausea. A few of those people who became nauseous as a result of taking the full amount of niacinamide did not follow the advice to lower their dose, and their condition went from mild to severe nausea, and they even experienced vomiting. Blood tests showed that these patients had elevated liver enzymes, brought on by excess niacinamide (or at least too much for those particular individuals' livers to process). But every case returned to normal within two to three weeks once the person stopped taking niacinamide completely. This sounds somewhat alarming but keep in mind that this only occurred in a small number of people: less than 10 of at least several hundred (possibly as many as 2,000 individuals) in over 33 years. And in those 33 years, there have been no other adverse symptoms! According to news reports, clinical trials in humans with Alzheimer's are set to begin this year in both England and Southern California. But, again, there's no need for you to wait for the outcome of these clinical trials to try niacinamide for a family member who already has Alzheimer's. (And even if there's no “official” diagnosis, it's worth a try for anyone who has any of the symptoms [Dr. Kaufman] outlined above). Its exceptional safety, affordability, and availability make it worth trying right now. And when it's Alzheimer's, the sooner niacinamide is started, the better the chances are for it to work, before the accumulation of “intracellular garbage” has done irreversible damage. Of course it's best to work with a physician skilled and knowledgeable in nutritional and natural medicine, if you feel uncertain. Niacinamide is available in 500 and 1,000 milligram capsules and tablets. It can be found at nearly any natural food store, compounding pharmacy, and Dr Jonathan V

Wright's Tahoma Clinic Dispensary. Read the label carefully! Although the names are quite similar, niacinamide is not niacin. Niacin can have many more side effects than niacinamide.

Some have reported a lessening of brain fog by taking Ginkgo Biloba, however it is very dose dependent - if I forgot to take it, the brain fog returned immediately. However, when I increased CoQ10 to over 150 mg a day, the brain fog lifted and I no longer needed Ginkgo. Additionally, with CoQ10, I can go without it for a day or so and the brain fog doesn't seem to return for several days."

### **Liquorice**

Some people believe it helps, but some don't and express concern over taking it for too long, and the variations between people. Some people think liquorice is very dangerous when taken for long periods of time which apparently is true in people who have an adrenal insufficiency and do not have correct potassium and sodium levels.

Apparently its success is very diet dependant, so think there are better and safer things to do.

### **Folate (Folic acid) deficiency linked to Alzheimer's disease**

LEXINGTON, KENTUCKY. Studies have shown that low concentrations of folic acid (folates) in the blood are associated with an increased risk of dementia and Alzheimer's disease (AD).

Folic acid helps heart disease patients.

"But what if there were a safe, inexpensive, and effective alternative? According to some very recent research, the best treatment for Alzheimer's may be a simple vitamin you can take right at home.

"According to the abstract from a recent study: "We evaluated the efficacy of nicotinamide in mice, and found that it restored cognitive deficits associated with [Alzheimer's disease]." After describing the biochemical and structural improvements they observed in the mouse brain cells, the researchers concluded: "These preclinical findings suggest that oral nicotinamide may represent a safe treatment for Alzheimer's disease..."

"Nicotinamide" is another name for what is more commonly referred to in this country as "niacinamide." Both are types of vitamin B3. While the niacinamide didn't have any effect on the most common marker of Alzheimer's, beta-amyloid, it did cause a 60 percent decrease in another marker, called "tau protein" (one specifically referred to as "Thr231-phospho-tau").

"Niacinamide was also associated with an increase in "microtubules," which carry information inside brain cells. "Microtubules are like highways inside cells. What we're doing with [niacinamide] is making a wider, more stable highway," one of the researchers said. "In Alzheimer's disease, this highway breaks down. We are preventing that from happening."

"So it's easy to understand why the researchers have been so enthusiastic about their findings. But the effects appear to go way beyond prevention.

"So effective even the mainstream researchers are calling it a "cure"

"In one interview, they remarked that niacinamide brought the mice "back to the level they'd be at if they didn't have the pathology. It actually improved behaviour in non-demented animals too."

"One of the co-authors continued, "this suggests that not only is it good for Alzheimer's disease, but if others take it, some aspects of their memory might improve."

"And in an uncharacteristic move for mainstream researchers, one of the co-authors even went so far as to say, "Cognitively, [the mice] were cured. They performed as if they'd never developed the disease."

"Of course, the research team couldn't completely abandon their mainstream roots, so they were sure to offer the typical obligatory warning: "Until we've done the proper clinical trials, I wouldn't advocate people rush out and eat grams of this stuff each day."

And just to make sure that message came through loud and clear, the Vice Chair of the Alzheimer's Association Medical & Scientific Advisory Council also commented that the new study is "intriguing," but people should be cautious and not assume that "more is better" when it comes to possible treatments, even ones that appear to be safe.

"It's certainly true that more isn't always better. But let me tell you why you don't have to wait around for more research before you reap the benefits of this vitamin breakthrough.

"Although there hasn't been any human research yet, the results of the animal research are so strong

that it gives hope that Alzheimer's may be treatable in humans by the same means. Plus, niacinamide has been used extensively for many purposes for over 60 years, and its safety is well-known. In fact, two of the "basic books" about niacinamide therapy were written in the 1940s by William Kaufman, Ph.D, M.D., a psychiatrist and an exceptionally thorough clinical researcher."

In 1943, Dr. Kaufman wrote his first book on the nutrient, titled *The Common Form of Niacin Amide Deficiency Disease: Aniacinamidosis*. In it, he lists a number of symptoms he'd observed in his patients who needed niacinamide -

Memory impaired; attention easily distracted; can't concentrate. Feels as if in a mental fog. Thought slowed. Difficulty comprehending. No longer reads as much as formerly.

Unwarranted anxiety. Lack of initiative, not co-operative. Delays making decisions; evasive. Dodges responsibility; starts projects, never finishes.

Frequently quarrelsome, mean, unreasonable, intolerant, opinionated, unhappy. Can't take a joke; little things annoy.

And he discovered that all of these symptoms—and many more—"disappeared or...improved considerably" with the use of niacinamide.

But it was one of Dr. Kaufman's other observations that led me to recommend niacinamide to the most people. His much longer and more detailed 1949 book focused on treatment of degenerative arthritis with niacinamide. And I saw first-hand many, many times that this therapy was just as effective as he reported.

Two or three years after I first read his books and started recommending niacinamide, I settled on a general dose of 1,000 milligrams taken three times a day. This timing followed Dr. Kaufman's careful clinical work, which showed that spreading out the total amount was significantly more effective than using it all at once.

"B3's other claim to fame

Abram Hoffer, M.D., Ph.D. (considered to be the "father" of orthomolecular psychiatry) started using niacinamide to treat schizophrenia in 1950. According to Dr. Hoffer's figures, schizophrenic individuals who started taking niacinamide, along with vitamin C, within five years of being diagnosed have a 66 percent—or higher—chance of recovery (although they also need to continue their niacinamide indefinitely).

The potential do-it-yourself Alzheimer's treatment you can get at your local pharmacy."

End

Session V, Zinc and the Central Nervous System focused on the anatomy, physiology, functional implications, and the pathology of zinc in the CNS. The fact that zinc is present in two distinctly different "pools" in the brain was recognised as an important starting point for discussion. The major pool, which is protein-bound, was recognised as an essential component of literally dozens of zinc metalloenzymes and other zinc metalloproteins. These zinc metalloproteins are ubiquitous in all soft tissue and in essentially all organelles of all cells.

The role of zinc in cognitive function has been studied extensively in both children and the elderly. It was noted that zinc deficiency during foetal life is associated with developmental delays; that zinc repletion in children with zinc deficient gestations may not be adequate to improve all of the developmental consequences. Low serum zinc levels in elders are associated with poorer global cognitive function, particularly verbal function, and that there is an inverse correlation of zinc blood levels with plaque density in Alzheimer's disease. Lower serum zinc levels are associated with slower lower-extremity function and poorer activities of daily living. Repletion in elders with lower serum zinc levels is associated with improved, but variable cognitive function, and especially with activities of daily living. It was noted that zinc's most important cognitive effects may be mediated in conjunction with other micronutrients.

Evidence was presented showing an intimate association of zinc deficiency and Alzheimer's disease. Zinc may play a role in the elaboration of the apoptotic pathways that are governed by zinc concentrations within the brain, and may also impact on the generation of neurofibrillary tangle formation and the basic biology of tubulin assembly. Alzheimer's disease is characterised by amyloid deposits within the neocortical parenchyma and within the cerebrovascular area of the brain. Evidence was presented showing that these amyloid deposits are selectively enriched in zinc and showing that zinc chelation may dissolve amyloid lesions. The possible use of zinc chelators as a therapeutic

approach to treat neuro-toxicities derived from any amyloid deposits has been considered.

Guess what:

<http://www.newtreatments.org/Adrenals/ga/301>

Co-Enzyme Q10 protects against nitric oxide generation

<http://www.newtreatments.org/Adrenals/ga/302>

Ginkgo Biloba inhibits nitric oxide synthesis

But wait, there is even more:

The Zinc relation:

Zinc is also a very potent inhibitor of nitric oxide synthase. Increased levels of chelatable zinc have been shown to be present in cell cultures of immune cells undergoing apoptosis.

<http://www.powerpak.com/PowerGraphs/1999/dec/Iron.cfm>

By contrast, a zinc deficiency is associated with Parkinson's disease. Levels of zinc in the cerebrospinal fluid of victims are substantially lower than those without Parkinson's. The enzyme superoxide dismutase contains zinc as an essential component. It is normally present in high concentrations in the substantia nigra where it scavenges free radicals. It catalyzes the dismutation of superoxide anions to hydrogen peroxide and oxygen thus exerting a neuroprotective effect. Zinc supplementation produces significant increases in superoxide dismutase activity.

<http://www.sbwise.com/ingredients/zinc.htm>

Many antioxidants, including superoxide dismutase also require zinc. Zinc levels are lower in the brain and cerebrospinal fluids in patients with Alzheimer's. Zinc deficiency may lead to the destruction of nerve cells and the formation of neurofibrillary tangles and plaques.

### **1. Drink Vegetable Juices**

A study published in the September issue of the American Journal of Medicine indicates that people who drink three or more servings of fruit and vegetable juices per week have a 76 percent lower risk of developing Alzheimer's disease compared to people who drink less than one serving per week. Because some people develop a high blood sugar level and associated health challenges when they drink fruit juices on a regular basis, it is best for the masses to stick to vegetable juices. If you don't have a juicer, then eat plenty of raw vegetables.

### **2. Ensure Regular Intake Of Omega-3 Fatty Acids**

A study published in the Journal of Neuroscience indicates that a diet high in omega-3 fatty acids, particularly docosahexaenoic acid (DHA), can dramatically slow the progression of Alzheimer's disease in mice. The consensus among neuroscientists worldwide is that consumption of foods that are rich in omega-3 fatty acids is essential to building and maintaining a healthy nervous system, the system that becomes dysfunctional in cases of Alzheimer's disease.

Some healthy foods that are rich in omega-3 fatty acids are:

- Cod liver oil
- Raw walnuts that have been soaked in water for a few hours
- Seaweed
- Purslane
- Freshly ground flax seeds
- Cold-water fish like wild salmon
- Organic eggs from free range birds

### **3. Enjoy Activities That Mentally Stimulate You**

The cells that make up your brain are similar to those that make up your muscles; they need to be exercised to stay healthy and strong. If your daily work doesn't require you to solve problems and be creative, consider adopting hobbies that do. Not only will you decrease your risk of developing

Alzheimer's, you're bound to feel more alive!

### **Blackmores**

Previously, high levels of the amino acid homocystine has been linked to heart disease and stroke. Now, in a recent study experts found a link between high blood homocystine levels and Alzheimer's disease.

Researchers studies 164 Alzheimer's patients aged over 55 years, and 108 people without Alzheimer's disease. It was found that the Alzheimer's patients had high levels of homocystine and low levels of folic acid and vitamin B12. From previous studies it is know that folic acid and vitamin B12 lowers homocystine levels in the blood.

It is interesting to find that those with the highest homocystine levels were 4.5 times more likely to have Alzheimer's. Those with the lowest levels of folic acid and vitamin B12 were 3.3 and 4.3 times respectively, more likely to have Alzheimer's disease.

Nitric oxide + superoxide ---> pyroxinitrite, a free radical

The link: High calcium levels will antagonise both magnesium and zinc.

\* Low magnesium levels will cause excess calcium influx, causing more Nitric oxide production

\* Low zinc levels can't inhibit NOS and besides that the very important zinc-dependent superoxide dismutate will also be deficient.

Reuters 0307

Copper in excess increases the chances of Alzheimer's.

See Al in Al item above

Study: Plant extracts may ease dementia

March 5, 2004

Reuters

LIVERPOOL, England - Professor Elaine Perry, of the University of Newcastle upon Tyne in northern England, was cited as telling a medical conference that extracts of sage and lemon balm may help to improve memory and behavioural problems in people with Alzheimer's disease and other types of dementia, adding in a statement that, "In controlled trials in normal volunteers, both extracts improved memory, and lemon balm improved mood. Lemon balm reduced agitation and improved quality of life in people with Alzheimer's disease.

Preliminary data showed that sage also had a significant effect on attention and behaviour. The impact of sage on Alzheimer's are still being investigated but preliminary data indicate significant effects on attention and behaviour, she added.

From

Dr. Joseph Mercola

Author of the

<[http://www.mercola.com/forms/total\\_health\\_book.htm](http://www.mercola.com/forms/total_health_book.htm)>Total Health Program

### “Six Guidelines to Preventing Alzheimer's Disease

1. Eat a Nutritious Diet. One of the best things you can do to prevent dementia -- and a variety of other chronic disease -- is to follow the diet described in my Total Health Program. The premise is to increase the amount of fresh vegetables, which are high in folate, in your diet and restrict grains and sugars. More likely than not, this will resolve cholesterol and blood pressure issues. It will also strengthen your body, allowing it to fight off a host of diseases, not to mention give you increased amounts of energy. I also recommend consuming high-quality fish or cod liver oil so you can meet the optimal amount of omega-3 fats needed to achieve good health and fight Alzheimer's. It is important to find a fish or cod liver oil that is independently tested by a lab and found to conform to the highest purity guidelines. This will ensure that the oil is free of mercury and other toxins. One such brand, which I have found to be of superior quality, is Carlson's fish and cod liver oil. You can find Carlson's and other good brands at your local health food store. If this is a problem for you, for your convenience we also carry these in our store.

2. Exercise. We all know that exercise is good for our cardiovascular system, but studies have found that exercise can also protect the brain, thereby warding off Alzheimer's and other forms of dementia. According to one study, the odds of developing Alzheimer's were nearly quadrupled in people who were less active during their leisure time, between the ages of 20 and 60, compared with their peers. Similar to a healthy diet, regular physical activity is one of those things that can significantly improve many aspects of your physical and emotional health. For the elderly, simple activities such as walking and light weight training would likely provide benefits. For those who are younger, more strenuous exercise may heighten the benefits.

3. Avoid and Remove Mercury From Your Body. Even trace amounts of mercury can cause the type of damage to nerves that is characteristic of the damage found in Alzheimer's disease. Dental amalgam fillings are one of the major sources of mercury, however you should be healthy prior to having them removed. Once you have adjusted to following the diet described in my Total Health Program, you can follow the mercury detox protocol and then find a biological dentist to possibly have your amalgams removed.

Other sources of mercury include most seafood, thimerosal-containing vaccinations and flu shots, which contain both mercury and aluminium.

4. Avoid Aluminium. Aluminium has been widely associated with Alzheimer's disease. Your main sources of exposure are likely through drinking water and use of antiperspirants.

Aluminium cookware may also be a source of exposure. Although aluminium pots are probably less problematic than the sources mentioned above, I personally would not use aluminium cookware.

5. Challenge Your Mind. Mental stimulation, such as travelling, learning to play an instrument or doing crossword puzzles, is associated with a decreased risk of Alzheimer's. Researchers suspect that mental challenge helps to build up the brain, making it less susceptible to the lesions associated with Alzheimer's disease.

6. Finally, try Wild Blueberry IQ, an all-natural, whole fruit softgel made from wild blueberries, which have high anthocyanin and antioxidant content that are known to guard against Alzheimer's and other neurological diseases." End

[http://www.mercola.com/2003/jun/11/hormone\\_replacement.htm](http://www.mercola.com/2003/jun/11/hormone_replacement.htm)

**Hormone therapy** doubled the risk of Alzheimer's disease and other types of dementia in women who began the treatment at age 65 or older, according to a large study.

The findings are the latest of a string of studies showing that the supposed benefits of hormone therapy do not exist and that the hormones actually raise the risk of several serious diseases.

The four-year study involved 4,532 women, half of whom took placebos, and the other half took Prempro, which is a combination of estrogen and progestin and the most widely prescribed type of hormone therapy.

Forty cases of dementia developed in the hormone group during the four years compared to 21 in the placebo group, leading researchers to say that there's no reason for older women to take combination hormone therapy.

In terms of an annual rate, the findings indicate that for every 10,000 women aged 65 years and older who take hormones, 45 cases of dementia will develop each year, 23 of them due to the hormones.

Wyeth, Prempro's manufacturer, plans to add a warning to the drug's label about the increased risk of dementia.

Researchers noted that the number of cases per year is small and is no cause for alarm, but they recommended that older women who are taking combination hormone therapy should decide with their doctors whether they should quit.

It is not known whether the findings apply to younger postmenopausal women or women who take other hormone combinations or estrogen alone. Two other studies have found that combined hormone therapy has a negative impact on the brain and increases the risk of stroke.

Of the 2.7 million American women who take combination hormone therapy, 1.2 million use Prempro. The hormones were approved by the Food and Drug Administration (FDA) to treat

menopausal symptoms like hot flashes and night sweats and to prevent the bone-thinning disease osteoporosis. However, the hormones slightly increase the risk of breast cancer, strokes and heart attacks, so the agency recommends that women consider other treatments for osteoporosis and that they use the lowest dose of hormones for the shortest time possible.

Last year a large study was halted after findings indicated that the combination therapy caused a small but significant increase in the risk of invasive breast cancer. Many women stopped taking the hormones after the study came out. Prior to the study, about 6 million women were taking combination therapy. Many people still believe that hormone therapy might protect the brain and help prevent Alzheimer's disease.

A case study from Keele University in the UK published last year showed high levels of aluminium in the brain of an individual exposed to aluminium at work, who later died from Alzheimer's disease.

The theory that estrogen might prevent Alzheimer's was based on earlier, survey-type studies suggesting that women on hormones had lower rates of dementia than women not on hormones. But those studies were not considered as reliable as the current study because they were smaller and did not contain control groups.

A recent study suggests that any good effects the hormones may have on brain cells may be offset by harmful effects. Researchers are not certain how the combination therapy increases the risk of dementia but suggested that it increased the risk of blood clots and clogged blood vessels in the brain, which might injure brain cells and contribute to Alzheimer's disease.

Alzheimer's Disease is a modern plague on the seniors in our society. More evidence continues to be published that Alzheimer's is primarily a prescription drug induced disease. Coconut oil is an alternative to toxic drugs that has shown tremendous results in helping or even reversing Alzheimer's disease.

**Study:** Virgin Coconut Oil Reduces Symptoms of Chemo – Improves Quality of Life for Breast Cancer Patients.

Once again, research into the health benefits of coconut oil is mainly being done outside of the USA, primarily in coconut-producing countries. In the USA, only pharmaceutical drugs can make health claims, by law. The FDA regulates all health claims, and only allows pharmaceutical companies that have gone through the lengthy and costly drug approval process to make such claims. No company in the U.S. would spend that kind of money on research for a product found in nature that cannot be patented. A study just published in the journal *Lipids in Health and Disease* looked at Malaysian women suffering from breast cancer. The study discovered that stage 3 and 4 breast cancer women who supplemented their diet with virgin coconut oil during breast cancer treatment improved fatigue, dyspnea, sleep difficulties, and loss of appetite compared to the control group. Virgin coconut oil consumption during chemotherapy also helped improve the functional status and global Quality Of Life of these breast cancer patients. In addition, it reduced the symptoms related to side effects of chemotherapy.

Organic Coconut Oil from Philippines has high levels of boron and selenium, so don't exceed a desert spoon a day, or less if you are taking boron and selenium in other forms.