

AGGRAVATING ALZHEIMER'S!

Causes of, and Options for, Cognitive Decline

One of the worst disorders a person, a couple, or a family can be confronted with is the official diagnosis of Alzheimer's Disease (AD), and with its accelerated occurrence, the aging Baby-Boomer population seems particularly worried.

For five years, German psychiatrist and neuropathologist Alois Alzheimer worked with a 50-year-old patient Auguste Deter. After she died in 1906, doctors examined her brain and found that it appeared shrunken and contained several unusual features, including strange clumps of protein called plaques and tangled fibers inside the nerve cells.

Dementia is not a specific disease, and one cannot be diagnosed quickly just because he/she is losing his/her memory. It is a possible combination of symptoms involving intellectual functioning: a decline in problem solving abilities, memory loss, impaired language, perception and reasoning, as well as changes in personality and emotional control. Dementia may result from hardening of the arteries (arteriosclerosis) that slowly cuts off the supply of blood and oxygen to the brain. It may come about through the death of brain tissue from a series of minor strokes, or from pressure exerted by an accumulation of fluid in the brain.

After Miss Deter's death, Dr. Alzheimer described her symptoms separately from those of dementia, and it became known as Alzheimer's Disease (1910). Interestingly, dementia is more related to natural aging, where Alzheimer's is not! AD is the most common form of dementia (50–80% of cases), but its progressive development, including the damage to, and eventual destruction of, brain cells sets it apart. AD is a decline in brain function characterized by symptoms that also progress over time.

SYMPTOMS: *In the early stages*, memory impairment, lapses of judgment, and subtle changes in personality. *In the second stage*, memory and language problems worsen and patients begin to have difficulty performing activities of daily living, such as balancing a checkbook or remembering to take medications. They may become disoriented about places and times, may suffer delusions (such as the idea that someone is stealing from them or that their spouse is being unfaithful), and may become short-tempered and hostile. *During the late stages*, patients begin to lose the ability to control motor functions such as swallowing, or lose bowel and bladder control. They eventually lose the ability to recognize family members and to speak. *Finally*, it begins to affect the person's emotions and behavior and they develop symptoms such as aggression, agitation, depression, sleeplessness or delusions.¹

BY THE NUMBERS: Estimates show that 5.3 million

people in the United States currently live with the disease—one in ten people over the age of 65 and nearly half of those over 85. At least 360,000 Americans are diagnosed with Alzheimer's disease each year and about 50,000 are reported to die from it. In most people, symptoms of AD appear after age 60. However, there are some early-onset forms of the disease diagnosed in people as early as 40 years young. When linked to a specific gene defect, it may appear as early as age 30 (including many suffering from Down Syndrome). Therefore, deterioration in critical areas of the brain may precede symptoms by as much as twenty to forty years. This is called younger-onset Alzheimer's.

Since the behavioral symptoms of AD result from changes in the brain, the person neither intends to nor can control this behavior.² On average, patients with Alzheimer's disease live for 8 to 10 years after they are diagnosed. However, some people live as long as 20 years after. Patients with AD often die of aspiration pneumonia because they lose the ability to swallow late in the course of the disease. Alzheimer's is the sixth-leading cause of death in this country, and according to experts, it is the only one in the top 10 that cannot be prevented, cured, or even slowed down. Deaths for most major diseases have declined, while deaths from AD have risen 66% since 2000!

Besides that, according to the National Alliance for Caregiving, there are nearly 15 million Alzheimer's and dementia caregivers. They provide 17 billion hours of unpaid care valued at \$202 billion. Caregivers not only suffer emotionally but also physically. Because of the toll of caregivers on their own health, Alzheimer's and dementia caregivers had \$7.9 billion in additional health-care costs in 2010. More than 60% of family caregivers report high levels of stress, because of the prolonged duration of caregiving, and 33% report symptoms of depression.³

POSSIBLE CAUSES: This degenerative disease has existed long before 1906, and we have seen an escalation in diagnoses during the last 40-plus years. Because of its growing prevalence, different focus organizations have started up, increased fundraising activities are being organized, more and more research is being done, and sadly enough, a wide variety of controversial information is being dispensed to the public. Increased risks for AD symptoms have been connected to the presence of blood clots in vessels that supply the brain, a brain tumor, hypothyroidism, as well as advanced syphilis. Then there are an increasing number of people who take cocktails of prescription drugs daily, not knowing the long-term effects of these mixes.

GENETICS: Many people have a family history of the disorder, suggesting that heredity may be involved. By age ninety, the risk is at least 50% for those with a first-degree relative (father, mother, brother or sister) who has had AD. For twins it is even higher—58% to 79% is hereditary.

At least four gene variations are linked to Alzheimer's. All of them increase the production of *Beta-amyloid*, a cerebrovascular amyloid protein identified in 1984 by



researchers. This is a chief component of plaques formed in the brains of people diagnosed with AD, and a prime suspect in triggering nerve-cell damage.

Then, in 1986, the *Tau-protein* was identified. Nerve fibers surrounding the hippocampus become tangled (called neurofibrillary tangles). Tau-protein is a key component of the tangles, the second pathological hallmark of AD, and another prime suspect in nerve-cell degeneration.

ALUMINUM: There is a popular belief in the natural-health industry that exposure to aluminum (sources include tea, beer, baked products, drinking water, public water supplies (aluminum sulphate), toothpaste, aluminum-based antacids, aluminum cookware, and some canned beverages) is one of the root causes for AD. Indeed, autopsies of people who died of Alzheimer's revealed excessive amounts of aluminum in the hippocampus area and in the cerebral cortex (the external layer of gray matter responsible for higher brain functions such as abstract thinking, judgment, memory and language). Aluminum accumulates in nerve cells that are particularly vulnerable in AD. However, other studies found no difference between the overall amount of aluminum in the brains of people with AD and the amount in normal brains (Trapp et al, 1978; Flaten and Odegard, 1988). The presence of aluminum does not mean that the aluminum was the causal factor—it is more likely to be a harmless secondary association. Aluminum is mostly removed through the kidneys; and even people with weak or failing kidneys, who often get treated with compounds that contain aluminum, are no more likely to develop dementia or the hallmark pathological changes of AD (Netter et al, 1990).⁴

MERCURY FILLINGS: Even though the Alzheimer's Association (www.alz.org) and certain dental trade organizations claim that a link between mercury fillings and AD is a myth, there are other studies (Dr. Boyd Haley) that show significant tissue damage "indistinguishable" from that of AD, when the animal subjects were exposed to amounts of mercury comparable to humans. Unfortunately, the type of mercury fillings used during the last couple of decades (non-gamma-2, high copper) release many times more mercury than the older style of amalgam fillings.

SMOKING: A recent study conducted in the Netherlands found that smoking increases the risk of AD by as much as 50% in people 55 or older who don't have a genetic predisposition to the disease. The new study reveals that, contrasting to previous belief, nicotine worsens the effects of a brain protein that causes AD.⁵

VACCINATIONS: Since many of these still contain Thimerosal, an organic mercury preservative that damages brain tissue, this is something to avoid as much as possible.

Hugh Fudenberg, MD, an immunologist and biologist with nearly 850 papers published in peer-reviewed journals, has reported that if an individual had five consecutive flu shots between 1970 and 1980 (the years studied), his/her chances of getting AD was ten times higher than if they had zero, one, or two shots.⁶

LACK OF OXYGEN: People suffering from cognitive decline may be suffering from oxygen depletion to the brain. You may want to check your levels, which should be in the 90%+ range. However, oxygen may be more beneficial in the remediation of dementia rather than AD.

NUTRITIONAL DEFICIENCIES: People with Alzheimer's disease tend to have low levels of vitamin B-12 (Methylcobalamin), B-3 (Niacin/Niacinamide), and zinc in their bodies. Where previous studies have identified low levels of the B-vitamins B-6 (Pyridoxine), B-12 and folic acid coupled with high homocysteine levels with age-related cognitive decline, a zinc deficiency may be associated with the development of neurofibrillary tangles (Tau-protein) and amyloid plaques (Beta-amyloid) in the brain. Most processed foods have been stripped of these necessary nutrients, so supplementation is recommended. Also, more and more people have digestive problems and malabsorption issues, and experience these problems partly because of (un)known side-effects of prescriptions and OTC-medications.

Also, people with AD have shown deficiencies in the (fat-soluble) anti-oxidant vitamins A, D-3 (cholecalciferol), E, and the carotenoids, and in the minerals potassium, boron and selenium. Supplementing your daily lifestyle with these may reduce your risk of getting AD altogether. Alzheimer's has been linked to a weakened immune system. This, along with an obvious deficiency in essential nutrients, coupled with an ever-growing dependency on prescription drugs, as well as food containing artificial colors and flavors, opens the door to illness and degenerative disorders of all kinds.

CONSIDERABLE OPTIONS

The precise causes of Alzheimer's Disease are unknown, but research has revealed some interesting clues that may provide answers for reducing both the occurrence and the severity of symptoms. Several prescription drugs, called *cholinesterase inhibitors*, are currently approved by the FDA to treat people diagnosed with AD. These can provide patients with comfort, dignity, and independence for a longer but limited period of time (7–12 months). This can encourage and assist the caregivers as well.⁷ Besides addressing the above-mentioned nutrient deficiencies, here are some other options:

PREVAGEN®: This dietary supplement, available at our *Gesundheit! Nutrition Center*, was developed by scientists and university researchers in Madison, WI, and has been presented to the Society of Neuroscience. Prevagen has a built-in protection system that contains a specialized protein to regulate cellular calcium; too much calcium in a brain cell will destroy the cell. The body's ability to naturally produce this protective protein slows down as we age, especially after the age of 40. When this happens, you begin to lose about 30,000 brain cells every day and may start to experience difficulty with memory, focus and concentration.

Prevagen contains a protein (*Apoaequorin*) derived from a specific type of jellyfish that has the same molecular structure as the protein naturally occurring in the brain. Prevagen is the only product ever that is laboratory proven to keep brain cells alive longer.⁸ Prevagen CEO Mark Underwood

was recognized for his work recently by the International Alzheimer's Symposium in Paris, France.

DHA (Docosahexaenoic Acid): an Omega-3 essential fat that has great anti-inflammatory properties. Recent well-promoted and published clinical studies have indicated that DHA has no positive effects on mild-to-moderate patients suffering from Alzheimer's, though, in my opinion, that was a false conclusion to a bad study. The DHA used was plant-derived (from algae, not fish), and participants were not allowed more than 200 mg. daily. **FISH OILS** contain both Omega-3 fats EPA and DHA, which compliment each other. Extensive research has been done consuming fish and fish-oil products for brain health. I have seen our customers experience cognitive improvements when they tried two tablespoons (6 tsp) daily of high-DHA fish oil (Cod liver, containing 625 mg/tsp) for at least two weeks.

NON-HYDROGENATED EXTRA-VIRGIN COCONUT OIL: This fat is a medium-chain triglyceride (MCT-oil), making it an easily digestible and absorbable fat that provides quick energy. In Alzheimer's, certain brain cells may have difficulty metabolizing glucose, the brain's principle source of energy. Without fuel, these precious neurons may begin to die. But researchers, including Theodore Van Itallie, MD, Columbia University, NY, have identified an alternative energy source for brain cells—fats known as ketone bodies. When MCT-rich oils are digested, the liver converts the MCT into ketones.

Dr. Mary Newport worked as

medical director at Springhill Regional Hospital in Florida. Her husband started to show accelerated symptoms of AD. She tried two tablespoons of pure coconut oil daily in his oatmeal and could not believe the improvements after only five days.

Dr. Van Itallie, after seeing success in several clinical studies states, "We know that if we give patients ketones, we can bypass the glucose clock."

CURAMIN®: this herbal supplement, which contains the spice Turmeric, and its active component Curcumin, the bright orange phytonutrient-rich extract, has been hailed as "the most important medical herb today". When used in people with AD, Curamin in combination with vitamin D-3, showed it may help stimulate the immune system to clear the brain of Beta-amyloid caused plaque build-up. Not all turmeric is created equal. The tested form is curcumin BCM-95, used exclusively in Curamin.⁹

IS THERE A CURE?

Current research says NO! However, there are now better ways to diagnose Alzheimer's earlier, and we know that we cannot take our immune system lightly. If you are concerned for AD because of family history or because you are exposed to nerve-damaging toxins, then I recommend you make adjustments to your diet and lifestyle, keep your brain active, take moderate daily amounts of the aforementioned dietary supplements, and maybe work with a coach-like physician of your choice. If you do have symptoms of Alzheimer's, I highly recommend you increase these supple-

ments drastically—even temporarily—and work with a physician who is willing to work with you to monitor your progress. Good people have done excellent research. Use it to avoid and reduce this aggravating Alzheimer's! ■

1. See Wikipedia: Alzheimer's Disease.
2. See *Prescription For Nutritional Healing* (5th Edition)—Phyllis A. Balch, CNC.
3. See Alzheimer's Association—Facts and Figures, at www.alz.org/alheimers_disease_facts_and_figures.asp.
4. See www.alzheimers.org.uk.
5. See *Parade* magazine, February 3, 2008.
6. See transcribed notes from Dr. Fudenberg's speech at the *NVIC International Vaccine Conference*, Arlington, VA (Sept. 1997).
7. See www.nia.nih.gov/alzheimers/publications/medicationsfs.htm.
8. See www.prevagen.com.
9. See www.europharmausa.com.



Jacobus is not a doctor and does not intend to diagnose, treat or cure any disorder. The information is based on self-study, interviewing experts on his weekly 3-hour Saturday morning Radio Program* "Gesundheit! With Jacobus," which runs from 8–11 am, on AM 1450-KMMS and AM 1340 KPRK, and on feedback received from retail customers visiting his dietary supplements retail store Gesundheit! Nutrition Center at 2855 N. 19th Avenue, Suite N, in Bozeman (585-4668). If in doubt please visit a professional of your own choice and/or educate yourself with available published materials.

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