What Causes Alzheimer’s?

Introduction

Alzheimer’s disease. If those words don’t give you a shiver, they should. Unlike most other diseases that twist and damage our bodies, Alzheimer’s twists and damages our thoughts, memories, emotions, judgment, and personality — things that combine to create our sense of self. When this disease strikes families, caregivers often sadly relate that they lose the person they love long before their loved one finally passes on. It’s no surprise that a recent survey showed that Americans over age 55 fear Alzheimer’s more than diabetes, heart disease, and even cancer. But though this disease is fearsome and deadly, we are not powerless to fight back. The more we learn about how this disease develops in the first place, the better we become at prevention, and at greatly slowing down the progression of this illness. And someday, we will know how to cure it.

What Causes Alzheimer’s?

Alzheimer’s disease (AD) is a terminal and incurable brain disease, and not merely a consequence of aging. It is the 7th most common cause of death in the United States. And if we added in the number of people with diseases that are made worse by Alzheimer’s, it would become the 4th leading cause of death! The number of people with this disease continues to grow — 14 million people are expected to have Alzheimer’s by the year 2050.

The brain of a person with Alzheimer’s disease is progressively destroyed by the formation of plaques, caused by deposits of a protein called beta-amyloid, and tangles, caused by a protein called tau. In a healthy person, beta-amyloid is broken down and removed from the brain. But in the person with Alzheimer’s disease, the beta-amyloid pieces accumulate and harden into plaques, while the tau protein interferes with the transfer of nutrients and other important substances between cells. Free radical activity (free radicals are unstable compounds that can damage cells and our DNA) is also higher in the brains of people with Alzheimer’s disease. What continues to be investigated is what factors cause these physical changes in the first place. We know that inflammation and oxidative damage play a role, as does diet, body weight, activity levels, past head injuries, family history, presence of other diseases, certain contaminants (especially aluminum), and even amount of social connections.

The plaques and tangles associated with Alzheimer’s disease form in the brain in a predictable pattern. The first areas they are found in are the section of the brain associated with memory and learning. The early stage of AD is characterized by forgetfulness, communication problems, and changes in mood and behavior. Judgment is impaired, and sometimes people with AD say rude things they would never have said aloud prior to their illness. This alone can cause problems between couples, families and friends. As the disease progresses, memory and thinking continue to decline. The ability to carry out daily tasks and self-care becomes more and more limited. In the very last stages of AD, the ability to communicate verbally and care for oneself is completely lost. Many people with AD succumb to pneumonia, as they can no longer walk about, choke easily as they are fed, and spend much time immobile in bed.

What Treatments are used to Protect the Brain?

Conventional Treatment

There are currently two classes of drugs that target the decline in brain function of AD. Both work by preventing the breakdown of chemical messengers that enable memory and learning. Cholinesterase inhibitors, includ-ing Aricept®, help prevent the breakdown of acetylcholine; memantine regulates glutamate. Both types of medications have side effects, some significant, including nausea, vomiting, loss of appetite, and potentially even liver damage. The benefits are not lasting. Use of these medications may slow progression of symptoms for 6-12 months in about half of the people who use them. Some doctors recommend against their use because they believe the cost and risks outweigh potential benefits. They are not a cure.

Natural Treatment

Curcumin and Vitamin D

Although we don’t yet know the reason for certain, the rates of Alzheimer’s disease in India are the lowest in the world. Part of the answer may be that a certain gene (ApoE4), which significantly increases the risk of AD, is not widely found in the Indian population. Or it may be a yet-to-be-understood interaction between the environment and genetic factors. However, we do know that the spice turmeric is widely consumed, on a daily basis, by most of the population of India. Turmeric is often called “Indian Solid Gold.” It contains a very active compound called curcumin, which is now the subject of research studies looking at how it... More...
can be used to not only slow, but perhaps even reverse, the progression of AD.

Unfortunately, curcumin is very hard to absorb. Some companies are using piperine, which is an extract of black pepper, to improve curcumin absorption, but I do not recommend this because piperine interacts unfavorably with a great many prescription drugs, including blood pressure, anti-seizure, heart and cancer prescription medications. Piperine also facilitates how easily we absorb certain toxins. Science has shown that the safest and most effective way to increase curcumin absorption is to micronize the curcumin particles, homogenize it, blend in some essential oil of turmeric and some naturally-occurring plant phospholipids. Using these methods, doctors have created a way to increase absorption up to 10 times that of plain curcumin. Curcumin prepared in this manner has been shown to cross the blood/brain barrier, meaning it can reach brain cells, something not every substance can do.

Curcumin has been shown to bind to plaque-forming beta-amyloid. It can not only help stop the accumulation of beta-amyloid fragments, but it has even been shown to promote their destruction. In fact, in a study using a model of Alzheimer’s disease, curcumin reduced the size of beta-amyloid plaques by 30% in just one week! Researchers noted that it was more effective at stopping the formation of plaques than many experimental drugs that are being tested as potential AD treatments.

An ideal partner for curcumin is vitamin D. It is impossible today to open any medical journal or health news publication and not find the results of yet another amazing study showing the benefits of the “sunshine vitamin.” Although technically a pro-hormone, not a vitamin, vitamin D is synthesized by our bodies when our skin is exposed to and absorbs sunlight. That means people with dark skin are more resistant to production of this vitamin from sunlight, and may be particularly at risk for low vitamin D. But did you know that by the time we are 65, changes to our skin – regardless of color – will reduce our ability to produce vitamin D by up to 60%? And that when compared to people who have optimal levels of vitamin D, low levels of vitamin D at age 65 mean you are twice as likely to experience mental decline?

Interesting new research has found that vitamin D works with curcumin to clear the brain of beta-amyloid plaques. Although research is still in progress, it appears that this combination stimulates a type of immune cell called a macrophage to more aggressively seek out and clean up beta-amyloid fragments in the brain. Additionally, curcumin and vitamin D help protect the brain from inflammation and from damage to brain cells by dangerous free radicals. Curcumin and vitamin D work synergistically – meaning they strengthen one another’s impact. Together, they are a potent protective force for the brain.

Rosemary and Spanish Sage Chemotyped Oils.
Concentrated plant oils are powerful medicine, but not all of them are safe for internal use. I only recommend chemotyped plant oils. Chemotyping certifies the correct plant, species, key compounds, dose, and safety.

Oils from rosemary (Rosmarinus officinalis) and Spanish sage (Salvia lavandulifolia) plants have a long history of use as aids to enhancing memory and learning. In fact, rosemary is known as the “herb of remembrance.” Students in ancient Greece would wear wreaths of rosemary on their heads to aid their memory when taking examinations, and rosemary symbolized remembrance and fidelity. Modern research is confirming how this herb actually works to provide the benefits for which it has long been known. Chemotyped Rosemary oil is a powerful antioxidant, meaning that it can neutralize dangerous free radicals that destroy brain cells. Once it crosses the blood/brain barrier, it does not activate until free radical stress is occurring. This makes rosemary very safe and with few side effects – it does not act indiscriminately. It waits until it is needed before its effects are exerted.

Both rosemary and Spanish sage concentrated plant oils are acetylcholinesterase inhibitors – meaning they slow down the activity of the enzyme, acetylcholinesterase, which breaks down the neurotransmitter, acetylcholine. This is similar to how the prescription drug works, but without the serious adverse effects. Acetylcholine is a messenger in the brain, carrying information between brain cells and supporting memory and learning. Low levels of acetylcholine are associated with Alzheimer’s disease. These oils are able to help keep acetylcholine levels from declining. In clinical tests, healthy volunteers who took Spanish sage oil experienced improved memory and recall. When this plant oil was given to people with Alzheimer’s disease, their attention and focus improved and many of their other symptoms were reduced. No significant side effects have been reported for either of these plant oils.

Hope for the Future
The more we learn about this devastating disease, the better we will be able to make choices and design natural medicines to aid in prevention, and some day, provide a cure. In the meantime, making good decisions regarding exercise, food choices, and proven natural medicines can have a tremendous impact in reducing the risk for this disease, and may aid those who already have AD by slowing – and hopefully even reversing – the damage caused by this illness.

Terry recommends this formula at your local health food store:

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<tr>
<th>Vitamin</th>
<th>Proprietary Complex</th>
<th>Vitamin D-3</th>
<th>Curcumin Micronized (Curcuma longa)</th>
<th>Rhizome Extract with phospholipids and turmeric essential oil, Spanish Sage (Salvia lavandulifolia) Oil, Rosemary (Rosmarinus officinalis) Oil</th>
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<td>D-3</td>
<td>2,000 IU</td>
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www.TerryTalksNutrition.com