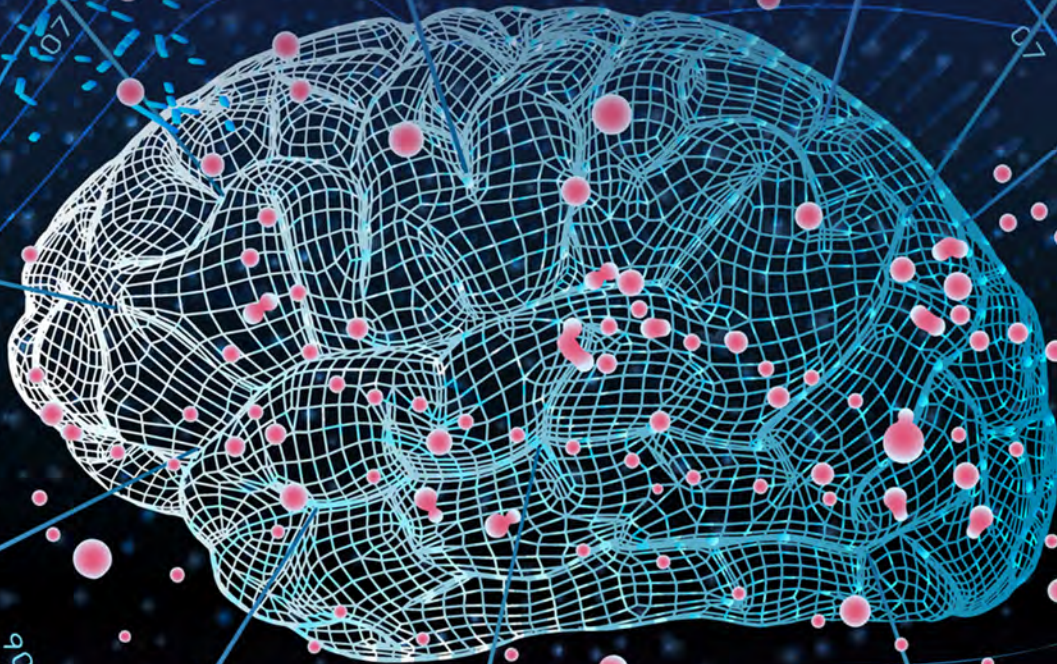


*How To:*

# SAVE YOUR BRAIN

PROVEN WAYS TO MAINTAIN AND REGENERATE YOUR BRAIN  
IN A WORLD OF ALZHEIMER'S AND DEMENTIA



BY JONATHAN OTTO & THE HEALTH SECRET TEAM

# HOW TO: SAVE YOUR BRAIN

By Jonathan Otto

Contributions from Nancy Gable, Brittany Escobar, Sarah Potts  
and the rest of the Health Secret Team

Cover design by Sarah Potts

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## Alzheimer's & Dementia... WHAT'S THE STORY?

Today young children are being diagnosed with dementia and arthritis. Diseases that we used to see only in the elderly are now being seen in children.<sup>1</sup>

Isn't that shocking, and just devastating!?

The current statistics on dementia and Alzheimer's are not good. One in three people are expected to die of dementia, killing more people than breast cancer and prostate cancer combined.<sup>2</sup>

Too often, we think of cognitive decline as irreversible, or a disease to be expected as we age. We have heard over and over again that the damage to the brain that causes Alzheimer's and dementia cannot be prevented or repaired. But is that true?

In this report, you will discover the principles for good mental health and how you can use them to preserve and even regenerate brain function.

Let's start with looking at the life of a 100-year-old man, with no aches or pains, to discover the principles he used and how you can use them.

### A 100-YEAR-OLD LEGEND

Dr. Ellsworth Wareham is a 100-year-old celebrated heart surgeon who still mows his lawn and trims his bushes.

He lives in Loma Linda, California—the only so-called “Blue Zone” of the U.S., an area where men and women live measurably longer lives than the average American.<sup>1</sup>

Loma Linda has banned smoking, and alcohol is scarcely sold. It has one of the highest concentrations of Seventh-Day Adventists in the world, a faith in which living a healthy lifestyle is taught and encouraged.

Wareham credits his longevity, good health, and clearness of mind, for which he is most grateful, in large part to his vegan diet, which he adopted midlife after reading research that showed animal protein raises cholesterol.



1 <http://alzheimers.emedtv.com/dementia/childhood-dementia.html>

2 <https://www.alz.org/alzheimers-dementia/facts-figures>

1 <https://www.bluezones.com/exploration/loma-linda-california/>

Although he retired from operating in the surgical unit at Loma Linda University at age 74, Wareham mentored and assisted residents at the university until age 95.

## SO WHAT ARE WAREHAM'S DAY-TO-DAY LIFESTYLE HABITS THAT CONTRIBUTE TO HIS OVERALL GOOD HEALTH?

Each day, Wareham gets eight or nine hours of rest, waking up at 5 a.m. He eats two healthy meals a day (refraining from animal products), exercises, and spends time with his family.

Wareham enjoys retirement, but said there doesn't seem to be much free time. "I will read quite a bit, and I do my own landscaping pretty much. I trim my bushes and mow my lawn, and I get my physical exercise that way," he said.

Wareham doesn't use a cane and prefers to use the stairs instead of the elevator. He cites research out of Stanford University from about 25 years ago that suggested a 46 percent decreased incidence of death by heart disease by climbing a flight of stairs 20 times per week.





## Our Vision



*“Mental health has two dimensions—absence of mental illness and presence of a well-adjusted personality that contributes effectively to the life of the community.*

*Ability to take responsibility for one’s own actions, flexibility, high frustration tolerance, acceptance of uncertainty, involvement in activities of social interest, courage to take risks, serenity to accept the things which we cannot change, courage to change the things which we can change, the wisdom to know the difference between the above, acceptance of handicaps, tempered self-control, harmonious relationships to self, and others, including Nature and God, are the essential features of mental health.”<sup>1</sup>*

**- ABRAHAM VERGHESE**



So, it isn’t simply ‘not having a mental illness’ that we are looking to accomplish. We want our minds to function at the best possible level and have a completeness and fulfillment, even well into old age.

1. Vergheese, Abraham. “Spirituality and Mental Health.” *Indian Journal of Psychiatry* 50.4 (2008): 233–237. PMC. Web. 30 Aug. 2017. <https://dx.doi.org/10.4103%2F0019-5545.44742>

## WHAT IS *Neurodegenerative Disease?*

Neurodegeneration is the progressive loss of structure or function of neurons (nerves), including death of neurons, which results in diseases such as Alzheimer's/dementia, Amyotrophic lateral sclerosis (ALS), Lewy body disease, Parkinson's, Huntington's, Spinal muscular atrophy, neuropathy, MS, Lupus, memory loss, and more.<sup>1</sup>

Neurodegenerative disease can occur at any age and have now surpassed both cardiovascular disease and cancer in incidence rates.<sup>2</sup> Though they haven't always been known as autoimmune diseases, they do show all the same features, and the symptoms are just as debilitating.

There also seems to be an underlying commonality between the sudden increase in autoimmune conditions and neurodegenerative conditions because they both began increasing in the population in the mid 1990's—about the same time genetically modified (GMO) food crops began to come into the markets, as well as an increase in the use of toxic chemicals, such as herbicides, pesticides, and fertilizers.<sup>3</sup>



1 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC151843/>

2 <https://neurodiscovery.harvard.edu/challenge>

3 <http://www.organic-systems.org/journal/92/abstracts/Swanson-et-al.html>



## WHAT ARE THE CAUSES OF *Neurodegenerative Diseases?*

Many factors cause and contribute to neurodegenerative disease. Known factors include environmental stressors, leaky gut or intestinal impermeability, mental/mind/emotional stressors, and genetics.

While genetics may make an individual more prone to neurodegenerative and autoimmune diseases, it generally takes one or more of the other factors to trigger the expression of the genomes that results in the disease. Without a triggering factor, the genomes can lie dormant and the inherited genetic potential for a disease may never develop.

So let's take a look at each of these factors and what they include.

1

Environmental stressors may include heavy metal toxicity, mold, parasites, and Lyme disease and its coinfections. These can cause a weakened immune system, inflammation, and even nutrient deficiencies.<sup>1</sup>

2

Dietary food choices can cause inflammation, a weakened immune system, food sensitivities, allergies, microbiome imbalances, hormone imbalances, and nutrient deficiencies from lack of nutrients and/or inability to absorb nutrients.<sup>2</sup>

3

Mental/mind/emotional stressors include Adverse Childhood Experiences (ACE's), physical and emotional traumas such as abuse, brain injury or infection, life-threatening experiences, and multiple life stressors such as death, divorce, serious disease, accident, etc.<sup>3</sup>

4

Leaky gut or intestinal permeability is where the junctions in the gut are open bigger than they should be, letting things into areas where they shouldn't be. And when things get in that shouldn't be there, like big, undenatured proteins or any type of food or any type of pathogen, the body starts attacking it. Then autoimmunity and neurodegeneration starts getting triggered because the body can't tell the difference between the large foreign particles and the normal particles of the body. So then the body attacks its own particles, such as in specific organs like the thyroid, adrenals, joints, nerves, and even the brain.<sup>4</sup>

1 <https://www.dementia.org/causes>

2 <https://www.alz.org/alzheimers-dementia/what-is-dementia>

Qureshi et al. Greater prevalence and incidence of dementia in older veterans with PTSD. J Am Geriatr Soc 2010; 58: 1627-1633., <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3582641/>

4 <https://functionalhealthminute.com/2017/08/how-a-leaky-brain-raises-your-risk-of-dementia/>

# The Impact Of CHILDHOOD TRAUMA

Many people have experienced childhood trauma of one kind or another, whether emotional, sexual or physical abuse, or whether the loss of a parent or a loved one. Unfortunately, painful experiences are difficult to avoid in this life, and it is significant to note that new research is finding a link between those childhood traumas and our physical health.<sup>1</sup> This is good news for many who have this correlation, because in being able to address those emotional, mental, and spiritual scars that were caused by the trauma, their mind and body can begin the healing journey.

“During the past few decades, researchers have demonstrated how trauma early in life can strongly impact and potentially trigger the development of chronic illness.

In addition to mental illness, victims of child abuse are more susceptible to developing allergies and asthma, autoimmune disorders, osteoarthritis, cardiovascular disease and metabolic disorders.

Several specific characteristics occur more frequently in victims of childhood abuse and might influence the development of chronic illness. These include poor sleep quality, elevated perceived stress, high body weight and small social networks. These factors all have been demonstrated to increase inflammation in victims of childhood abuse compared with non-victims. These patients may be at risk of dying younger secondary to the chronic effects of inflammation.”<sup>2</sup>



1. <https://www.ncbi.nlm.nih.gov/pubmed/23469076>  
2. <https://consultqd.clevelandclinic.org/2014/11/childhood-emotional-trauma-closely-linked-to-problems-in-adulthood/>



## What Can We Do To PREVENT & RESTORE BRAIN & NERVE FUNCTION?

As the old sayings go, “A stitch in time saves nine” or “The best defense is a good offense.” And so it is with our brain and nerve health.

While there are some factors that we cannot/could not control—childhood abuse, deaths, accidents, etc.—the sooner we begin a lifestyle that reduces the factors that cause disease and increase the factors that cause health, the less likely we will develop neurodegenerative diseases. Similarly, the earlier we begin to practice a healthy lifestyle, the more likely we’ll be able to turn around any diseases we may already have, or at least prevent or slow their advancement, including neurodegenerative disease.

Indeed, a world authority on brain health, Dr. Michael Merzenich, states that Alzheimer’s is not a disease.

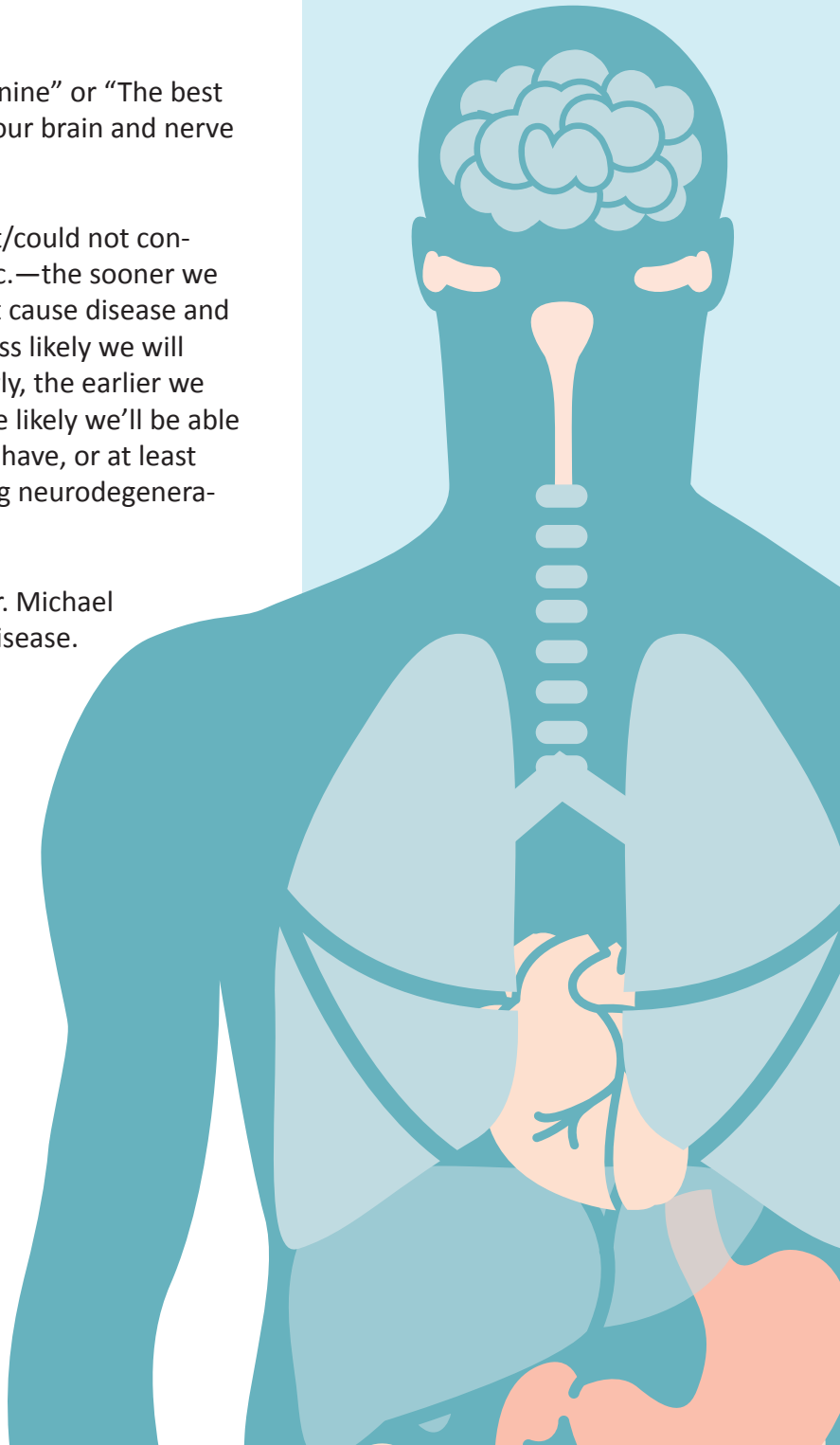
It’s the end stage of a decades-long negative progression.<sup>1</sup>

We should not look at it as a disease to be treated, but instead, should determine how to stop the decades-long progression.

We should be stopping it from ever happening in life.

Dr. Merzenich believes that Alzheimer’s can be prevented, or at least delayed for probably indefinitely in most people, and that when you do that, the changes that you drive in the brain will lead to substantial increases in longevity.

<sup>1</sup> [https://www.reddit.com/r/IAmA/comments/6k1k3a/i\\_am\\_neuroscientist\\_dr\\_michael\\_merzenich\\_a/](https://www.reddit.com/r/IAmA/comments/6k1k3a/i_am_neuroscientist_dr_michael_merzenich_a/)



## Nutrition

“Let thy food be thy medicine,” said Hippocrates hundreds of years ago. Every bite of food we eat will either contribute to our physical and brain health or be injurious.

There was a classic study on brain fitness—the nun study—reported in a book by Dr. Bob Goldman.<sup>1</sup> The nuns in the study who were on plant-based, whole foods nutrition throughout their entire life had perfect brain function and never developed Alzheimer’s or dementia. But in the group of nuns who were eating meat, cheese, eggs and dairy products, the incidence of Alzheimer’s and dementia was statistically similar to the rest of the population. Both groups were away from stress, didn’t have to worry about a job, and lived under the same conditions. The only difference was their diet.

Trappist Monks and Benedictine Monks had the same results. The plant-based monks that were away from stress, lived longer and had less disease—little or no cancer or heart disease, and excellent brain function.

Even Dr. Alzheimer stated that the Alzheimer’s condition was found in people who ate a lot of animal products. They had high LDL (low density lipoprotein) cholesterol that clogged up the arteries to the brain. That reduces circulation to the brain through the small capillaries and then you can’t think clearly.

According to Dr. Ben Johnson, diet is the number one factor for good health. He believes that sugar and sugar spikes are huge causal factors for Alzheimer’s, as well as diabetes and cancer. A sugar spike occurs when we eat a certain substance, and it spikes the blood sugar more than 20 points, causing damage to the body. He states that blood sugar management is critical not only in his treatment of Alzheimer’s and cancer patients, but in all of his practice.

He states, “I’ll actually tell my patients, go to the local pharmacy and get a blood sugar meter. Check your blood sugar, eat the bowl of whatever you’re going to eat: quinoa or corn or potatoes or fruit, or whatever. Set your timer for 20 minutes and check your blood sugar again. If your blood sugar went up over 20 points, you can’t eat that. That’s causing a sugar spike. Sugar spikes cause damage everywhere, from the brain, to the pancreas, to our little bitty blood vessels, our capillaries, nerves, sugar feeding cancer cells. Sugar spikes are one of the unhealthiest that we can do in life.”<sup>2</sup>

1 Robert Goldman, Lisa Berger, Ronald Klatz. ‘Brain Fitness: Anti-Aging to Fight Alzheimer’s Disease, Supercharge Your Memory, Sharpen Your Intelligence, De-Stress Your Mind, Control Mood Swings, and Much More’, 1999 Doubleday, Random House Inc.

2 Dr. Ben Johnson, in *Autoimmune Secrets*, 2018.





## Dr. Sruti Lam warns against AGEs.

AGEs is an acronym for Advanced Glycation End Products. Glycation is a reaction in which sugars are bonded with either proteins or lipids. When this bonding takes place, a product called glycotoxin is formed.<sup>1</sup> When glycotoxins are ingested, they're not able to be broken down, digested or absorbed in the body. Food normally has very low AGEs in the body. But we increase AGEs by overcooking food, grilling food, or deep-frying food. For example, one serving of raw chicken has 800 AGEs, but fried chicken or deep-fried chicken has 8,000 AGEs. And when consumed, the AGEs are not absorbed or digested, and so they accumulate in our body.

## Advanced Glycation End Products (Products)



Much research has been done on AGEs and has been shown to be one of the causes of diabetes and cardiovascular diseases. And now new research has found that AGEs is also a risk factor for Alzheimer's Disease.<sup>2</sup>

A study was done in 2014 on three different groups of mice. One was given a diet of low AGEs, one with high AGEs, and one normal levels.<sup>3</sup>

The mice that were given the high AGEs had a very increased cognitive decline. The same study was repeated on healthy humans, ages 60 and above. The people who had a high AGEs diet were shown to have a decline in their cognition.

So how do we change that? AGEs have been found to be naturally high in animal-derived products like beef, chicken, fish, and pork.

But foods that are carbohydrate-rich, like vegetables, fruits, and legumes, have been found to be very low in AGEs.

But when animal-derived foods like butter, mayo, or cheese are added to these foods, we're again consuming more AGEs.

So an alternative to that is to stop grilling or decrease the amount of grilling, frying, or overcooking food.

Instead, we can poach, blanch, or bake foods. And also reduce or eliminate animal-derived products like butter, mayo, and cheese.



1 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3583887/>

2 <https://www.ncbi.nlm.nih.gov/pubmed/9063589>

3 [http://www.natap.org/2014/HIV/040314\\_02.htm](http://www.natap.org/2014/HIV/040314_02.htm)

Another study was done on heterocyclic amines (HCAs), which are toxic substances that are released when animal products are grilled or fried. Studies were done in which spices were added to decrease or inhibit the formation of HCAs. Turmeric, cilantro, cumin, and rosemary were found to inhibit the formation of HCAs, even with grilling, and they make food more palatable and nutritious to eat.<sup>1</sup>

In another study, it was found that when a burger with a patty of beef or chicken was ingested, two hours later there is vasoconstriction in the body, and an inflammatory substance called Interleukin 6 is increased. But when half an avocado is added to the burger there is actually inhibition of the vasoconstriction and the triglycerides and inflammatory amines that are formed in the body.<sup>2</sup>

So there are simple changes that we can do for food that we are already eating, but the best approach is to decrease or limit our intake of animal products, and actually increase our vegetables, fruits, and legumes intake to decrease AGEs and HCAs in the body.



1 <https://www.cancer.gov/about-cancer/causes-prevention/risk/diet/cooked-meats-fact-sheet>  
2 <http://pubs.rsc.org/en/content/articlehtml/2012/fo/c2fo30226h>





## THE BENEFITS OF Fasting

Fasting is another critical element of diet. We not only want to be eating the right things, but fasting, all through the centuries, has been a major spiritual practice and is also an extremely healthy practice.<sup>1</sup> Fasting allows immune senescence to happen.

What is immune senescence? When we are exposed to an infection, our immune system mounts a response against it. Then, when the infection clears up, we have those immune cells sitting around waiting on that type of infection to show up again, but those immune cells are not active.<sup>2</sup>



1 <https://www.scientificamerican.com/article/how-in-termittent-fasting-might-help-you-live-longer-healthier-life/>

2 <https://immunecells21.com/low-immune-function/>

So possibly 90% or more of our immune system is sitting dormant waiting for that one thing to show up again that we were exposed to years ago. And if it never shows up again, then that part of our immune system is not functioning.

Fasting allows the body to purge itself of some of those old cells, and then the immune system creates new, vibrant stem cells that haven't identified anything, and now they're looking for that new cancer cell or that new fungus or virus, and they can react to it. So fasting is an amazing health practice.<sup>1</sup>

"A study in the June 5, 2014, issue of the Cell Stem Cell shows that cycles of prolonged fasting not only protect against immune system damage but also induce immune system regeneration, shifting stem cells from a dormant state to a state of self-renewal."<sup>2</sup>

On a daily basis, we should be fasting for 16 to 18 hours without food, and on a monthly basis, a 3-day water-only fast. But you say, "oh I can't do that". Yes you can. Diabetics can do it, and anyone can do this. You have to set your mind to it and be firmly intentional. Water-only fast, preferably 72 hours, but no less than 48 hours. Drink lots of water because you're purging things, and you want to have a good wash-out. Fasting is very important for keeping a healthy mind and a healthy body.

1 <https://www.sciencedirect.com/science/article/pii/S2211124716305769>

2 <https://news.usc.edu/63669/fasting-triggers-stem-cell-regeneration-of-damaged-old-immune-system/>

## The Mediterranean Diet

A Mediterranean diet has been scientifically shown to improve brain health. Not only is it possible natural treatment for Parkinson's disease, dementia and Alzheimer's<sup>1</sup>, but it is also shown to improve mood, preserve memory and lower brain shrinkage<sup>2</sup>.

This diet is rich with fresh vegetables (particularly leafy greens such as spinach and kale), fruit, whole grains, legumes (such as lentils and chickpeas), nuts, herbs and spices (like oregano, rosemary and parsley), healthy fats such as olives and olive oil, and is low in red meat and processed foods.

This diet is good for brain health not only because many of the included foods are anti-inflammatory, but it's full of protective vitamins and antioxidants - like B vitamins, omega-3 fatty acids, and polyphenols. Certain B vitamins, for example, actually help regulate the production of your neurotransmitters, the chemical substances that transfer messages from one cell to another in the brain.<sup>3</sup>

One of the key players in the Mediterranean diet is olive oil. It is advised that one to four tablespoons of olive oil per day is beneficial for brain and heart health.

However, it is important how you consume olive oil, and which product to choose at the grocery store.

For the most health benefits, only use olive oil in raw or low-heat dishes. Above about 350 degrees, the beneficial compounds in olive oil begin to degrade, and at high heats can turn rancid or toxic to the body. A better oil for cooking is coconut oil.

Always use olive oil labeled "extra virgin." Oils labeled "virgin" or "light" may have undergone a chemical process that strips away the nutritional benefits, or they might even be blended with other types of less-healthy oils.

Buy olive oil in a dark bottle, store it away from any kind of light, and keep it tightly sealed. Unsaturated fats like olive oil get rancid (spoil) very easily and quickly when exposed to air, light, or heat.

You can test if your olive oil is good quality by placing your bottle in the fridge. If the oil becomes cloudy or thickens, you have purchased a quality product.

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1 [https://aandjournal.net/article/S1552-5260\(15\)02037-3/full-text](https://aandjournal.net/article/S1552-5260(15)02037-3/full-text)

2 Rush University Medical Center. Michelle Luciano, PhD; Janie Corley, PhD, Simon R. Cox, PhD, et al: Mediterranean-type diet and brain structural change from 73 to 76 years in a Scottish cohort. *Neurology*, published online Jan. 4, 2017

3 <https://www.frontiersin.org/articles/10.3389/fnut.2016.00022/full>



## TIPS ON REDUCING *Inflammation*

Brain inflammation is a serious problem that is impacting a large percentage of our society. The brain and neurological tissue are extremely sensitive regions of the body that are highly susceptible to damage.<sup>1</sup>

One of the ways that our body protects itself from the threat of infection is through an immune process called inflammation.

However, if there is too much inflammation in the body, it can damage neurological tissue and cause problems.

Food can be a big contributor to inflammation. Inflammatory foods include dairy, sugar, refined grains, grain-fed meat, and bad fats, such as corn, unfermented soy, and non-organic canola oil, hydrogenated oils, and all oils that have been used for frying. Fried foods are a culprit for inflammation in the body.<sup>2</sup>

Thankfully, there are many ways to naturally reduce inflammation in the body. Some of the best foods to help reduce inflammation include fermented foods and liquids, broccoli, hemp oil, foods rich in Omega-3 fatty acids, tart cherries, soaked walnuts, pineapple, spinach, and spices, such as ginger and turmeric.<sup>3</sup>

There are other whole foods that offer this benefit as well. The closer you can stay to a whole-foods diet, the less inflammation you will experience.

Another way you can reduce inflammation is by sticking to organic foods and avoiding GMOs (genetically modified organisms) whenever possible.<sup>1</sup>

If you can't afford organic, at least bring your food home and wash it off in the sink in a teaspoon of baking soda to decontaminate the chemical residues that might be on it.<sup>2</sup>



1 Kharrazian, Datis. Feb 05 2013. Why Isn't My Brain Working?. Elephant Press. Kindle Edition.

2 <https://www.health.harvard.edu/staying-healthy/foods-that-fight-inflammation>

3 <https://draxe.com/anti-inflammatory-foods/>

1 <https://gmojudycarman.org/wp-content/uploads/2013/06/The-Full-Paper.pdf>

2 <https://pubs.acs.org/doi/abs/10.1021/acs.jafc.7b03118?source=cen>

## Exercise

Exercise is another one of those critical elements for the brain and for the body.

There has never been a study done on exercise that showed any detriment and one would be hard-pressed to find a study that didn't show an improvement when exercise is properly carried out. The same goes for brain health.<sup>1</sup>

Indeed, a study done at the University of British Columbia, researchers found that regular aerobic exercise, the kind that gets your heart pumping and makes you break a sweat, appears to boost the size of the hippocampus, the brain area involved in verbal memory and learning. Surprisingly, resistance training, balance and muscle toning exercises did not have the same results.<sup>2</sup>

The finding comes at a critical time. Researchers say one new case of dementia is detected every four seconds globally. They estimate that by the year 2050, more than 115.4 million people will have dementia worldwide.<sup>3</sup>

1 <https://www.frontiersin.org/articles/10.3389/fnagi.2013.00075/full>

2 <https://www.health.harvard.edu/mind-and-mood/exercise-can-boost-your-memory-and-thinking-skills>

3 [http://www.who.int/mediacentre/news/releases/2012/dementia\\_20120411/en/](http://www.who.int/mediacentre/news/releases/2012/dementia_20120411/en/)

So, what should this exercise look like?

The studies don't tell us which particular aerobic exercise is the best - as almost all of the research has been based on walking!

However, the researchers suggest that any other aerobic exercise (the type that gets your heart pumping) should do the trick.<sup>2</sup>

How much exercise is required to improve memory? These study participants walked briskly for one hour, twice a week. Standard recommendations advise half an hour of moderate physical activity most days of the week. If that seems daunting, start with a few minutes a day, and increase the amount you exercise by five or 10 minutes every week until you reach your goal.<sup>2</sup>

Walking isn't the only exercise you can do! Other moderate-intensity exercises such as dancing, swimming, cycling, tennis or soccer will all promote brain health. Vigorous housework is also on the list!

If you feel like you don't have the internal discipline to start exercising regularly, you can try any of these suggestions:

- Join a class or work out with a friend who'll hold you accountable.
- Track your progress, which encourages you to reach a goal.
- Hire a personal trainer (Pre-paid financial investment is always a good motivator to keep you turning up.)



## Water

Hydration is critical. It washes out toxins and waste products, but it does more.

Our cells are making DNA all day long, working like a small factory. DNA looks like a rubber band wad, and it literally has to unfold and string out for it to be copied to create whatever the cell is creating from that DNA.<sup>1</sup>

After it gets translated, it wads back up. If the cell is dehydrated, it's difficult for the DNA to untangle itself and then wad back up.<sup>2</sup> Liquid is a medium which helps everything happen in the body.

After the cells manufacture their stuff, there's waste products, and since we don't have a little blood vessel coming from every cell, the cells throw the trash right outside the door.

Then more liquid—the lymph fluid—comes along to carry the waste back into the body systems to be recirculated or permanently disposed of with the urine or feces.<sup>3</sup>

So we need lots of fluid for both inside and outside the cells, so hydration is critical.



Hydration with healthy water is best. Tap water and water in plastic bottles, which is often mostly tap water, are not the best.<sup>1</sup> And that water may have been sitting in plastic for weeks or months, with all the chemicals and plastic.<sup>2</sup>

The best water is fresh water that's cleansed with activated charcoal<sup>3</sup> and other substances, preferably right in your own home and stored in glass.



1 <https://www.reference.com/science/dna-replication-important-accd4bd24c83c572>

2 <https://www.sciencedaily.com/releases/2011/04/110426091122.htm>

3 <https://www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html>

1 [https://bodyecology.com/articles/best\\_water\\_to\\_drink.php](https://bodyecology.com/articles/best_water_to_drink.php)

2 <https://www.bbc.com/news/science-environment-43388870>

3 [http://science.naturalnews.com/2008/1426452\\_Neither\\_hollow\\_fibre\\_membrane\\_filters\\_nor\\_activated\\_charcoal\\_filters\\_remove.html](http://science.naturalnews.com/2008/1426452_Neither_hollow_fibre_membrane_filters_nor_activated_charcoal_filters_remove.html)

## Rest

One of the health principles is rest. If you don't give your body time to recover from exercise, stress, daily activities, you're going to get sick or sicker. You need to rest and have your down time. It's so important, and that goes for sleep, too.

Sleep is a time for brain cleansing.<sup>1</sup> Getting enough sleep at night is absolutely critical for your cognition. If you want to put yourself at risk of Alzheimer's and dementia, don't drain your brain.<sup>2</sup> Every time you sleep at night your brain drains fluids carrying waste products. About 75% of people who have sleep apnea are not diagnosed with sleep apnea, it's a critical contributor to cognitive decline.<sup>3</sup>

When you're awake during the day, your brain is inflaming, and there are fluids being added. There are cells in our brains called glial cells that become inflamed and fluid filled. Those cells drain when you sleep.<sup>4</sup> So for somebody that doesn't sleep enough, they're going to have inflammation of the brain because there wasn't proper time for the brain drainage to happen. You can improve drainage while sleeping by sleeping on your side.<sup>5</sup>



Insufficient sleep can affect the development of Alzheimer's and it can affect whether or not someone recovers from Alzheimer's. The major factor in that is the lack of melatonin, a hormone produced by the pineal gland.<sup>1</sup>

Melatonin is extremely neuroprotective. It's one of the most powerful antioxidants our body produces. Melatonin has a particularly beneficial effect on the nervous system in that it protects the nerves and the neurons from falling apart.<sup>2</sup>

Your body produces melatonin while you're sleeping, so if you're not sleeping, you're not producing melatonin, and you're not getting the beneficial protection from the melatonin.

1 <https://www.nih.gov/news-events/news-releases/brain-may-flush-out-toxins-during-sleep>

2 [http://www.kurzweilai.net/how-the-brain-takes-out-the-trash-while-we-sleep?utm\\_source=KurzweilAI+Daily+Newsletter&utm\\_campaign=1f13ae0363-UA-946742-1&utm\\_medium=email&utm\\_term=0\\_6de721fb33-1f13ae0363-282120781](http://www.kurzweilai.net/how-the-brain-takes-out-the-trash-while-we-sleep?utm_source=KurzweilAI+Daily+Newsletter&utm_campaign=1f13ae0363-UA-946742-1&utm_medium=email&utm_term=0_6de721fb33-1f13ae0363-282120781)

3 <https://www.rosalbacourtney.com/sleep-apnea-snoring-breathing-retraining-mouththroat-exercises-life-style-change-part-solution/>

4 <https://www.nih.gov/news-events/nih-research-matters/how-sleep-clears-brain>

5 <http://www.jneurosci.org/content/35/31/11034.short>

1 <https://www.tandfonline.com/doi/abs/10.1080/0035919X.2012.745032?scroll=top&needAccess=true&journalCode=ttrs20>

2 <https://www.tandfonline.com/doi/abs/10.1080/0035919X.2012.745032?scroll=top&needAccess=true&journalCode=ttrs20>



## SLEEPING IN PRACTICE

The closer to the time the sun sets is the best time to go to sleep because that's when melatonin production starts setting in. So you want to get more hours before midnight. It's better to wake up at 2:00 a.m. then to go to bed at 2:00 a.m. So go to bed early to ensure a quality rest for the mind and body.

Adults should be aiming to sleep for seven to nine hours a night.<sup>1</sup>

Practically, means going to bed on time. You're probably not going to get 8 hours of sleep if you go to bed at 11 or 12 o'clock at night, especially if you have to get up early for a job or responsibilities. You have to turn off the TV, the computer, shut off the lights, go to bed, and give your body and mind the opportunity to get that sleep to recover and repair.

That is an absolutely essential component of health for body and mind.



<sup>1</sup> <https://www.theguardian.com/lifeandstyle/2015/feb/15/how-much-sleep-do-i-need-recommended-amounts-all-ages>

## Stress

A lot of people who have chronic disease have gone through significant stress.<sup>1</sup> Sometimes they know the stress that happened and the autoimmune condition that happened around that same period of time. If the body is already having problems or issues and then another stressor comes in, and there are no reserves left to deal with it, a disease may occur that is significant enough to get diagnosed.

A Harvard Mastery of Stress Study followed about 160 young men college students for about 30-35 years to see which of these young men would develop a coronary artery disease, like high blood pressure and peptic ulcers.<sup>2</sup>

They found that the men who reported that they felt close to both their father and their mother had about a 25% chance of developing one of these conditions. And those who were not close to either one, whether it be their father or their mother, their risk went up to about 80 to 90%.

So it was very protective to feel close to both parents. To feel close to one parent also was protective, maybe it dropped your risk to around 50%, but to be close to both parents caused them to have the least risk

of developing these conditions.

So the feeling of being loved, of forgiveness, of sadness and remorse, and all these emotions can have an effect on the body.<sup>1</sup> Our emotions play an important role in our physical and mental health. It has been said that nine out of ten conditions actually start in the mind, in the heart.

We hear of people having heart attacks when they get really emotionally wound up about things, but it also affects the gut and a lot of these chronic diseases that we have in ways that we don't understand.

If you have wounds in your gut from the food and the toxins you're taking in, if you have wounds on your skin, these are all areas that are going to take resources from your body to heal. It's the same thing with emotional wounds.

They have found that just having the condition of depression causes decreased blood flow to the brain.<sup>2</sup> It also increases the mediators of inflammation in the system.<sup>3</sup> So just the thoughts that we think and the emotions that we feel will have a dramatic affect.

1 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3341916/>

2 <https://link.springer.com/article/10.1023/A%3A1025525428213>

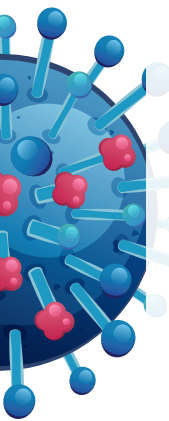
1 <https://psychcentral.com/lib/the-relationship-between-mental-and-physical-health/>

2 <https://www.sciencedaily.com/releases/2007/08/070808132027.htm>

3 <https://www.ncbi.nlm.nih.gov/labs/articles/27337107/>



# How to: SAVE YOUR BRAIN

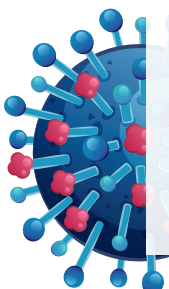
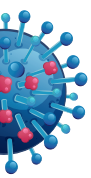
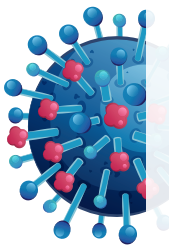


Often we have very little way of knowing how to deal with these things, because we've dealt with some of them since childhood, and they are defense mechanisms, walls we have built up around ourselves that we don't even know how to function outside of because that's just been who we are.

Cortisol is our major stress hormone.<sup>1</sup> The main job of cortisol is to allow us to buffer life stressors, but also biological stressors. So, if you're getting stress signaling, the body goes into protection mode to try and survive. Cortisol is a signal that's there for survival.

How do we really reduce stress in our crazy lives these days? It's making a commitment to get to sleep on time.<sup>2</sup> It's making a commitment to go for walks and spend more time out in nature.

It's making a commitment to eat whole foods instead of packaged, processed foods. These are biochemical stressors in the body.<sup>3</sup>



- 1 <https://www.psychologytoday.com/us/blog/the-athletes-way/201301/cortisol-why-the-stress-hormone-is-public-enemy-no-1>
- 2 <https://www.psychologytoday.com/us/blog/hide-and-seek/201702/how-reduce-stress>
- 3 <https://www.medicalnewstoday.com/articles/318630.php>

Mindfulness. Meditation.<sup>1</sup> Practicing loving kindness in our relationships with others.<sup>2</sup> All of these things will help us manage stress.

Essential oils have a direct ability to primarily affect the limbic system, which is our primal brain, your mood, your emotions, your remembrance.<sup>3</sup> Studies have shown that simply diffusing citrus oils like lime, lemon, bergamot, and others, like orange, have created positive work-life balance for nurses specifically who have arguably one of the most stressful, underappreciated jobs on the planet.<sup>4</sup> And they've found just by diffusing essential oils on the nurse station, that they reported being happier at work, less stressed, less anxiety, and overall their life became better.

- 1 <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/1809754>
- 2 <https://www.cbsnews.com/news/doing-small-acts-of-kindness-may-lower-your-own-stress/>
- 3 <https://www.ncbi.nlm.nih.gov/pubmed/21742047>
- 4 [https://prd-medweb-cdn.s3.amazonaws.com/documents/evidencebasedpractice/files/Essential%20Oil%20use%20in%20Perianesthesia%20Nursing\\_Reynolds.pdf](https://prd-medweb-cdn.s3.amazonaws.com/documents/evidencebasedpractice/files/Essential%20Oil%20use%20in%20Perianesthesia%20Nursing_Reynolds.pdf)



## More Information

There are so many natural ways to combat the devastating neurodegenerative diseases of dementia and Alzheimer's.

While we cannot expound on all the methods here in this Ebook, they will be covered in the informative 7-part docu-series, *Autoimmune Secrets*.

Some of these topics and protocols include:

**HERBS AND ESSENTIAL OILS**

**BRAIN EXERCISES**

**DETOXING**

**NEUROFEEDBACK THERAPIES**

**PARASITES**

**COGNITIVE BEHAVIORAL THERAPY**

**GUT BRAIN CONNECTION**

**MORE NUTRITIONAL THERAPIES**

Don't be in the dark any longer.

Discover the truth about brain health and autoimmune disease  
in 'Autoimmune Secrets'.

Featuring over 50 doctors, scientists, researchers and survivors of thyroid disease, lupus, multiple sclerosis, rheumatoid arthritis, lyme & even Alzheimer's & dementia, this documentary will show you the answers you've been searching for.



Watch the series now! Visit [www.autoimmunesecrets.com](http://www.autoimmunesecrets.com)