

Experience whole brain healing by finding the answers to Alzheimer's, Dementia, Parkinson's, Anxiety & Depression

BRAIN HEALING BREAKTHROUGH

By Jonathan Otto

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

Cover design by Sarah Potts

Copyright 2018 by Jonathan Otto and Health Secret LLC. All rights reserved. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the author. The Author and Publisher have strived to be as accurate and complete as possible in the creation of this book. While all attempts have been made to verify information provided in this publication, the Author and Publisher assumes no responsibility for errors, omissions, or contrary interpretation of the subject matter herein. Any perceived slights of specific persons, peoples, or organizations are unintentional. In practical advice books, like anything else in life, there are no guarantees of results. Readers cautioned to rely on their own judgment about their individual circumstances to act accordingly. This book is an educational guide that provides general health information. The materials are "as is" and without warranties of any kind either express or implied. The book's content is not a substitute for direct, personal, professional medical care and diagnosis. None of the protocols (including products and services) mentioned in the book should be performed or otherwise used without clearance from your physician or health care provider. The information contained within is not intended to provide specific physical or mental health advice, or any other advice whatsoever, for any individual or company and should not be relied upon in that regard. While every effort has been made to ensure accuracy, these contents should not be construed as medical advice, professional diagnosis, opinion, or treatment to you or any other individual, and is not intended as a substitute for medical or professional care or treatment.

Depression & Anxiety WHAT'S THE STORY?

"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."1

- 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.

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

A 100-YEAR-OLD LEGEND

Let's start with looking at the life of a 100-year-old man, with no aches or pains and no depression,

1 Verghese, 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 anxiety, or brain disfunction to discover the principles he used and how you can use them, too.

Dr. Ellsworth Wareham was a 100-year-old celebrated heart surgeon who still mowed his lawn and trims his bushes till his recent death in December of 2018.

He lived in Loma Linda, California—the only socalled "Blue Zone" of the U.S., an area where men and women live measurably longer lives than the average American.²

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 credited his longevity, good health, and clearness of mind, for which he was most grateful, in large part to his vegan diet, which he adopted midlife after reading research that showed strong

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



links between animal protein consumption and heart disease.

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 WERE WAREHAM'S DAY-TO-DAY LIFESTYLE HABITS THAT CONTRIBUTE TO HIS OVERALL GOOD HEALTH?

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

Wareham enjoyed retirement, but said there didn'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 didn't use a cane and prefered to use the stairs instead of the elevator. He cited 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.











AN EPIDEMIC OF MENTAL HEALTH ISSUES

According to Dr. Daniel Binus, founder of Beautiful Minds Medical, in recent years, there's been an explosion of mental illness in our society and culture. Studies were done among young people around World War II to assess how many mental health problems people had. Recent follow up studies found that there's been a 500% increase, meaning five times more diagnosable mental health problems among young people of high school and college age today.

That should raise a red flag that what we're doing is incorrect—the diagnosis, the treatment, the whole experience as a patient.

Every year about a quarter of the United States adult population deals with diagnosable mental health problems. Approximately 20% are on some kind of psychiatric medication, mostly antidepressant medication. But in recent years, there have also been a lot of antipsychotics, which, of course, come with big risks associated, so mental health in America is not getting any better.

Anxiety and depression have long been associated with older patients who suffer from neurodegenerative diseases due to the onset of cognitive deterioration. Statistically, the rise in teen mental illnesses has been shocking to many, but another group that was rarely associated with depression and anxiety was middle-aged adults, 45 to 64. Yet, in recent years, this group has become increasingly more likely to suffer from depression and anxiety than any other group. That means, no matter our age, we are all susceptible to these conditions.



Too often we are told that mental illness is simply a hormonal imbalance and we are just genetically predisposed toward a particular mental health problem. However, science is discovering that, while genetics certainly plays a role in all this, we are not doomed by our genetics. The environment we live in and the choices we make can alter our genetic expression. This is called epigenetics. So don't fall for the lie that you were born with an imbalance and you may have to be on medication for life because of your depression, anxiety, or other mental illness.

These statistics may seem staggering, but there is hope. Many people have been able to reverse their depression and anxiety with the tools that we will be sharing with you in this report. However, we should also take time to realize that we really need to understand what is going on in the minds of those suffering from these conditions. What is their experience? They need our understanding and care in order to be able to reach out and seek help. It is important that we, as a society, take the time to better comprehend mental illness and the struggles that go on in the minds of many Americans.



Depression, Anxiety & Neurodegeneration?

Three hundred fifty (350) million people are now diagnosed with depression, one million of which have been known to or will commit suicide this year. Depression is predicted to be the number one cause of disability through 2030. It is a global epidemic and a public health crisis.

So what is depression? Why do people battle depression? How do we define depression? No one really understands it. Unlike cancer, where you can test cancer cells or a tumor, unlike diabetes where you can measure blood glucose levels, there's no measure of depression. It doesn't exist. There is a list of symptoms, but we can't measure it or monitor it. It's between a psychologist, psychotherapist or psychiatrist and a patient getting a list of symptoms and signs.

Depression symptoms include feelings of guilt, sadness, worthlessness, desperation, inability to experience pleasure, changes in appetite and sleep patterns, lack of energy, fatigue, poor concentration, brain fog, poor memory, and motor retardation.

Are people really depressed? What does that mean? The reason why the diagnosis is important is because that determines the treatment. Many people are on antidepressants, and they're not getting better.

Continually ruminating on past events is often a sign of depression. By living in the past, we often feel that we don't connect with those in the present. We feel different or distant from all those around us, and even when loved ones do express care for us, it often just feels like

they cannot understand and so we hold back from sharing this deep struggle with them. This causes further isolation, which amplifies the feelings that no one can ever understand or really care for us. It is a very vicious cycle, and the longer we stay stuck in it the deeper we can end up traveling into depressive thoughts. In a way, it's like being stuck in a whirlpool that is sucking you down and you are able to get to the surface and get some air every once in awhile, just enough to stay alive, but you are in a constant struggle to not be sucked down to the bottom.

Anxiety on the other hand is when we are focusing on the future and trying to determine the outcome. Because our minds have limited information, we tend to fill in the gaps. If we've had failures or bad



experiences, like trauma or abuse, in the past, our mind will fill in those gaps with what it knows. If those gaps get filled in with ideas of failure or bad experiences, then it creates an overwhelming fight or flight reflex. This is when we feel the cortisol kick in, and the feeling of anxiety rushes over us. If this fight or flight reaction escalates too much, it can develop into a full-blown panic attack and we feel that we are going to die and there is no way out.

There are over 100 anxiety symptoms and signs for anxiety, anxiety attacks (panic attacks), and other anxiety disorders, including Generalized Anxiety Disorder (GAD), Social Anxiety Disorder (SAD), Obsessive Compulsive Disorder (OCD), Post-Traumatic Stress Disorder (PTSD), and phobias.

Some of the symptoms include dizziness chest pain, headaches, stomach upset, nervous stomach, nausea, fear of impending doom, shortness of breath, heart palpitations, weakness in legs, feeling like you are going crazy, and sleep problems.

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.

The reality is, when there is a threat in real life, like being chased by a dog for example, we have something physical to react to. We can run away. We can fight. But, when it is triggered by thoughts in our minds, where can we go? How can we fight? So we feel stuck. We can't quite pinpoint where the fear is coming from, and it makes it very difficult to diffuse the situation if we don't understand what is happening.

So, we're learning that not only can anxiety and depression affect us mentally, but it can lead to other chronic illnesses as well. Both depression and anxiety lead to prolonged cortisol exposure. Cortisol is our stress hormone that causes that fight or flight reflex. Considering that prolonged cortisol exposure can lead to chronic illnesses is alarming. The thought that "everything bad always happens to me" might end up being a self-fulfilling prophecy in the sense that chronic negative thoughts can lead to chronic physical ailments.

In a study published in *Biological Psychology* in 2004, it was found that the elevated cortisol levels

(referred to as Cushing's syndrome) caused by depression was associated with nervous system illnesses, cognitive impairment, hippocampal atrophy, and weight-gain. Other possible associations were bone loss, hypertension, diabetes, and peptic ulcers.

Another study on the role of stress in chronic illness, published in the *Journal of Medicine* in 1994, strongly suggested that elevated stress disorders, called uncoping stress disorder, was the underlying cause of chronic illnesses such as Crohn's disease, multiple sclerosis, systemic lupus and rheumatoid arthritis. This information was also backed by another study which connected irritable bowel syndrome, depression, and Th1 autoimmune diseases. A recent wave of research has unveiled that stress is also a player in the genesis of neurodegenerative disease.

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

Because stress can be mitigated through lifestyle changes, people may finally gain some control over these devastating and feared illnesses.

This information may seem overwhelming at first, but it's good to take a step back and think of it in the context of understanding the connection between the systems in your body. When you know that your body works as a whole system, just like the engine of a car, you can see why, when one part of the system is failing to work efficiently, it will affect other parts of the system as well.

According to the National Institute of Mental Health, nearly one in five US adults lives with a mental illness. So, that's around 44.7 million people in the US. In fact, their website actually states, "Mental illnesses are common in the United States." Since these rates have been increasing so significantly over the last few decades, we have to wonder if it is related to our lifestyles here in America. And if so, can the outcomes be changed by making simple lifestyle changes?







Depression, anxiety, and neurodegeneration are common comorbid conditions. Research has linked neuroinflammation as a major contributing factor to these diseases. The key to neuroinflammation effects on depression, anxiety, and neurodegeneration appears to lie within the dysregulation of the control and release of proand anti-inflammatory cytokines. This can come from an internal or external insult to the system, or from changes in the individual due to aging that culminate in immune dysregulation.

Depression, anxiety, and neurodegeneration are more than just what's in your mind. It's a whole body effect, and all of these things are curable. They take lifestyle modifications and thinking modifications, but they are all reversible. They're not often taught as curable because people can make some good money off of you always having this, but a therapist, specific therapies, and lifestyle changes are especially beneficial ways to get to that end. You really don't have to live with this forever. It is something that you can get rid of and something that you shouldn't have to deal with later on in life. You just have to find the solution for you.



WHAT ARE THE CAUSES OF

Depression, Anxiety & Neurodegeration?

Many factors cause and contribute to depression, anxiety, and neurodegenerative disease. Known factors include environmental stressors, leaky gut or intestinal permeability, 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.¹
- 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.²
- 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.³
- 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 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.⁴

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. 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

> 1 https://www. ncbi.nlm.nih.gov/ pubmed/23469076

impact and potentially trigger the development of chronic illness.

In addition to mental illness, like depression & anxiety, 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."²

https://consultqd.clevelandclinic.org/2014/11/childhoodemotional-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 depression, anxiety, and 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 decadeslong negative progression.¹

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

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.

¹ https://www.reddit.com/r/IAmA/comments/6k1k3a/i_am_ neuroscientist_dr_michael_merzenich_a/

Mutrition

"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.¹ 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. Alois Alzheimer (after whom the disease is named), 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.

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. 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 vour 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

can do in life."2

of the unhealthiest that we

Dr. Ben Johnson, in Autoimmune Secrets, 2018.

DR. SRUTI LAM WARNS AGAINST AGES

Advanced Glycation End S (Products)

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.¹ 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.



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.²

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.³ 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.

³ http://www.natap.org/2014/HIV/040314_02.htm



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

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

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

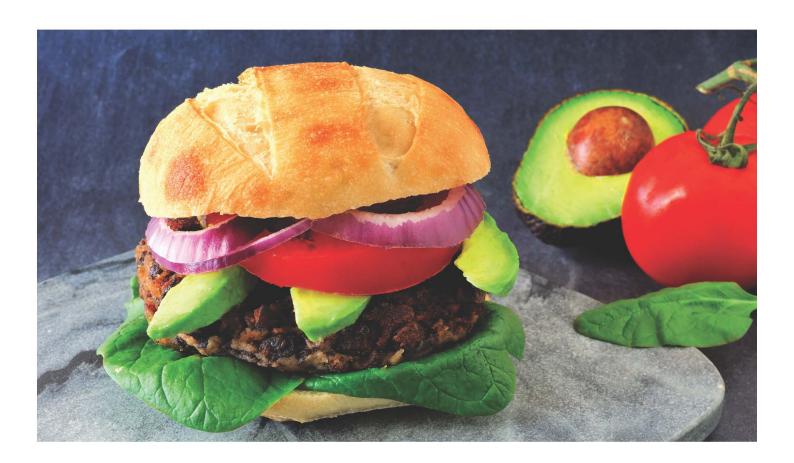
Another study was done on heterocyclic amines (HCAs), which are toxic substances that are released when animal products are grilled or fried. Studies were done in which spices were added to decrease or inhibit the formation of HCAs. Turmeric, cilantro, cumin, and rosemary were found to partially inhibit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

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.²

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.

² http://pubs.rsc.org/en/content/articlehtml/2012/fo/c2fo30226h



¹ https://www.cancer.gov/about-cancer/causes-prevention/risk/diet/ cooked-meats-fact-sheet

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.¹ 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.² So possibly

https://www.scientificamerican.com/article/how-intermittent-fastingmight-help-you-live-longer-healthier-life/

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.³

"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." 4

On a daily basis, we should be fasting for 12 to 18 hours without food, and ideally on a monthly basis, a 2- or 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. 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.

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

³ https://www.sciencedirect.com/science/article/pii/ S2211124716305769

⁴ 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 a possible natural treatment for Parkinson's disease, dementia and Alzheimer's¹, but it is also shown to improve mood, preserve memory and lower brain shrinkage².

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 avocados, 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.³

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 can be 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.

¹ https://aanddjournal.net/article/S1552-5260(15)02037-3/fulltext

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.¹

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, red meat, processed meat, and bad fats, such as vegetable oils, margarine, shortening, lard, hydrogenated oils, and all oils that have been used for frying.²

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.³

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.⁴

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.⁵



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-thatfight-inflammation

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

⁴ https://gmojudycarman.org/wp-content/uploads/2013/06/ The-Full-Paper.pdf

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



Exercise is another one of those critical elements for depression, 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.¹

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.²

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.³ 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.²

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.²

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.)

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/

O Dater

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.¹

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.² 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.³

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.⁴ And that water may have been sitting in plastic for weeks or months, with all the chemicals in plastic.⁵

The best water is distilled water or fresh water that's cleansed by reverse osmosis coupled with activated charcoal and other substances, preferably right in your own home, and stored in glass.

¹ https://www.reference.com/science/dna-replication-importantaccd4bd24c83c572

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

⁴ https://bodyecology.com/articles/best_water_to_drink.php

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



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 for mental and physical health, and that goes for sleep, too.

Sleep is a time for brain cleansing.¹ 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.² 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.³

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.⁴ 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.⁵



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.⁶

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.⁷

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.

5

 $^{1 \}qquad https://www.nih.gov/news-events/news-releases/brain-may-flush-out-toxins-during-sleep \\$

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-breathingretraining-mouththroat-exercises-lifestyle-change-part-solution/

⁴ https://www.nih.gov/news-events/nih-research-matters/how-sleepclears-brain

⁶ https://www.tandfonline.com/doi/abs/10.1080/0035919X .2012.745032?scroll=top&needAccess=true&journalCode=ttrs20

⁷ 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.¹

Practically, that 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.





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



A lot of people who have chronic disease have gone through significant stress.¹ 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.²

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.³ 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.⁴ It also increases the mediators of inflammation in the system.⁵ So just the thoughts that we think and the emotions that we feel will have a dramatic affect.

Often we have very little way of knowing how to deal with these things, because

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

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

³ https://psychcentral.com/lib/the-relationship-betweenmental-and-physical-health/

⁴ https://www.sciencedaily.com/ releases/2007/08/070808132027.htm

⁵ https://www.ncbi.nlm.nih.gov/labs/articles/27337107/

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.¹ 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.² 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.

https://www.psychologytoday.com/us/blog/the-athletesway/201301/cortisol-why-the-stress-hormone-ispublic-enemy-no-1 These are biochemical stressors in the body.³ Mindfulness. Meditation.⁴ Practicing loving kindness in our relationships with others.⁵ 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. 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. 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.

- 3 https://www.medicalnewstoday.com/articles/318630.php
- 4 https://jamanetwork.com/journals/jamainternalmedicine/ fullarticle/1809754
- 5 https://www.cbsnews.com/news/doing-small-acts-of-kindnessmay-lower-your-own-stress/
- 6 https://www.ncbi.nlm.nih.gov/pubmed/21742047
- 7 https://prd-medweb-cdn.s3.amazonaws.com/documents/ evidencebasedpractice/files/Essential%200il%20use%20in%20 Perianesthesia%20Nursing_Reynolds.pdf



² https://www.psychologytoday.com/us/blog/hide-andseek/201702/how-reduce-stress

More Information

There are so many natural ways to combat the devastating depression, anxiety and the 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 8-part docu-series, *Depression & Anxiety Secrets*. Some of these topics and protocols include:

NUTRITIONAL PROTOCOLS
DETOXIFICATION
MEDITATION
GUT REPAIR & PARASITES

COGNITIVE BEHAVIORAL THERAPY EXERCISE & NEUROPLASTICITY HERBS & SUPPLEMENTS ESSENTIAL OILS

Don't be in the dark any longer.

Discover the truth about mental health in Depression & Anxiety Secrets.

Featuring over 60 doctors, scientists, researchers and survivors of depression and anxiety, this documentary will show you the answers you've been searching for.

