

If you are reading this article with some interest, as though you know that you or your friends and relatives stand a chance of having some form of dementia in the near future (and who over 50 years of age doesn't?), I have some very good news for you, and some strong, urgent advice that I think you need to put ahead of all other considerations. Just purchase the book "The End of Alzheimers" by Dale E. Bredesen, MD. I have the book, copyright 2017 but the current book on Amazon shows a date of July 2020, with a few more pages, so it may be a revision.

This book is so much more than you will ever get from reading dozens of studies and articles on dementia. This book is what you need if you want to win. Please, just go to Amazon and read the reviews. Don't waste valuable hours trying to learn, when you can fix yourself before you need a "cure", which is essentially not possible. Why is this book better? Because it doesn't just describe the disease. You can get that in a couple of minutes for what it is worth.

The book goes into all the diet/lifestyle items involved in detail (yeah, it's about everything) but more importantly, if you think you are already suffering symptoms, it has descriptions of all the blood tests that help you, with the help of a lab or a doctor, to determine the severity of the signals, and further, to see the progress of your return to health as you do the things to remedy your condition. And these items are nothing new to you probably.

Dr. Mercola talks about these conditions all the time. For instance, "inflammation". So what are the signals, and once you have your blood work, what are your targets you are aiming for to reduce your chance of Alzheimers? So there's the list of tests: "C-reactive Protein, albumin to globulin ratio, O-6 to O-3 ratio in red blood cells, IL-6 and TNF alpha.", then after the tests, the target values for each test that shows you are healthy again. Are you seeing how thorough this can be? Nothing left to chance.

Now I see there are also books available that help with the Dr. Dale Bredesen plan. There is "The End of Alzheimer's Program" from Sept. 2022 by Dr. Bredesen and David Perlmutter, and also "The First Survivors of Alzheimers" by Dr. Bredesen from August 2021. These might be of great use once you are convinced you need to work a complete plan like this to be successful. Actually, I hope many of you here will tackle this as though your happiness depends on it, as I have done. I think it lets one feel good about what style of life they are living, as opposed to having a haunting worry, supported by a weak hope, but with no guidance or guarantee that they will escape dreaded Alzheimers.

Real knowledge, then conviction, then seeing results of test/health improvements is so much better than just "worry and hope". But it's a new wrinkle in the journey. To be sure, you are going to need to work at it. This is not the same as "safety" as in "accident avoidance" and "having health insurance". This is safety only through personal endeavor, but it's safety from not just Alzheimers, but safety that will give you better health in dozens of ways from day 1. Health is no simple thing just because we don't seem to need to address it each day.

The dangerous word in that sentence is "seem". Alzheimers is about quality of life itself. You really need to focus on quality daily to not end up senile. If you read the book, yes, you will get details on what's happening in the brain, on the 3 Types of Alzheimers, and on how each of the other degenerative disease causes relate also to causing Alzheimer's. Things like Hypothyroidism, Leaky Gut, abnormal lipid levels, toxins, genetics (ApoE-4 gene), and Mitochondrial function, to name some. I offer my sincere thanks to Dr. Mercola for bringing this whole topic to his followers, as it obviously is going to have a great impact on our happiness, and also on world-wide health care costs in the future.

A final word. Don't get distracted by people and articles that propose simple possible solutions. Avoiding Alzheimer's and any dementia is not going to be like that, no more than avoiding cardiovascular disease or diabetes is. Since people want these "simple" solutions, they are being proposed. That sells one article, or one drug, or one diet panacea. Cha-ching! Quick sale. No solution. I suggest not biting on these, but reading and admitting that total bodily health, and measurements to see what you actually have and what you need to improve is really the only way to go. I think that many of my acquaintances that are long-term Dr. Mercola followers will find they are maybe "80% there already" on the targets proposed by Dr. Bredesen in his book. After all, it is mostly how to be very healthy.

Thanks stoneharbor. In November 2014, neurologist Dale Bredesen MD published the first article on reversing cognitive decline. Using a combination of lifestyle and supplement-focused approaches, 9 out of 10 patients reversed their dementia and 6 of them even returned to work pubmed.ncbi.nlm.nih.gov/25324467 (2014).-- Dr. Bredesen's approach fits very well within the framework of functional medicine. I couldn't wait to put it into practice and wrote a blog post about it. The Bredesen protocol (now called "ReCODE", for "reversal of cognitive decline").

www.unconventionalmedicine.net/blog/some-approaches-can-reverse-cognit... ------ Dr. Bredesen compares cognitive decline to the "36-hole roof": It rains on your house because the roof has many defects, not just a few.

If you fix only two or three, it will still rain in your house. Another way to think about it is the problem of "feedback loops": to interrupt a negative feedback loop, you only have to stop one event. But in a system of interconnected feedback loops, most links need to be stopped. AReCODE is very much the inevitable conclusion of Dr. Bredesen's years of basic research. What's new here is not the belief that mercury, mold, vitamin B deficiencies, or a lack of thyroid hormone can cause dementia.

These are well established medical facts. The novelty is to demonstrate that even small alterations in these parameters (being in the "normal" range, but not in the "optimal") can add up and create a devastating decline. Reductionist clinical experiments, in which only one parameter is changed, will often have negative results when a combination of changes would have been successful. Dr. Bredesen admits that he was influenced by his wife Aida, an integrative physician. www.unconventionalmedicine.net/blog/the-end-of-alzheimers-by-dr-dale-b..

pubmed.ncbi.nlm.nih.gov/27294343 (2016). -- pubmed.ncbi.nlm.nih.gov/26870879 (2016). --

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## **Guillermou**

THE END OF ALZHEIMER'S. BY DR DALE BREDESEN. PDF julianaszabluk.com/wp-content/uploads/2020/09/The-End-of-Alzheimers\_-T..

Thanks Gui for the valuable additional details on the work of Dr. Bredesen and also the analogy that he has used equating the cause of Alzheimer's to a roof with 36 holes in it. It's so easy to see that the solution is never going to be patching a single hole. I can only thank you for putting together the logic of why a plan such as Dr. Bredesen's can work, and is essential. You encapsulated this beautifully in your final paragraph where you thus mentioned "Reductionist clinical experiments, in which only one parameter is changed, will often have negative results when a combination of changes [such as the Bredesen plan] would have been successful." Thanks for the additional research! Also, I hope people notice you have provided the PDF that is available on line of the entire book, "The End of Alzheimer's". This shows that it is the version published in 2017 which claims to be "Version\_2". With this, I can recommend that people read some of this book today.

Posted On 04/06/2024

### rrealrose

Here's a link to Dr Bredesen's website, with descriptions of each book:

www.apollohealthco.com/books

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# shery77

Stoneharbor Thank you! I will get the book you recommend. Does it also cover the foods to eat and foods not to eat to prevent estrogen overload? And what carbs are actually fine to eat to prevent Alsheimers? Thanks!

Worldwide there are more than 50 million people living with Alzheimer's disease or other dementias. By 2050, rates could exceed 150 million. Controlling diabetes, high blood pressure, obesity, smoking, sedentary lifestyle, depression, cognitive inactivity, and social isolation and other environmental factors could potentially prevent the disease. Modern diets, containing a high proportion of ultra-processed foods produce a high level of AGEs, cause deleterious effects leading to a multitude of intracellular and extracellular signaling and inflammatory pathways. The formation of advanced glycation products, by reaction of sugar molecules with proteins and other biomolecules, produces endothelial damage in the brain, which can result in cognitive impairment, strokes and neurodegenerative diseases such as Alzheimer's disease.

The effects of hyperglycemia, including excessive glucose entry into cells independent of insulin, can induce oxidative stress and a secondary innate immunity-dependent inflammatory response, which can damage CNS cells, thereby promoting neurodegeneration and dementia. Furthermore, long-term hyperglycemia can promote brain insulin resistance, which in turn can promote the accumulation of A aggregates and tau hyperphosphorylation.

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This dysfunction is known as "type 3 diabetes."europepmc.org/.../27350397 (2017).----
www.sciencedirect.com/.../S0261561423002571 (2023),--- www.mdpi.com/.../10069 (2023).---
n.neurology.org/content/there-may-be-brain-origin-advanced-glycation-e.. (2023).--
www.mdpi.com/.../405 (2023).--- www.mdpi.com/.../9881 (2023).--- www.mdpi.com/.../1684 (2023).---
onlinelibrary.wiley.com/.../ejn.16286 (2024).--
www.frontiersin.org/journals/pharmacology/articles/10.3389/fphar.2024... (2024).--
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Modifications in lifestyle, such as physical activity and caloric restriction, also in the entire process of digestion, absorption and metabolism by polyphenols, amino acids, carnosine, Benfotiamine and other new antiglycation agents such as carnosine. .and always present curcumin, ubiquinol, PQQ, NAD +. Omega 3, Acetyl-L-Carnitine, R-lipoic, NAC, resveratrol, green tea, ginkgo Biloba, grape seed extract, B complex, vitamaa E, D and magnesium to prevent Alzheimer's. www.mdpi.com/.../9881 (2023).--- www.sciencedirect.com/science/article/abs/pii/S0141813023027095?via%3D.. (2023).--- www.mdpi.com/.../1008 (2023) www.future-science.com/.../fmc-2022-0040 (2023).--- Supplementation with the NAD+ precursor nicotinamide riboside improves cognitive function and restores brain plasticity and preserves cognitive health in a variety of disease contexts, with the strongest evidence presented for Alzheimer's disease and other forms of of dementia.

The main findings are summarized in Table 1 of the last link. www.ncbi.nlm.nih.gov/.../PMC9876637 (2023) www.mdpi.com/.../3231 (2023) Some neuropathological characteristics of its development have been related to the high concentration of some metal cations such as aluminum and iron.

## juststeve

Gui, throughout history, the world nearly most, if not all cultures have treasured a long-lived life. In times past it has not been the impression many have been left with about their longevity. Much of what we have been fed is the average age lived was thirty something, maybe a little more. When what an average age is, is halfway between the youngest and oldest lived. Currently this is reflected in the loss of three years in the average age lived in the U.S. What is dropping is those of younger years dying earlier than before, not so much the older population dying sooner.

Take a walk around the oldest parts of a cemetery and they are filled with the graves of younger people, many not even seeing sixteen, eighteen. When so much of human history the elders were treasured for their knowledge, life experiences, Things They Remembered and had many examples to compare a current situation with. It would be out of line to believe those elders were rift with Dementia, Alzheimer's. Without a lifestyle of condensed, concentrated life offenders of overpopulated cities, closer to healthy sourced foods and the how they were gathered and/or produced, it would be more reasonable to expect those who made it into advanced age were very likely still healthy, mentally acute until it was their time.

In just short six decades this change in overall health can be noted in the States. When overall health has declined so much, so far, it is also reasonable to expect Mental, Brain Health has suffered with it. Seen once again research shows one thing and the public is given the direct opposite for medicine. Give more Serotonin, ignore the SERT.

### **Almond**

juststeve and all... I think 100+ years ago, more people died from childbirth and diseases, esp. pneumonia. Many people died from dangerous work... factories, mining, logging, etc. The infant mortality rate also contributed to lower life expectancy. Most people who made it thru early childhood were very healthy until osteoarthritis caught up with them from years of doing heavy labor in a time before mechanization and electricity. My husband's older siblings did manual labor during the horse age and many are crippled. His younger siblings avoided the physical abuse and deterioration as they lived during the tractor age.

My husband talks about hard times and no money when they had to convert horse-drawn equipment to be pulled behind tractors. His was the generation in between. However, there was still a lot of virgin soil to break and food was healthy. Many families ate well and they had strong bones. This is why some of them survived accidents and traumas that would kill most people today. Even the poorest families could rely on seafood, venison, foraging and a garden. Most people kept a few egg layers. I had an opportunity to observe a group of well over 100 older farmers who had lived a traditional lifestyle.

One was an elderly woman in a wheelchair. One was a disabled veteran (war injury). Most of the farmers and their wives carried a few extra pounds, but all were active and mentally alert. I think this was because they continued a traditional way of life close to nature. I doubt you would observe the same among senior citizens who had lived in a city all their life and were supermarket-dependent. Most supermarket food is unfit for human consumption. The increase in Alzheimer's is more likely due to inactivity combined with malnutrition in spite of adequate calories. The wrong kinds of food.

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## juststeve

Almond - hear, hear.

Just and Almond, After 15 years of research and clinical experiences, Dr. Jean Seignalet - French doctor and author of Food, the 3rd Medicine - concluded that many pathologies and the current proliferation of others are basically due to five reasons: the consumption of cereals domestic animals, the ingestion of animal milk from foods raised on industrial farms with antibiotics, hormones and contaminated foods. ultra-processed foods, the refining of oils and food contamination with the consequent lack of vitamins and minerals. Hence, he proposed to overcome them to follow what he called "Ancestral Regime", a dietary method with which surprising cures have been achieved in numerous pathologies, including cancer.

Cellular fouling is the cause of many pathologies. Fouling that is largely due to the fact that the mucosa of the small intestine - with a large surface area and extreme thinness - can become hyperpermeable when subjected to the aggression of different agents, anti-inflammatory medications and certain foods that are difficult to digest, especially refined cereals and dairy. industrial It is the modern diet that has most decisively contributed and continues to contribute to deteriorating the permeability of the mucosa. And our eating habits have undergone great changes over the centuries with the appearance of new products, the modifications imposed on food by modern agriculture, livestock and industry techniques and the way of preparation with high-heat cooking techniques.

temperatures that have not been accompanied by a similar adaptation of our biology. In short, our body, the product of an evolution of millions of years, cannot adapt to the rapid changes of the last 5,000 years but, above all, to those of the last century, which has ended up causing pathologies for which there is no cure today, answer and that are studied from different perspectives.

Seignalet would verify that depending on the structure of the molecules coming from the intestine, the mechanisms with which they hinder the functioning of the cell, the type of enzymes affected and the different reactions they generate, one type or another of pathology occurs. Considering that cellular fouling would be the main cause of most autoimmune and rheumatic diseases - rheumatoid polyarthritis, ankylosing spondylitis, Gougerot-Sjgren's disease, lupus erythematosus, scleroderma, multiple sclerosis, celiac disease, myasthenia, Basedow's disease -, the soiling pathologies - primitive fibromyalgia, tendinitis, osteoarthritis, osteoporosis, gout, headaches, endogenous nervous depression, schizophrenia, migraines, Parkinson's, Alzheimer's, type 2 diabetes, hypoglycemia, hypercholesterolemia, spamophilia, arteriosclerosis, dysepsia, gallstones, acute pancreatitis, hemopathies non-malignant, leukemias and some cancers - and elimination pathologies - acne, psoriasis, eczemas, keratoderma, ichthyosis, colitis, Crohn's disease, functional colopathy, chronic bronchitis, asthma, otitis, angina, sinusitis, allergic rhinitis, repetitive infections, Behet's disease, allergic conjunctivitis and thrush.

In short, and as incredible as it may seem, all these dysfunctions and pathologies are caused, according to Seignalet, by cellular fouling and can be prevented, stopped from progressing and even reversed in many cases by following the Ancestral, Original or Hypotoxic Regime that he proposed in his work The Food, the 3rd Medicine

## juststeve

Gui & Almond, if I may. Jump into a time machine and here in this area back in the time frame of the sixty's, seventies the refrain often heard was 'we are forty years behind the times.' Today now that some of us have the life experience to be able to compare, it very much seems much of what we were behind on, we may have been better off if it stayed that way. Fifties, Sixties is an area where heart attacks, strokes, cancers began to show up, most likely from the damage of Cottonseed Oils taking hold. (Radioactive fallout from A bomb testing most likely contributed too.) So many of the things you list Gui would be mostly unknown, thought to be nonexistent.

Insulin for Type one Diabetes was a welcomed thing. Type two would draw a response of Type what? Nearly everything now are off the charts plus new offenders, dis-ease. Had we invested in the smaller, community based basic needs at a Local Level producing healthier fare through healthier means, we would have a stronger Nation. That unfortunately became called Protectionism. It was. It protected those most important sources of Real Wealth. One thing today to have developed are the Biodynamic, Regenerative, Organic & Sustainable methods. The Real Deal, not the phony efforts to high jack, greenwashing head and health fakes being imposed today.

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### sma2126

What about the nano sized aluminum oxide aerosols Bill Gates have been spraying worldwide? Other heaven metals and acids are used as well. We not only inhale that air crap b ut the nano size particles go right through our skin. Multiple patents for "albedo" cloud whitening exist and all one has to do is look up in the sky to see the crap. being sprayed. I read that the military will disperse aerosols in the shadow of the eclipse, which sounds like a sick joke, nevertheless, it made the news recently.

## cstbrenda

Yes! I just brought home a heavy metals test kit again because I'm convinced some of the things going on with me and many of my craniosacral therapy clients have to do with the Nano aluminum particles dumped nearly continually over Los Angeles! And the world!!

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## epi-cure

Here's a reference list pilfered from a cognitive enhancement dietary supplement composite: Poly C, Massaro JM, Seshadri S, Wolf PA, Cho E, Krall E, Jacques PF, Au R. The relation of dietary choline to cognitive performance and white-matter hyperintensity in the Framingham Offspring Cohort. Am J Clin Nutr. 2011 Dec;94(6):1584-91. www.ncbi.nlm.nih.gov/.../PMC3252552 Spiers PA, Myers D, Hochanadel GS, Lieberman HR, Wurtman RJ. Citicoline improves verbal memory in aging. Arch Neurol. 1996 May;53(5):441-8.

pubmed.ncbi.nlm.nih.gov/8624220 Byun JI, Shin YY, Chung SE, Shin WC. Safety and Efficacy of Gamma-Aminobutyric Acid from Fermented Rice Germ in Patients with Insomnia Symptoms: A Randomized, Double-Blind Trial. J Clin Neurol. 2018 Jul;14(3):291-295. www.ncbi.nlm.nih.gov/.../PMC6031986 Intake of 200 mg/day of —Aminobutyric AcidGABAImproves a Wide Range of Cognitive Functions A Randomized, Double—blind, Placebo—controlled Parallel—group Clinical Trial Atsushi Yamatsu and et al., , 48, 461-474 (2020), www.pieronline.jp/.../461 Miller JW, Harvey DJ, Beckett LA, Green R, Farias ST, Reed BR, Olichney JM, Mungas DM, DeCarli C.

Vitamin D Status and Rates of Cognitive Decline in a Multiethnic Cohort of Older Adults. JAMA Neurol. 2015 Nov;72(11):1295-303. pubmed.ncbi.nlm.nih.gov/26366714 BMJ-British Medical Journal. "Over 65s Should Take High Dose Vitamin D To Prevent Falls, Say Researchers." ScienceDaily. ScienceDaily, 3 October 2009. www.sciencedaily.com/.../091001191659.htm . . . . . continued below

# epi-cure

continued list . . . . Malouf R, Grimley Evans J. The effect of vitamin B6 on cognition. Cochrane Database Syst Rev. 2003;(4):CD004393. pubmed.ncbi.nlm.nih.gov/14584010 Gong B, Pan Y, Vempati P, Zhao W, Knable L, Ho L, Wang J, Sastre M, Ono K, Sauve AA, Pasinetti GM. Nicotinamide riboside restores cognition through an upregulation of proliferator-activated receptor- coactivator 1 regulated secretase 1 degradation and mitochondrial gene expression in Alzheimer's mouse models. Neurobiol Aging. 2013 Jun;34(6):1581-8. pubmed.ncbi.nlm.nih.gov/23312803

Good recommendations, EPI. It is estimated that more than 90% of Americans do not meet their recommended daily intake and, according to recent research conducted in mice, their deficiency can cause profound negative effects on the heart, liver and other organs. However, new research findings suggest that environmental and lifestyle changes can help protect the brain from Alzheimer's disease and improve overall health. Among them, adequate choline intake. The study by researchers Ramn Velzquez, Eric Ferreira, Sara Knowles, Chaya Fux, Akexis Rodin, Wendy Wislow and Salvatore Oddo, from Arizona State University, in the United States, is so relevant.

Scientists investigated the role of choline in preventing the symptoms of this disease. As Dr. Velzquez points out, "the choline diet was only 4 times higher than the recommended daily amount, which is well below the 'recommended upper limit,' making it a safe strategy."

onlinelibrary.wiley.com/.../acel.13037 (2019).--- A group of researchers from the Massachusetts

onlinelibrary.wiley.com/.../acel.13037 (2019).--- A group of researchers from the Massachusetts Institute of Technology, in the United States, have discovered that a mixture containing three components normally found in blood promotes the growth of new connections in the brain and improves cognitive function in rodents.

This treatment is being tested in patients with Alzheimer's and may be hope for the treatment of other diseases. This mixture would contribute to the correction of the loss of synapses that characterizes Alzheimer's disease, in a way analogous to what L-dopa does in the case of Parkinson's. The mixture is made up of Docosahexaenoic acid (DHA, a type of omega 3 acid), uridine and choline, and produces an increase in the concentration of dendritic spines, which receive postsynaptic information. www.ncbi.nlm.nih.gov/.../PMC3062998 (2010).—

This protocol describes the methodology for a systematic review of choline intake and AD. The systematic review resulting from this protocol will form an evidence-based foundation to advance nutritional care for people with AD or poor cognitive function. <a href="https://www.frontiersin.org/.../full">www.frontiersin.org/.../full</a> (2023).--- In plasma, dietary choline deficiency altered protein networks associated with insulin metabolism, mitochondrial function, inflammation, and fructose metabolic processing. The data highlight that dietary choline intake is necessary to prevent system-wide organ pathologies and reduce the hallmark pathologies of AD. <a href="https://organ.org/nicelestrapy.com/.../acel.13775">noticel.13775</a> (2023).-- Choline plays a key role in healthy body and brain function and supplementation above the adequate daily intake (ADI) reduces AD pathology.

Choline deficiency increases the risk and pathology of AD. In particular, recent reports estimate that approximately 90% of Americans do not meet the dietary ADI for choline, making it imperative to better understand the link between choline and AD risk. Taken together, as free choline and ACh levels decreased, AD pathology increased. Free choline was also associated with MMSE score. An increase in TNF was observed in cases with lower choline, illustrating increased inflammation. Together, these data expand on our recent publications, highlighting links between low choline levels and AD risk. alz-journals.onlinelibrary.wiley.com/doi/abs/10.1002/alz.077122 (2023).--

Quercetin, a well-known flavonol, has been extensively studied for the treatment of AD. Therefore, this review mainly focuses on the pharmacokinetic properties of quercetin and its modes of action, such as antioxidant, anti-inflammatory, anti-amyloidogenic, and neuroprotective properties, which are beneficial in the treatment of AD. Quercetin, a flavanol, has several therapeutic actions in Alzheimer's disease. Preclinical studies demonstrated the effectiveness of quercetin in Alzheimer's disease. www.sciencedirect.com/science/article/abs/pii/S0006899324001598 (2024).-- It has been shown to protect neurons from oxidative damage while reducing lipid peroxidation.

In addition to its antioxidant properties, it inhibits the formation of fibrils of -amyloid proteins, counteracting cell lysis and inflammatory cascade pathways. In this review, we provide a synopsis of recent literature exploring the relationship between quercetin and cognitive performance in Alzheimer's disease and its potential as a lead compound for clinical applications.

www.mdpi.com/.../59 (2019).-- Glycyrrhiza uralensis, Cyperus rotundus and Buplerum falcatum, produced promising preclinical results. These herbs are rich in kaempferol and quercetin, flavonoids with a polyphenolic structure that facilitate multiple mechanisms of action.

These mechanisms include inhibition of A plaque formation, a reduction in tau hyperphosphorylation, and suppression of oxidative stress. In this review, we discuss the anti-AD mechanisms of quercetin and kaempferol and their limitations, and suggest a possible alternative treatment for AD. The findings lead us to conclude that a polyherbal cocktail rich in kaempferol and quercetin could treat AD-related brain damage. www.mdpi.com/.../1453 (2023).--

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## wearewell

I was told a long time ago that about 3 tsp. of organic coconut oil a day helped prevent dementia...did I miss this in the article? Also that the coconut oil helped the brain stem to avoid the buildup causing dementia....did I dream this?

## **Bunny3**

Turmeric and coconut oil seem to help Alzheimer's Disease patients.

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## qtf47334

Salt, don't limit your salt unless a heart doctor or dialysis doctor told you to limit salt. The crusade against salt hurts humans

Posted On 04/06/2024

### Kat3040

I've read that those with higher cholesterol don't get Alzheimer'. Can High Cholesterol Really Be Heart Protective? Perhaps the question that would get to the point quicker is to ask why the Japanese study infers that people with low versus high cholesterol die sooner? The Mission offers referenced studies that show a few factors that could be weighing in: Cholesterol may protect against infections and atherosclerosis, as "the many observations that conflict with the LDL receptor hypothesis, may be explained by the idea that high serum cholesterol and/or high LDL is protective against infection and atherosclerosis."16 Cholesterol may protect against cancer, although in previous cases where low cholesterol was linked to cancer, exclusions were made to tip the scales, such as excluding possible prior drug treatment, namely clofibrate, a popular cholesterol-lowering drug before statins, by subjects — leaving the question open as to whether it was the low cholesterol that caused the cancer, or the drug treatments that contributed to it.

### Horsea

The problem may express as cognitive disorder, but I would opine that the basic causes are emotional/psychological. The persons I know or have known with severe dementia/Alzheimer etc. have things to hide, things they are suppressing, bad stuff from their past, events they don't or won't acknowledge, matters undealt with. All women. Are my observations "scientific"? No. With anything, you have to prove cause and effect. But scientists and medical people need to be held to the same standard. You say that we should keep serotonin levels "as low as possible".

That sounds ominous. I should think our goal is to keep our serotonin levels at an optimum level. There is such a thing as too little serotonin (or too little of any other neurotransmitter-hormone). What do you think. Also, I wonder if we die "of" or "with" Alzheimer's disease. They say that the AD causes dehydration, malnutrition and death. Is it that simple, though. Medical scientists are always seeing things through their own limited lens. Cause & effect; cause or association, etc. Just saying, IMO, etc.

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## epi-cure

Noteworthy to me is that the dietary recommendations for thwarting Alzheimer's is identical to the dietary guideline for good health, be it with regard to cardio vascular, cancer, etc. \*\*\*\*\*\* What is a good way, dietarily speaking, to elevate GABA without resorting to GABA supplements? \*\*\*\*\*\*\*\* I've posted this before and believe it's worthy of consideration especially for those who have mysterious physical AND mental health challenges: www.youtube.com/watch

Hi EPI. GABA is an effective immunomodulatory molecule that has various effects on immune cells, cytokine secretion, modification of cell proliferation. Furthermore, GABA can also be found in tissues such as lymph nodes and islets of Langerhans and high enough in the blood to activate, for example, GABA-A channels. GABA appears to play a role in autoimmune diseases such as multiple sclerosis, type 1 diabetes, and rheumatoid arthritis and may modulate the immune response to infections. In this review, we report some of the recent findings that reveal the role of GABA as an immunomodulator.

www.ncbi.nlm.nih.gov/.../PMC3680704 (2023).---- This review reports that Gaba is a major inhibitory neurotransmitter in the central nervous system with modulation of synaptic transmission, promotion of neuronal development and relaxation, and prevention of insomnia and depression. Furthermore, various pharmaceutical properties of Gaba have also been reported in non-neuronal peripheral tissues and organs due to antihypertension, antidiabetes, anticancer, antioxidant, anti-inflammatory, antimicrobial, antiallergic, hepatoprotective, neuroprotective, reno-protection, and intestinal protection.

www.mdpi.com/.../htm (2019).---- GABA and the vagus nerve collaborate to control how the gut microbiota affects brain function. The vagus nerve is also an important regulator of the immune response and appears to be important for microbiota-gut-brain communication. Butyrate production has been related to the presence of lower levels of proinflammatory cytokines.

www.sciencedirect.com/.../S0753332223001324 (2023).----

Green tea, white tea, and oolong tea naturally have high amounts of GABA. Some tea companies also add GABA to their tea blends for an extra boost. If you already like drinking tea, this is probably the easiest way to increase GABA naturally. www.mcgill.ca/oss/article/health/gaba-supplements-glorious-gimmicky-or.. (2018).---- You practice yoga 60 minutes a day, 3 times a week for 12 weeks. Brain scans showed increased GABA in their brains. Participants also reported improved mood and decreased anxiety www.ncbi.nlm.nih.gov/.../PMC3111147 (2015).--- Declining physical performance with age and illness is an important indicator of declining health. GABA, a muscle autocrine factor, is a potent inhibitor of muscle function and acts as a muscle relaxant.

To consider the relationship of the intestinal microbiota and neurotransmitters with insomnia. Numerous neurotransmitters produced in the intestine have direct interactions with the CNS; they can also communicate with the brain through -aminobutyric acid (GABA), an important inhibitory neurotransmitter in the brain. Experimental studies have found that GABA can improve sleep by regulating the gut microbiota and increasing levels of SCFAs. Lactobacillus and bifidobacteria have the ability to produce GABA. This suggests that GABA may improve sleep by promoting probiotics in the gut.

The vagus nerve works in conjunction with the enteric nervous system to regulate intestinal function. Probiotics have been found to regulate sleep by increasing the expression of central GABA receptors. GABA and the vagus nerve collaborate to control how the gut microbiota affects brain function. The vagus nerve is also an important regulator of the immune response and appears to be important for microbiota-gut-brain communication. Afferent signals from the gut to the brain can trigger an efferent response that reduces inflammation through interaction with immune cells.

We hypothesize that insomnia is a common inflammatory response and that inflammation mediated by disorders associated with the gut microbiota may also cause insomnia. There is a balance between the intestinal flora, which plays an important role in the immune function of the intestinal mucosa. When this balance is disrupted, the number of harmful bacteria will increase, intestinal barrier function will be damaged, permeability will increase, and the body's immune function will be impaired. www.sciencedirect.com/.../S0753332223001324 (2023)

Posted On 04/06/2024

# epi-cure

Guillermou thank you for the generous, as always, firehose treatment :- ) For a minute there I thought I was going to have to sift through an hour of data to find the dietary needle recommendation in the haystack. And then there was your mention of green and other teas which I drink on occasion. I'll read through the data anyhow after the sun goes down. Be well!

Also, The physiological balance between excitation and inhibition in the brain is significantly affected in Alzheimer's disease (AD). GABA is the main inhibitory neurotransmission system in the mammalian brain. Dysregulation of glutamate and GABA. It has been shown in multiple brain conditions. Factors that can prevent the efficient conversion of glutamate to GABA include a lack of cofactors (B6 and magnesium) and a lack of the enzyme glutamate decarboxylase, which converts glutamate to GABA. Infections and chronic stress inhibit the function of this enzyme.

GABA and the vagus nerve collaborate to control how the gut microbiota affects brain function. The vagus nerve is also an important regulator of the immune response and appears to be important for microbiota-gut-brain communication. pubmed.ncbi.nlm.nih.gov/34769106 (2021).---- www.nature.com/.../s41380-023-02140-w (2023).--- www.sciencedirect.com/science/article/abs/pii/S0889159123000594 (2023).-- www.sciencedirect.com/.../S0753332223001324 (2023).-- Exercise at about 85% of your maximum heart rate, to be exact. GABA is closely associated with physical performance since both intrinsic factors (inflammation, apoptosis, mitochondria, calcium metabolism, etc.) and extrinsic factors (endocrine, nutritional status, immobility, etc.) contribute to progressively defective myogenesis and dysfunction.

muscle during aging www.nature.com/.../s41598-023-41628-x (2023) www.sciencedaily.com/.../160225101241.htm (2016).---- Meditation and yoga can increase GABA production in your brain. www.ncbi.nlm.nih.gov/.../PMC4769029 (2015).----- www.ncbi.nlm.nih.gov/.../PMC3111147 (2015).----

An interesting fact is that alcohol inhibits the central nervous system. To put this into perspective, think about the common side effects of drinking. These often include loss of motor skills, slurred speech, blurred vision, impaired judgment, etc. Many of these symptoms are caused by how alcohol affects the brain. Not only does alcohol effectively kill essential cells that help keep you alert and healthy, it can also cause GABA withdrawal by reducing its production. www.gbhoh.com/gaba-and-alcohol-how-drinking-leads-to-anxiety (2023).--- Stressful situations require a rapid response from the body to promote adaptation and survival.

The functionality of the hypothalamic-pituitary-adrenal (HPA) axis is essential for such a response and depends on many mediators, such as steroid hormones (for example, cortisol), neurotransmitters (including glutamate and GABA), cytokines and neuropeptides, which function in time. - and manners dependent on the brain area. The hippocampus, amygdala, and prefrontal cortex (PFC) are particularly interesting regions, as they project to the HPA axis via the inhibitory GABA system and the excitatory glutamate system, but the stress-related dynamics of these systems largely extent remains unclear.

Of note, stress exposure generally increases prefrontal cortex glutamate levels in the rodent brain and primarily decreases GABA levels in the brain, depending on the type and duration of stress, and the brain region. examined. Furthermore, rapid changes in GABA(A) receptors occur after acute stress in animals. www.sciencedirect.com/.../S2213158217300013 (2017).---my.clevelandclinic.org/health/articles/22857-gamma-aminobutyric-acid-g..

Posted On 04/06/2024

# lesleybethune

And stop using pesticides - they are neurotoxic - you could do all of the above but spray your house every 6 weeks, and you'd still be buggered.

Glyphosate infiltrates the brain, elevates both TNF and soluble A expression, and alters the transcriptome. Glyphosate exposure in cortical neurons increases soluble A levels and cytotoxicity. More than 200 differentially expressed genes were revealed in a dose-dependent manner and cell type-specific deconvolution analysis showed enrichment of key biological processes in oligodendrocytes, including myelination, axon wrapping and cell development. link.springer.com/.../s12974-022-02544-5 (2022).---------------- In this study, Glyphosate revealed a severe decrease in serum Mn. The impact of Mn on physiology and its association with intestinal dysbiosis, as well as with neuropathologies such as autism, Alzheimer's disease (AD), depression, anxiety, Parkinson's disease (PD) and prion diseases. The overexpression of glutamate in the brain associated with autism, AD, and other neurological diseases may be explained by Mn deficiency. www.ncbi.nlm.nih.gov/.../PMC4392553 (2025).-

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### sschank

Just this week we had a young man rang the bell at our new home. He was selling pesticide treatments in the neighborhood. I asked him what type of chemicals are being used and if it protects pollinators. He told me that the person coming to do the treatment will tell me that and I need to sign up today. Obviously, I declined the offer and purchased a No Soliciting sign.

Posted On 04/06/2024

# Alldogsgotoheaven

That seems as obvious as the nose on my face and yet you hear very little about that. I have been wondering when this is going to become an issue that is talked about.

Glyphosate and other agents you have named induce a shift in intestinal bacteria towards endotoxin producers, their exposure can contribute to many chronic and degenerative diseases. Permanent exposure to low doses of glyphosate (GBH-RUp) in the intestinal environment includes morphological and microbiome changes. Prolonged exposure to GBH-RUp also induced changes in intestinal integrity, as evidenced by altered expression of tight junction effector proteins. The herbicide also causes changes in the composition of the intestinal microbiome, leading to the production of endotoxins that prevent the production of GABA which is also crucial for the establishment of the intestinal barrier. Taken together, morphological and functional changes in the intestine correlate with behavioral changes similar to those observed in patients with neurodevelopmental disorders.

www.mdpi.com/.../5583 (2022).---

Posted On 04/06/2024

#### stc4358

Aluminum is a brain toxin to my knowledge. Millions of tons of aluminum nanoparticles are sprayed into our skies every year by some perverts with airplanes. Any wonder so many ppl lose their brains? Watch the documentary The Dimming at geoengieeringwatch.org to find out more. Start by looking into the sky as often as you can. Eventually the message will sink in what is going on up there. It's outright frightening!

Posted On 04/08/2024

### bel1048

It is truly a blessing to read of more doctors finding a major help vs Alzheimer's. I have Dr Bredesen's great book & took notes on this one's! My maternal grandma had Alzheimer's.... as did my Mom & her brother & my brother got it early, in late 50's & I believe a cousin has it. I'm 62 & working vs it!...We know Alzheimer's Association \$\$\$\$\$\$ donations go to find more drugs to kill us.

### mar39280

Great article. But all these Do and Do NOTs are mostly assumptions based on reductionist clinical studies and research done in unnatural lab or controlled conditions. I had ancestors who lived LONG healthy livesthey were ALL living in countryside, healthy and natural foods, clean air - no "chemtrails loaded with aluminum and other toxics, moving a lot until death, no doctor visits, no medications other than natural methods and plants, rich social life etc. In my family, as people moved from country to towns and adopted a city life style, every generation lived shorter than previous, and kids got sicker and sicker: allergies, food intolerances (that we and my parents NEVER experienced).

It is clear to me - and I have a strong medical education - that staying healthy means simply living naturally in all aspects. Might be hard to do nowadays, but if one truly wants to stay healthy has to move far from cities and pollution and find a peaceful corner in Nature. We did, left behind careers and big money for a better life and health.

Posted On 04/06/2024

### isabellita1

Wondering about compounded progesterone and testosterone taken vaginally. Have been doing so for more than a decade. Feel great.

Posted On 04/06/2024

### sue2613

When reading about the peanut butter smell test, I realize how amazing it is that problems in the brain can affect the senses. I know someone who had a brain tumor which affected taste and smell. Lemons tasted sweet and bananas smelled like skunk. Luckily the tumor was non-malignant and removed. If we paid more attention to things like that our diagnoses would improve.

### **Bro4477**

GUI do you know if Evening Prim Rose oil is considered a bad LA oil? It is in the ingredients with krill oil for women. I have significantly reduced my LAs and don't want to impair that. Thank you

Posted On 04/06/2024

### ekoborie

Do you sell this progesteronepowder? Does the method suggested for taking in article reduce side effects of progesterone? I have tried bio-identical hormone cream as well as oral and get headaches and nausea from progesterone. I am on an estrodial patch due to hysterectomy and s/b taking prog too but havent been able to tolerate. I just recently lowered patch level due to prog intolderance.

Posted On 04/06/2024

### **MarKe**

Cannot stress enough to make sure you aren't taking an anticholinergic medication. So many elderly have seizures and don't know why. My daughter was put on Benadryl, an anticholinergic med, and began to have seizures which stopped with the discontinuance of Benadryl. On a different note, I just came across the work of Dr. Goodenowe, who uses plasmalogens to reverse Alzheimer's, MS and other such illnesses. In some respects, we live at a great time. See Epoch news article from yesterday. Dale Bredesen reviewed his book and said it is paradigm shifting.

## reg5821

'So, to inhibit serotonin production in your gut (which is where most of the serotonin in your body is produced), you want to prevent endotoxin production', - had assummed endotoxin inhibited all neurotransmitter production but a quick search confirms the above, serotonin increased by endotoxins.

Posted On 04/06/2024

### **Guillermou**

Yes . Also. Endotoxin levels in blood plasma are elevated during infections, intestinal inflammation, gum disease, and neurodegenerative disease. The addition of high levels of endotoxin to the blood induces microglial activation, priming and/or tolerance, memory deficits, and loss of brain synapses and neurons. Endotoxin promotes amyloid and tau aggregation and neuropathology, suggesting the possibility that endotoxin synergizes with different aggregating proteins to give different neurodegenerative diseases. In neurological diseases, endotoxin levels increase significantly both in the blood and in the brain, due to gum disease and/or alteration of the intestinal microbiota.

which leads to accelerated systemic infection with action on neurological diseases. link.springer.com/.../s12974-019-1564-7 (2019).--- link.springer.com/.../978-3-030-66376-6\_3 (2021).--- molecularneurodegeneration.biomedcentral.com/articles/10.1186/s13024-0.. (2023).--- ui.adsabs.harvard.edu/.../abstract (2023).-- www.mdpi.com/.../308 (2024).- -The current results showed that a high-fat diet (HFD) reduced GABA levels in the frontal cortex (FC) and hippocampus.

These findings suggest that lower levels of neurotransmitters in the FC and hippocampus could affect the inhibitory processes underlying eating behavior. High Gamma-Aminobutyric Acid (GABA) Oolong Tea Alleviates High-Fat Diet-Induced Metabolic Disorders in Mice www.scielo.cl/scielo.php? script=sci\_arttext&pid=S0716-976020160001.. (2017).---- pubs.acs.org/.../acsomega.3c04874 (2023).--- Not only does alcohol effectively kill essential cells that help keep you alert and healthy, it can also cause GABA withdrawal by reducing its production. www.gbhoh.com/gaba-and-alcohol-how-drinking-leads-to-anxiety (2023).---

Most studies observe higher concentrations of LPS or LBP in diabetic subjects than in healthy controls. Subjects with DM1 and DM2 presented higher average fasting LPS of 235.7% and 66.4% compared to non-diabetic subjects. diabetics, respectively. Advanced complications (eg, macroalbuminuria) and disease onset exacerbate endotoxemia. DM1 and DM2 appear to increase metabolic endotoxemia. However, some confounding factors such as diet, age, medication, smoking, and obesity influence both the manifestation of diabetes and endotoxemia. Increased intestinal permeability may contribute to low-grade inflammation, leading to insulin resistance and DM.

A healthy intestinal barrier allows the passage of water, nutrients and bioactive compounds, and prevents the passage of harmful substances such as microbial and dietary antigens. DM favors the translocation of endotoxins (especially lipopolysaccharides (LPS)) across the intestinal barrier, leading to a slight increase in their concentration in the bloodstream. The degradation of intestinal integrity and increased intestinal permeability favor the translocation of LPS from the intestinal lumen to the bloodstream, causing metabolic endotoxemia. LPS has a short half-life, so LPS-binding protein (LBP) has been used as a marker of metabolic endotoxemia.

In general, we observed that diabetic subjects had higher fasting and postprandial LPS concentrations compared to lean nondiabetic and/or obese subjects. Figure 2 shows the possible mechanisms that explain the increase in plasma LPS in diabetic subjects. Fasting endotoxin concentrations appear to change with nutritional and metabolic status (healthy, obese, diabetic, etc.). Endotoxemia is also associated with low-grade inflammation, metabolic syndrome and a different response to LPS in Type 1 diabetes. www.sciencedirect.com/science/article/abs/pii/S0026049516301871 (2017).------www.researchsquare.com/.../v1 (2023)

## honeybee22

Prolonged alcohol abuse causes early dementia and death. Omega 3's and loads of other supplies like K2 D3 +++ organic and probiotic/prebiotic gut friendly non gmo and no pesticide in or around the house. Beef, eggs fish and I love tofu too. I consider Carbs to be a food group and love my toast with coconut oil. No dairy not even raw milk. Happy and Healthy. Mercola offers many great guidelines but even he gets wires crossed sometimes. Always trust your good instincts. Nobody is perfect.

Posted On 04/06/2024

## **Guillermou**

Yes, alcohol consumption affects cognitive performance with immediate and long-term effects on brain anatomy and neuropsychological functioning. Cognitive impairment is related to clinical dementia as it accelerates brain shrinkage and atrophy, leading to a critical determinant of neurodegenerative changes and cognitive decline in aging. These morphological changes induced by alcohol consumption may be reversible, unlike Alzheimer's disease (AD) or aging, since atrophy decreases, with cognitive improvement after alcohol abstinence. Other data showed that morphological changes in the brain are associated with the loss of a number of nerve cells that occur in the white matter, which largely comprises nerve fibers connecting neurons and/or cortical cholinergic neurons, which are known to be affected in AD.

This link makes it possible that alcohol consumption may be related to AD, since the cholinergic system plays an important role in memory. This role is confirmed and its deficits are well established in EA. Chronic alcohol consumption causes degeneration of cholinergic neurons.

www.mdpi.com/.../9492 (2023).--

# Sally\_0

This is incorrect: "Death certificates are well known to underreport deaths from Alzheimer's and other types of dementia. The more immediate causes of death, such as pneumonia or heart attack, are usually listed, and the underlying causes of death are usually left off." Just the opposite was true until Covid when the CDC changed how death reports were filled out. Didn't matter that someone was already dying of cancer. If they got Covid, the "immediate" cause of death, then Covid was the C.O.D. Historically, cancer would have been the C.O.D. with pneumonia/flu as contributing. Dr. Scott Jensen has done a ton of reporting on this.

Posted On 04/10/2024

# mthfrgal

I'm confused. I have SIBO and eat pretty much only rice and white potatoes for my carb intake. I have to eat carbs! The Fodmap diet actually suggests these as safe! I've never read this before but this article.

Posted On 04/09/2024

### Gra3069

Awesome article!

## janejane

(Prolonged Estrogen Exposure Linked to Alzheimer's Severity) In My Family My mom took took low grade Estrogen for yearsshe had what they called (Pick's disease.) (My two sister took low grade Estrogen for years) .one is so bad ..she sits & stares all day Second sister has no memory. (but some better than the other sister) I ask my doctor about taking itshe said ..Absolutely NOT! My memory is as good as it ever was!)

Posted On 04/06/2024

# quiquibm

Peanut butter gives me migraine. I wonder if it is a symptom of Alzheimer's?

Posted On 04/06/2024

# **Squirlie**

I often wondered what caused alzheimer's / dementia, and the difference between them. Thank you Dr. Mercola.

Posted On 04/06/2024

### mei9282

Some of the latest research I have seen says get your free iron, ferritin, below 100 and suddenly dementia disappears, and full cognition appears. Fortified foods, well intentioned, is poisoning people with what is fortified. Look at labels, even though they are suspect, for any extra iron added is not in your best interest.

### Horsea

I knew a man who, in his 60s, was having memory problems. He mentioned to me that he was then prescribed a drug for his gout. Voila! The memory & concentration issues disappeared. His brain functioning and memory were great when I knew him, this was after the prescription drug was taken. FWIW.

Posted On 04/06/2024

## pecanroll

Government lied and people died

Posted On 04/06/2024

## **Cece2019**

For me, since Covid, peanut butter, bacon and coffee has never smelled or tasted the same, even after 3 years. Guess I'll have to test my left and right nostrils separately.

Posted On 04/06/2024

# Cj24Mercola

I am new to your post. Years ago I read and still have Adell Davis book let's get well. My chiro gave me your name. I have just been reading your info and I am well pleased.