Dementia

Dr. John Bergman

Dementia Defined

"Dementia is an <u>umbrella term</u> for a group of cognitive disorders typically characterized by memory impairment, as well as marked difficulty in the domains of language, motor activity, object recognition, and disturbance of executive function – the ability to plan, organize, and abstract."



CDC

Alzheimer's Disease

"Alzheimer's disease is perhaps the most common form of dementia, although several others exist."

Other Dementias

- Vascular dementia
- Lewy body dementia
- frontotemporal dementia
- Huntington's disease
- Creutzfeldt-Jakob disease CDC ¹



Dementia Statistics

- 5.3 million Americans currently have Alzheimer's disease
- Alzheimer's disease is the 6th leading cause of death in the US
- 1 in 3 seniors dies with Alzheimer's or another Dementia
 Every <u>66 seconds</u> someone in the US develops Alzheimer's

Alzheimer's and other dementias kill more than breast and prostate cancer combined

CDC¹, Alzheimer's Association¹⁰

Dementia Statistics

"The number of people living with dementia worldwide is currently estimated at **47.5 million** and is projected to increase to **75.6 million by 2030**. The number of cases of dementia are estimated to more than **triple by 2050**."



d Health Organization ⁹

Facts about Dementia According to the WHO

- Dementia is **not** a normal part of aging
- A new case of dementia is diagnosed every <u>4 Seconds</u>
- Dementia costs the US, \$604 billion per year
- More research is needed?

"More research is needed to develop new and more effective treatments and to better understand the causes of dementia. Research the identifies the <u>modifiable risk factors</u> of dementia is still scarce."

According to the World Health Organization ⁹

Modifiable Risk Factors

"There are a number of studies that suggest behaviors that might lessen the risk of developing the disease. Among these are increasing physical activity, having a diet rich in fruits and vegetables, maintaining social engagement, and participating in intellectually stimulating activities."

"Other conditions can also cause dementia or dementia-like symptoms including reactions to medications, nutritional deficiencies, infections, poisoning, brain tumors, and anoxia or hypoxia.

In many cases, the condition is reversible with treatment, therefore alleviating the dementia or dementia-like symptoms"

What causes Dementia?

- Most Doctors, Journals, and Organizations agree that these can cause dementia:
- Accumulation of proteins (beta amyloid) in the brain = Alzheimer's disease
- Damage to vessels that supply blood to the brain = Vascular Dementia
- Abnormal clumps of protein in the brain = Lewy Body Dementia
- Degeneration of nerve cells in the frontal and temporal lobes of the brain
 = Frontotemporal Dementia
- A combination of all of these = Mixed Dementia

All forms of Dementia have something in common:

Progressive loss of nerve cells

Mayo Clinic, CDC, WHO, and other sources ¹⁻¹²

Sharp Again Naturally (sharpagain.org)

The 7 areas that may cause memory loss and dementia but can be reversed:

- Mercury and other Heavy Metal Poisoning
 Prescription Medication side effects
- 2. Prescription Medication side effects
- 3. Stress, stagnation, and inactivity
- 4. Thyroid and other hormonal imbalances
- 5. Inflammation
- 6. Artificial food colors, flavors and sweeteners
- 7. Nutritional imbalances and deficiencies

1. Mercury and Other Heavy Metal Poisoning

Sources of Mercury:

- Vaccines: Annual flu shots
- Amalgam fillings



<u>Thimerosal</u>

- Used in vaccines as a preservative and is 49.6% ethylmercury
- Mercury can cause immune, sensory, neurological, motor and behavioral dysfunctions

The Thimerosal Cover Up

- Robert F. Kennedy, Jr. wrote an article for Rolling Stone exposing the cover up of the dangers of thimerosal
- According to Kennedy's account, in June of 2000
- A group of top government scientists and health officials including high-level officials from the CDC, FDA, top vaccine specialists from the WHO, and representatives from every major vaccine manufacturer gathered to discuss the use of thimerosal in childhood vaccines
- Data indicated that Thimerosal appeared to be responsible for a drastic increase in autism and other neurological disorders

The CDC played an important role in the cover up:

- Payed the Institutes of Medicine to produce a new study that would debunk the link between thimerosal and brain disorders
- Withheld unflattering findings by claiming the original data had been "lost" and could not be replicated
- Handed over their database of vaccine records to a private company which would make it off-limits to researchers and prevent access through the Freedom of Information Act

The Result:

 By 2001, thimerosal was removed from the majority of childhood vaccines, but it's still used in multi-dose vials and is present in almost all seasonal flu vaccines.

Source ²³

The Flu Vaccine

- Ethyl Mercury (thimerosal): a powerful neurotoxin implicated in autism, seizures, mental retardation, dyslexia
- Aluminum compounds: a known neurotoxin that has been associated with brain damage, dementia, Alzheimers and convulsions
- Ammonium Sulfate: commonly used in pesticide preparations and attributed to respiratory toxicity;
- Beta-Propiolactdone: a hazardous chemical associated with lymphomas in animals;
- Formaldehyde: an embalming chemical and known human carcinogen, neurotoxin, and genetic disruptor
- Monosodium Glutamate: a preservative known to adversely affect learning, behavior and reproduction
- Phenol: highly toxic to the cardiovascular, nervous, reproductive and respiratory systems and once employed by the Nazis in the concentration camps

ources 17-19

Affects of the Flu Shot

Dr. Hugh Fudenberg, MD

- The world's leading Immunogeneticist
- Founder and Director of Research, Neurolmmuno Therapeutic Research Foundation
- Over 850 papers published in peer-reviewed publications

After 5 consecutive flu shots, the chances of acquiring Alzheimer's Disease was **10 times (1000%) higher** than those who had only one or two vaccinations

Aluminum Adjuvants in Vaccines

 Aluminum is a known neurotoxin that is in many common childhood and adult vaccines

• May even exceed the toxicity of mercury

- Is added to the vaccine in order to boost your immune response to the antigen
- Allows the vaccine manufacturer to use smaller amounts of the antigen which makes production less expensive
- Aluminum has no biological role inside the body
- May lead to <u>long-term brain inflammation</u> along with many other health problems

<u>Aluminum</u>

"Aluminum is an experimentally demonstrated neurotoxin and the most commonly used vaccine adjuvant. Despite almost **90 years** of widespread use of aluminum adjuvants, medical science's understanding about their mechanisms of action is still remarkably poor."

"There is also a concerning scarcity of data on toxicology and pharmacokinetics of these compounds. In spite of this, the notion that aluminum in vaccines is safe appears to be widely accepted."

Current Medicinal Chemistry ^{21,22}

Aluminum

"Experimental research, however, clearly shows that aluminum adjuvants have a potential to induce **serious immunological disorders** in humans."

"In particular, aluminum in adjuvant form carries a risk for autoimmunity, long-term brain inflammation and associated neurological complications and thus may have profound and widespread adverse health consequences."

Current Medicinal Chemistry 21,22

Aluminum

In our opinion, the possibility that vaccine benefits may have been overrated and the risk of potential adverse effects underestimated, has not been rigorously evaluated in the medical and scientific community. We hope that the present paper will provide a framework for a much needed and long overdue assessment of this highly contentious medical issue."

Researchers discovered:

Children up to 6 months of age receive **14.7 to 49 times** more aluminum from vaccines that the FDA safety limits allow Current Medicinal Chemistry ^{21,22}

2. Prescription Medication side effects

<u>Statins</u> (Cholesterol lowering Drugs)

- Suppress the synthesis of cholesterol
- Deplete your brain of coenzyme Q10 and neurotransmitter precursors
- Prevent adequate delivery of essential fatty acids and fat-soluble antioxidants to the brain by inhibiting the production of the indispensable carrier biomolecule known as **low-density lipoprotein**

Statin-associated adverse cognitive effects have been reported with 90% resolving after drug discontinuation. Journal of Pharmacotherapy ²⁴

Sleep Medication and Dementia

• Study involving over 25,000 people

"Zolpidem (Ambien) use might be associated with increased risk for dementia in elderly population. Increased accumulative dose might have higher risk to develop dementia, especially in patients with underlying diseases such as hypertension, diabetes, and stroke.

Journal of Medicine (Baltimore) ²⁵

3. Stress, Stagnation, and Inactivity

Excess Cortisol leads to:

- Inflammation
- Hormone imbalances
- Cognitive impairment
- High blood glucose levels
- Hypertension
- Susceptibility to disease

A Sedentary Lifestyle leads to:

- Lack of proper lymph and blood flow
- Cellular shutdown and blockages
- Interference with healing on every level

Exercise and Dementia

"This meta-analysis suggests that physical activity interventions **positively influence cognitive function** in patients with dementia."

Ageing Research Reviews 32

"Increasing energy output from a variety of physical activities is related to **larger gray matter volumes** in the elderly, regardless of cognitive status. Physical activity can be neuroprotective and reduce the risk for Alzheimer's disease."

Journal of Alzheimer's Disease ³⁴

Exercise and Dementia

"Our findings suggest that physical activity reduces the long-term risk of dementia, especially Alzheimer's Disease."

European Journal of Epidemiology ³⁶

"Physical activity counteracts neuronal loss and behavioral deficits. The present findings underscore the relevance of increased physical activity as a potential strategy in the prevention of dementia."

Translational Psychiatry ³⁸

Why is Exercise so Beneficial?

"Regular physical exercise may thus **increase angiogenesis**, **neurogenesis**, **synaptogenesis**, **and the synthesis of neurotransmitters** in different cerebral structures involved in cognition due to an increase in the liberation of neurotrophic factors and the production of enzymatic antioxidants."

"There is an inversely proportional relationship between the amount of physical activity undertaken and the risk of cognitive decline and/or the development of neurodegenerative disease."

Journal of Sports Medicine 41

4. Thyroid and other hormonal imbalances

- 20 million Americans have hypothyroidism
- 10-40% of Americans have suboptimal thyroid function
- The Thyroid maintains constant communication between the brain, other glands, hormones, and the receiving cells and tissues
- The thyroid is at the mercy of cortisol



Iodine for Thyroid Health

- Functions of Iodine
- Stabilization of metabolism and body weight
- •Brain Development
- Fertility
- Optimization of your immune system
- Is a potent anti-bacterial, anti-parasitic, anti-viral and anti-cancer agent

5. Inflammation

- Neuroinflammation is the result of damage among brain
 Healthy microglia populations are focused on preventing inflammation among neurons, thus preventing damage to brain cells
- Microglia are immune cells (macrophages) that are responsible for dealing with toxins and infection in the central nervous system
- Microglia are also responsible for cleaning up the amyloid plaque that plays a role in Alzheimer's

Source ²⁶

Inflammation

- Damage from oxidative stress have been linked to the build-up of plaque
- Oxidation is produced through an imbalance between toxins that form oxidative radicals and antioxidants.

"Pro-inflammatory cytokines seem to have negative effects on the aging brain and have been related to dementia." "These patterns of data suggested that inflammation was particularly detrimental in inactive older adults and may exacerbate the negative effects of physical inactivity on brain and cognition in old age."

Human Brain Mapping Journal ³⁵

Preventing Oxidative Damage

"The purpose of the study was to test whether daily consumption of a beverage with **high antioxidant power**, combining extracts of green tea and apple over a period of 8 months, would affect blood and urinary concentrations of biomarkers of oxidative stress in Alzheimer's patients."

"Our results suggest that antioxidant beverages could be used as a natural complementary therapy to alleviate or decrease the oxidative stress effects in the stages of Alzheimer's disease."

European Journal of Nutrition 44

6. Artificial food colors, flavors and sweeteners

- Food additives of all kinds cause dementia and other neurological disorders
- Over 75% of adverse reactions to food additive reported to the FDA concern aspartame
- Aspartame is Broken down int<mark>o:</mark>
- Phenylalanine (50%)
- Aspartic acid (40%)
- Methanol (10%)



Affects of Aspartame

Phenylalanine

Reduces levels of dopamine and serotonin

Aspartic Acid

 Causes Hyper-excitability of neurons which leads to degeneration of astrocytes and neurons

Methanol

 Causes CNS depression and vision disorders and leads to metabolic acidosis and coma
 Association of Polish Neuropathologists and Medical Research Centre ²⁹

Affects of Aspartame

"It was seen that aspartame disturbs amino acid metabolism, protein structure and metabolism, integrity of nucleic acids, neuronal function, endocrine balances and changes in the brain concentrations of catecholamines."



7. Nutritional Imbalances and Deficiencies

- Nutritional Deficiencies that can lead to Dementia:
- omega 3's
- vitamin B12
- Vitamin D
- vitamin C
- Magnesium
- Selenium
- Probiotics
- And many other nutrients



The Mediterranean Diet

"These findings suggested that adherence to the Mediterranean Diet may affect not only the risk of AD, but also of pre-dementia syndromes and their progression to overt dementia.

High levels of consumption of fats from fish, vegetable oils, non-starchy vegetables, low glycemic index fruits and a diet low in foods with added sugars and with moderate wine intake should be encouraged. Hopefully this will open new opportunities for the prevention and management of dementia and AD."

Expert Review of Neurotherapeutics Journal ¹³

<u>Vitamin D</u>

"Available data indicates that lower vitamin D status may be associated with increased risk of developing AD and dementia."

Nutrition Journal ¹⁴

"Alzheimer's Disease cases had lower serum vitamin D concentrations than matched controls. This reinforces the conceptualization of vitamin D as a **'neurosteroid hormone**' and as a potential biomarker of Alzheimer's Disease." Journal of Alzheimer's Disease ⁴³

Vitamin B9 (Folate, Folic Acid)

"Folic acid is believed to play a role in protection from oxidant stress. Low levels of folic acid had been found in serum from patients with Alzheimer disease."

Researchers found low levels of Folate in patients diagnosed with:

- Alzheimer's disease
- Frontotemporal dementia
- Lewy Body Disease
- Corticobasal degeneration
- Progressive supranuclear palsy
- Parkinsons Disease

The Neuroscience Letters Journal ³³

Folic Acid can Reverse Alzheimer's Disease

"The results showed that folic acid stimulated the DNA methyltransferase (DNMT) **gene and protein expression**, and DNMT activity.

Furthermore, folic acid decreased **amyloidB-peptide** (A β) production, whereas inhibition of DNMT activity by zebularine increased (A β) production.

The results indicate that folic acid induces methylation potential-dependent DNMT enzymes, thereby attenuating Aβ production."

International Journal of Molecular Sciences 40

<u>Coconut Oil</u>

- Medium Chain Triglycerides (MCTs) the primary type of fat found within coconut oil
- The majority of fats we consume are long-chain triglycerides which are harder to absorb and utilize
- Has been proven to boost cognitive performance in older adults suffering from memory disorders including Alzheimer's

How long would this take and how much is needed? Months? Days? A Single Dose?

<u>Coconut Oil</u>

- This study showed that just 40ml (2.7 tablespoons) caused an almost immediate improvement in cognitive performance in people with Alzheimer's
- "Glucose is the brain's principal energy substrate. In Alzheimer's disease (AD), there appears to be a pathological decrease in the brain's ability to use glucose.
- Neurobiological evidence suggests that ketone bodies are an effective alternative energy substrate for the brain. Elevation of plasma ketone body levels through an oral dose of medium chain triglycerides (MCTs) may improve cognitive functioning in older adults with memory disorders."

Neurobiology of Aging Journal ¹⁷

Coconut Oil can Reverse Alzheimer's

- Researchers discovered that Coconut Oil:
- Protects the neurons from damage
- Prevents mitochondrial alterations caused by amyloid-B peptide

Journal of Alzheimer's Disease ¹⁶



Turmeric (Curcumin)

"Curcumin, the principal curcuminoid of turmeric, exhibits beneficial role in several neurodegenerative disorders such as dementia of Alzheimer type."

Pharmacological Research Journal 37

"AD patients have defects in phagocytosis of amyloidbeta in vitro by the innate immune cells, monocyte/ macrophages and in clearance of Abeta plaques. The natural product curcuminoids enhanced brain clearance of Abeta."

Journal of Alzheimer's Disease ⁴⁵

<u>Reversal of Cognitive Decline</u>

- A new program from UCLA and the first study to prove natural therapies can not only slow the progress of dementia but can actually reverse it
- Dr. Dale Bredesen, professor of neurology at the Mary S. Easton Center for Alzheimer's Disease Research at UCLA

9 Out of 10 subjects diagnosed with dementia were able to reverse their cognitive decline

The Protocol

- eliminating all simple carbohydrates;
- eliminating gluten and processed food;
- increasing vegetables, fruits, and non-farmed fish;
- reducing stress with yoga and meditation;
- increasing sleep from 4-5 hours per night to 7-8 hours per night;
- taking methylcobalamin (vitamin B12), vitamin D, CoQ10, and fish oil each day;
- optimizing oral hygiene using an electric flosser and electric toothbrush;
- fasting for a minimum of 12 hours between dinner and breakfast;
- exercising for a minimum of 30 minutes, 4-6 days per week.

The 5 Keys to Health and Healing







Regular Exercise



Proper Nutrition



Sufficient Rest



Prayer and Meditation

Side Effect is Health

"Although the downside to the program is the complexity and the number of lifestyle changes required, **the only side effect of the protocol was improved health** and an optimal body mass index, a stark contrast to the side effects of many drugs." Dr. Dale Bredesen, Sources ^{30,31}



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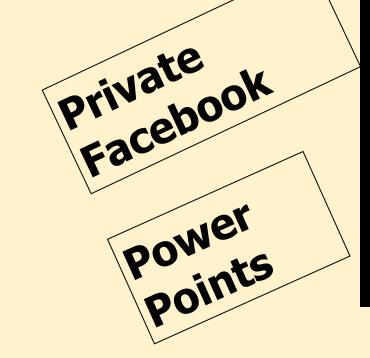
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