**Summary of research on cognitive decline and Alzheimers**

**By Peter Senior, 17 September 2019**

The objective: finding out how to reverse cognitive decline.

Assumption: the standard medical view that cognitive decline and Alzheimers can at best be alleviated and that the is no way to reverse it is false.

An initial task to check if Dr Bredesen’s protocol, or some variation, could assist achievement of this objective.

This paper comprises an **initial** chronological list of findings that appear to be of interest. The most promising to date is the first listed together with several aspects of Dr Bredesen’s protocol.

Further updates will be provided shortly

1. **Dr Dale Bredeson: End of Alzheimer’s**

<https://www.apoe4.info/wiki/Bredesen_Protocol> :

[Dr. Dale Bredesen](https://www.drbredesen.com/thebredesenprotocol/) has created the ReCODE protocol that involves multiple strategies to address specific health issues that contribute to Alzheimer's Disease (AD). The results of each strategy are measured by using blood tests, cognitive evaluations, and other markers of overall health improvements. Actions are tweaked over time to aim for optimal lab and evaluation results. His analogy is to think of AD as a leaky roof - there are as many as 36 leaks in the AD roof that need to be addressed to stop the problem. Not every patient will have the same leaks, and the protocol is customized based on the patient’s genetics, current health, and lifestyle.

In 2014, his first published paper on the protocol, [Reversal of Cognitive Decline](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4221920/), highlighted 10 case studies. Of those 10 people, nine showed enough improvement to return to normal life activities. Several hundred people with cognitive impairment have since followed the protocol, and most have seen a reversal of cognitive impairment. He published results of reversing various levels of cognitive decline in [Reversal of Cognitive Decline: 100 patients](https://www.omicsonline.org/open-access/reversal-of-cognitive-decline-100-patients-2161-0460-1000450.pdf), published October 2018. His book *The End of Alzheimer's*, published August 2017 discusses his protocol and explains many of the mechanisms of Alzheimer's.

Bredesen’s protocol has not been tested as a preventative, however in a May 2019 podcast interview, Dr Bredesen did say that he’s never had someone at risk come in for prevention and develop even mild cognitive impairment. Research has shown that amyloid-β is deposited in E4 carriers as early as their thirties, so addressing components prior to experiencing cognitive impairment symptoms will likely lead to better health and cognition in aging. Members on the APOE4.Info forum who follow the protocol report improvements not only in health but also in cognition, even if they do not have an SCI or MCI diagnosis.

Although Bredesen does not see private patients, he has made his protocol available to those seeking doctor assistance through [AHNP: Precision Health](https://www.ahnphealth.com/). MPI Cognition, his previous affiliation, was acquired by AHNP and his prior affiliation with [Muses Labs](https://museslabs.com/) has ended.

Dr Dale Brederson End of Alzheimer’s book:  AUD4.99 on Kindle.  It makes sense to me.  He has been researching Alzheimers with a highly qualified team for 25 years. Their view is that what is measured, in particular plaques and tangles (all explained in the book) are only the indirect cause of brain cells being killed deliberately.  The real cause, he explains, is that the brain has a natural defence mechanism that tries to stop the plaques and tangles forming and, if these build up too much, it goes haywire and starts killing too many brain cells.  The trick is to stop the mechanisms that cause the plaque and tangle growth. They have identified 36 so far (see below), and expect just a few more to be found.  These come in categories of inflammatory, toxic and nutrients.  Their programme is to identify which are the major causes for each individual – it varies it seems – and tackle each one starting with the most prominent.  Their program is called ReCODE, and they are training numerous nurses and doctors to apply it.  The reason ReCODE hasn’t made the main stream is they are not allowed to carry out formal test approval programs, as required for all approved medical drugs.  Big Pharma only want to sell huge numbers of pills.  Problem is, it isn’t a matter of one super pill as each person’s needs vary as which of the 36+ are the major causes, so testing just one would be a waste of time and only appear to prove the treatment doesn’t work.  Ie stop the plaques and tangles forming and the brain’s defence mechanism reckons all is now well, stops killing cells and shuts down until needed.  But the official approval mechanism only allows one factor at a time to be tested, so the approval mechanism for multiple factors has not been approved.  They have had many successes when doctors who knew of this program sent their patients to Dr Bredersen – with amazing full recoveries. The list below links to summaries of why each strategy is important, what you can do, and a selection of research references.

NB: Cognoscopy, chapter 7

Diet Strategies

[Optimize diet](https://www.apoe4.info/wiki/Optimize_diet)

[Enhance autophagy and ketogenesis](https://www.apoe4.info/wiki/Enhance_autophagy,_ketogenesis)

[Improve GI Health](https://www.apoe4.info/wiki/GI_health)

Lifestyle Strategies

[Reduce stress](https://www.apoe4.info/wiki/Reduce_stress)

[Optimize sleep](https://www.apoe4.info/wiki/Optimize_sleep)

[Exercise](https://www.apoe4.info/wiki/Exercise)

[Rule out sleep apnea](https://www.apoe4.info/wiki/Ensure_nocturnal_oxygenation)

[Optimize mitochondrial function](https://www.apoe4.info/wiki/Optimize_mitochondrial_function)

Lab Tests to Track and Treat

[Homocysteine](https://www.apoe4.info/wiki/Homocysteine_less_than_6)

[B vitamins](https://www.apoe4.info/wiki/Serum_B12_greater_than_500)

[Inflammation](https://www.apoe4.info/wiki/CRP_less_than_1.0;_A/G_greater_than_1.8)

[Insulin sensitivity](https://www.apoe4.info/wiki/Fasting_insulin_less_than_5;_HgbA1c_less_than_5.6) (insulin and blood glucose)

[Hormones](https://www.apoe4.info/wiki/Hormone_balance)

[Zn:fCu ratio](https://www.apoe4.info/wiki/Optimize_Zn:fCu_ratio)

[Vitamin D](https://www.apoe4.info/wiki/25OH-D3_%3D_50-80ng/ml)

[Rule out heavy metal toxicity](https://www.apoe4.info/wiki/Exclude_heavy_metal_toxicity)

[Optimize antioxidants](https://www.apoe4.info/wiki/Optimize_antioxidants)  ??

Brain Strategies

[Brain stimulation](https://www.apoe4.info/wiki/Brain_stimulation)

[Reduction of Aß](https://www.apoe4.info/wiki/Reduction_of_A%C3%9F)

[Cognitive enhancement](https://www.apoe4.info/wiki/Cognitive_enhancement)

[Increase NGF](https://www.apoe4.info/wiki/Increase_NGF)

[Provide synaptic structural components](https://www.apoe4.info/wiki/Provide_synaptic_structural_components)

[Increase focus](https://www.apoe4.info/wiki/Increase_focus)

[Increase SirT1 function](https://www.apoe4.info/wiki/Increase_SirT1_function)

[Inhalational Alzheimer's](https://www.apoe4.info/wiki/Inhalational_Alzheimer%27s) (editing note: update to types of AD)

**Summary of key tests for ReCode Protocol** taken from Dr Bredesen's book ***The End of Alzheimer's*** provided for quick reference, refer to the book for specific information

| **Genetics** | **Critical tests** | **Target values** | **Optional tests** | **Comments** |
| --- | --- | --- | --- | --- |
|  | ApoE | Negative for ApoE4 | Whole genome, exome, or SNPs | Saliva or blood |

| **Blood Tests** | **Critical tests** | **Target values** | **Optional tests** | **Comments** |
| --- | --- | --- | --- | --- |
| Inflammation vs. cellular protection | Hs-CRP | <0.9 | IL-6, TNFalpha |  |
|  | Homocysteine | <7 |  |  |
|  | Vit. B6, B12, folate | 60-100 (B6) 500-1500 (B12)10-25 (folate) |  |  |
|  | Vit. C, D, E | 1.3-2.5 (C) 50-80 (D) 12-20 (E) |  | Vit. D is measured as 25-hydroxy-cholecalciferol |
|  | Omega-6: omega-3 ratio | 0.5-3.0 |  |  |
|  | A/G ratio (albumin:globulin ratio) | ≥ 1.8 > 4.5 (albumin) |  |  |
|  | Fasting insulin, glucose, hemoglobin A1c | ≤ 4.5 (fasting insulin) 70-90 (fasting glucose) <5.6 (HbA1c.) Although in a 2019 interview Dr Bredesen updated to: fasting insulin < 5.0, and A1c of 4.5 to 5.2. | Neural exosome studies (p-tau, AB42, REST, cathepsin D, and IRS-1 phos. Ratio) |  |
|  | Body mass index (BMI) | 18-25 |  |  |
|  | LDL-p or sdLDL or oxidized LDL | 700-1000 (p) <20 (sd) <60 (ox) |  |  |
|  | Cholesterol, HDL, triglycerides | >150 (cholesterol) >50 (HDL) <150 (TG) |  |  |
|  | Glutathione | 5.0-5.5 |  |  |
|  | RBC thiamine pyrophosphate | 100-150 |  |  |
|  | Leaky gut, leaky bloodbrain barrier, gluten sensitivity, autoantibodies | Negative |  |  |

| **Trophic support** | **Critical tests** | **Target values** | **Optional tests** | **Comments** |
| --- | --- | --- | --- | --- |
|  | Vit D. | 50-80 |  |  |
|  | Estradiol (E2), progesterone (p) | 50-250 (E2) 1-20 (p) |  |  |
|  | Pregnenolone, cortisol, DHEA-sulfate | 50-100 (preg) 10-18 (cort) 350-430 (DHEA, women) 400-500 (DHEA, men) |  |  |
|  | Testosterone, free testosterone | 1500-1000 6.5-15 (free) |  |  |
|  | Free T3, free T4, reverse T3, TSH | 3.2-4.2 (fT3) 1.3-1.8 (fT4) <20 (rT3) <2.0 (TSH) Ft3:rt3 ≥20 |  |  |

| **Toxin related** | **Critical tests** | **Target values** | **Optional tests** | **Comments** |
| --- | --- | --- | --- | --- |
|  | Mercury, lead, arsenic, cadmium | <5, <2, <7, <2.5, respectively | <50th percentile (Quicksilver) |  |
|  | Copper:zinc ratio | 0.8-1.2 | RBC zinc; ceruloplasmin |  |
|  | C4a, TGF-B1, MSH | <2830 (C4a) <2380 (TGF-B1) 35-81 (MSH) | MMP9, VEGF, leptin, VIP, ADH, osmolality | If abnormal, add MARCoNS culture and VCS testing |
|  | HLA-DR/DQ | Benign HLA-DR/DQ |  |  |

| **Metals Excluding those listed above** | **Critical tests** | **Target values** | **Optional tests** | **Comments** |
| --- | --- | --- | --- | --- |
|  | RBC-magnesium | 5.2-6.5 |  |  |
|  | Copper, zinc | 90-110 (both) |  |  |
|  | Selenium | 110-150 |  |  |
|  | Potassium | 4.5-5.5 |  |  |
|  | Calcium | 8.5-10.5 |  |  |

| **Cognitive performance** | **Critical tests** | **Target values** | **Optional tests** | **Comments** |
| --- | --- | --- | --- | --- |
|  | CNS Vital Signs, BrainHQ, or equivalent | >50th percentile for age, improving w/ practice | Novel object recognition |  |

| **Imaging** | **Critical tests** | **Target values** | **Optional tests** | **Comments** |
| --- | --- | --- | --- | --- |
|  | MRI w/ volumetrics | Hippocampal, cortical volume percentiles steady (or increasing) for age, >25th percentile |  |  |

| **Sleep** | **Critical tests** | **Target values** | **Optional tests** | **Comments** |
| --- | --- | --- | --- | --- |
|  | Sleep study | AHI <5/h |  |  |

| **Microbiomes** | **Critical tests** | **Target values** | **Optional tests** | **Comments** |
| --- | --- | --- | --- | --- |
|  | Gut, oral, nasal | No pathogens |  |  |

# Previous 2016 paper <https://www.aging-us.com/article/100981/text>

# Reversal of cognitive decline in Alzheimer's disease

#### **Dale E. Bredesen**[**1**](https://www.aging-us.com/article/100981/text)**,**[**2**](https://www.aging-us.com/article/100981/text)**, Edwin C. Amos**[**3**](https://www.aging-us.com/article/100981/text)**, Jonathan Canick**[**4**](https://www.aging-us.com/article/100981/text)**, Mary Ackerley**[**5**](https://www.aging-us.com/article/100981/text)**, Cyrus Raji**[**6**](https://www.aging-us.com/article/100981/text)**, Milan Fiala**[**7**](https://www.aging-us.com/article/100981/text)**, Jamila Ahdidan**[**8**](https://www.aging-us.com/article/100981/text)

* 1 Easton Laboratories for Neurodegenerative Disease Research, Department of Neurology, University of California, Los Angeles, CA 90095, USA
* 2 Buck Institute for Research on Aging, Novato, CA 94945, USA
* 3 Department of Neurology, University of California, Los Angeles, CA 90095, USA
* 4 Memory Clinic, California Pacific Medical Center, San Francisco, CA 94115, USA
* 5 Private Practice of Psychiatry, Tucson, AZ 85718, USA
* 6 Department of Radiology, University of California, Los Angeles, CA 90095, USA
* 7 Department of Surgery, University of California, Los Angeles, CA 90095, USA
* 8 Brainreader, Horsens, Denmark

#### **received: April 12, 2016 ; accepted: May 30, 2016 ; published: June 12, 2016**

<https://doi.org/10.18632/aging.100981>

### Abstract

Alzheimer's disease is one of the most significant healthcare problems nationally and globally. Recently, the first description of the reversal of cognitive decline in patients with early Alzheimer's disease or its precursors, MCI (mild cognitive impairment) and SCI (subjective cognitive impairment), was published [1]. The therapeutic approach used was programmatic and personalized rather than monotherapeutic and invariant, and was dubbed metabolic enhancement for neurodegeneration (MEND). Patients who had had to discontinue work were able to return to work, and those struggling at work were able to improve their performance. The patients, their spouses, and their co-workers all reported clear improvements. Here we report the results from quantitative MRI and neuropsychological testing in ten patients with cognitive decline, nine ApoE4+ (five homozygous and four heterozygous) and one ApoE4-, who were treated with the MEND protocol for 5-24 months. The magnitude of the improvement is unprecedented, providing additional objective evidence that this programmatic approach to cognitive decline is highly effective. These results have far-reaching implications for the treatment of Alzheimer's disease, MCI, and SCI; for personalized programs that may enhance pharmaceutical efficacy; and for personal identification of ApoE genotype.

The Buck Institute for Research on Aging is an independent biomedical research institute that researches aging and age-related disease. The mission of the Buck Institute is to extend the healthy years of life. The Buck Institute is one of eleven centres for aging research of the Glenn Foundation for Medical Research.

### [**Buck Institute for Research on Aging** https://www.buckinstitute.org](file:///C:\Users\Peter2\Documents\Afiles\Better-Management,%20newsletters,%20articles\%0dBuck%20Institute%20for%20Research%20on%20Aging%20%20https:\www.buckinstitute.org%0d)

----------------------------------------------

MoCA brain test - <https://www.mybraintest.org/dl2/moca-test-english-7-1.pdf>

Brian exercises: The Brain HQ Group -   <https://www.brainhq.com/why-brainhq/about-the-brainhq-exercises/attention/double-decision/>

Also Luminosity (which I’ve used for 4 years), Dakim, Cogstate

Souvenaid, a multi-vitamin drink for early stages of CD

**MCT oil** is most commonly extracted from **coconut oil,** can help **you** stay in the fat-burning state known as **ketosi -** Addi small amounts of MCTs to any food**s**

**Ashwagandha, an Indian herb,** provides a benefits for your **body** and brain - lower blood sugar levels, reduce cortisol, boost brain function

The **APOE gene** provides instructions for making a protein called apolipoprotein E. This protein combines with fats (lipids) in the body to form molecules called lipoproteins. Lipoproteins are responsible for packaging cholesterol and other fats and carrying them through the bloodstream. **APOE4** is the greatest genetic risk factor for late-onset Alzheimer's disease (AD), increasing the risk of developing the disease by 3-fold in the 14% of the population that are carriers. There are no approved predictive genetic tests for this form of the condition. - <https://www.apoe4.info/wp/>

## Redimind mixture / tonic : The Clinical Study

The **International Shopping List Test**, the standard in short-term memory evaluation, was administered to 50 participants to evaluate the effectiveness of  versus placebo. Huperzine A "Compared with [other acetylcholinergic substances], HupA has better penetration through the blood-brain barrier, higher oral bioavailability, and longer duration of AChE inhibitory action. HupA has been found to improve cognitive deficits in a broad range of animal models. [...] The phase IV clinical trials in China have demonstrated that HupA significantly improved memory deficits in elderly people with benign senescent forgetfulness [...] with minimal peripheral cholinergic side effects and no unexpected toxicity."

## Mayo Clinic - Alzheimer's treatments: What's on the horizon?

## <https://www.mayoclinic.org/diseases-conditions/alzheimers-disease/in-depth/alzheimers-treatments/art-20047780>

**Despite many promising leads, new treatments for Alzheimer's are slow to emerge.**

Current Alzheimer's treatments temporarily improve symptoms of memory loss and problems with thinking and reasoning. These Alzheimer's treatments boost performance of chemicals in the brain that carry information from one brain cell to another. However, these treatments don't stop the underlying decline and death of brain cells. As more cells die, Alzheimer's disease continues to progress.

# Webmd - <https://www.webmd.com/alzheimers/guide/alzheimers-disease-treatment-overview#1> Treatments for Alzheimer's Disease

Right now, there is no cure for [Alzheimer's disease](https://www.webmd.com/alzheimers/default.htm). Once a person starts showing signs – [memory loss](https://www.webmd.com/brain/memory-loss) and problems with learning, judgment, communication, and daily life -- there aren’t any treatments that can stop or reverse them. But there are medicines that can ease some of the symptoms in some people. They can slow down how quickly the disease gets worse, and help the brain work better for longer. It’s important to talk to your doctor about which option may work best for you.

National Institute of Aging

# <https://www.nia.nih.gov/health/how-alzheimers-disease-treated>

# How Is Alzheimer's Disease Treated?

[Alzheimer’s disease](https://www.nia.nih.gov/health/what-alzheimers-disease) is complex, and **it is unlikely that any one drug or other intervention will successfully treat it**. Current approaches focus on helping people maintain mental function, [manage behavioural symptoms](https://www.nia.nih.gov/health/managing-personality-and-behavior-changes-alzheimers), and slow down the [symptoms](https://www.nia.nih.gov/health/what-are-signs-alzheimers-disease) of disease. Several prescription drugs are currently approved by the U.S. Food and Drug Administration (FDA) to treat people who have been diagnosed with Alzheimer’s disease. Treating the symptoms of Alzheimer’s can provide people with comfort, dignity, and independence for a longer period of time and can encourage and assist their caregivers as well. Most medicines work best for people in the early or middle stages of Alzheimer’s. For example, they can slow down some symptoms, such as memory loss, for a time. It is important to understand that none of these medications stops the disease itself.

## Dementia.org – worthwhile checking site –

## Preventative Measures: As research for a dementia cure continues, taking preventative measures to decrease the risk of developing dementia becomes crucial. Certain risk factors like age or genetic susceptibility cannot be changed or controlled, but there are many other factors that increase the probability of developing dementia. Alzheimer’s disease is a form of [****dementia****](https://draxe.com/dementia/) that can rob people of the ability to think clearly, perform everyday tasks and ultimately, remember who they even are. Because the disease is so devastating, and since previous treatments failed to come up with a cure, I’m always on the lookout for Alzheimer’s natural treatment options and Alzheimer’s news, scouring the medical journals for for Alzheimer’s breakthroughs.

There’s so much we still don’t know about the human brain, but thankfully, 2016 marks a year of progress and some pretty significant Alzheimer’s breakthroughs. Let me share some of them with you.

There are several theories including [**free radical damage**](https://draxe.com/fighting-free-radical-damage/), an inability to use glucose properly, vitamin deficiencies or environmental toxins. This illness affects a third of people over the age of 85 in the U.S. ([1](https://www.alzheimers.net/resources/alzheimers-statistics/))

The good news is that there are Alzheimer’s natural treatment options that can effectively improve this condition. Recently, scientists are also uncovering major Alzheimer’s breakthroughs that may, one day, lead us to a cure.

# Alzheimer’s Natural Treatment Options & 7 Notable Breakthroughs

# Standard sensible day-to-day advice, similar to Dr Bredesen, but no diagnosis

# by [Dr. Josh Axe, DC, DMN, CNS](https://draxe.com/about-dr-josh-axe/) April 5, 2018

## ****7 Notable Alzheimer’s Breakthroughs****

#### **1. What you eat TOTALLY matters**

If you’ve spent any time at all on this website, you know my mantra: [**Food is medicine**](https://draxe.com/food-is-medicine/). It’s not hocus pocus, either. Hippocrates knew the importance of food in healing the body back in 400 B.C. when he advised people to prevent and treat diseases first and foremost by eating nutrient-packed foods. Modern science is catching up. Scientists recently found that the [**Mediterranean diet**](https://draxe.com/mediterranean-diet/) seems to be protective against Alzheimer’s disease. A UCLA study published in the American Journal of Geriatric Psychiatry found that the Mediterranean diet is one of the main lifestyle factors that seems to keep the brain from developing the toxic plaques and tangles associated with the development of Alzheimer’s disease. ([2](http://aanddjournal.net/article/S1552-5260(15)02037-3/fulltext))

Plaque is characterized by deposits of a toxic protein called beta-amyloid in the spaces between nerve cells in the brain. Think of tangles of knotted threads of the [tau protein](http://www.sciencemag.org/news/2018/01/alzheimer-s-protein-may-spread-infection-human-brain-scans-suggest) found within brain cells. Both are considered the key indicators of Alzheimer’s.

The new study used PET imaging to study the brain for changes and is the first to demonstrate how lifestyle factors directly influence abnormal proteins in people with subtle memory loss who have not yet been diagnosed with dementia. Healthy lifestyle factors also have been shown to be related to reduced shrinking of the brain and lower rates of atrophy in people with Alzheimer’s. ([3a](http://newsroom.ucla.edu/releases/diet-and-exercise-can-reduce-protein-build-ups-linked-to-alzheimers-ucla-study-shows))

Food staples of the Mediterranean diet include:

* fresh fruits and vegetables (especially leafy greens like spinach and kale and non-starchy veggies like eggplant, cauliflower, artichokes, tomatoes and fennel)
* [**olive oil**](https://draxe.com/olive-oil-benefits/)
* nuts and seeds (like almonds and sesame seeds used to make tahini)
* legumes and beans (especially lentils and chickpeas used to make hummus)
* herbs and spices (like oregano, rosemary and parsley)
* whole grains
* eating wild-caught fish and seafood at least twice a week
* high-quality, pasture-raised poultry, eggs, cheese, [**goat milk**](https://draxe.com/goat-milk/), and probiotic-rich kefir or yogurt consumed in moderation
* red meat consumed on special occasions or about once weekly
* plenty of fresh water and some coffee or tea
* oftentimes a daily glass of red wine

One study found the [**MIND diet**](https://draxe.com/mind-diet-plan-benefits/), a hybrid of the Mediterranean diet and DASH diet, specifically designed to help reduce cognitive decline through berries, whole grains, leafy, green vegetables, other vegetables, olive oil, poultry and fish more effectively reduced incidence of Alzheimer’s disease than the two respective diets did when followed separately. ([3b](https://www.alzheimersanddementia.com/article/S1552-5260(15)00017-5/abstract)) Similarly, [the ketogenic diet appears to help neurological disease like Alzheimer’s](https://draxe.com/keto-diet-food-list/). For example, in one study clinical improvement was observed in Alzheimer’s patients fed a keto diet, and this was marked by improved mitochondrial function. ([3c](https://www.ncbi.nlm.nih.gov/pubmed/19664276))

#### **2. Exercise is a potent Alzheimer’s preventer**

That same UCLA-led study also produced some robust results surrounding exercise’s brain-protecting properties. Those who were more physically active on a regular basis also had the lowest levels of tangles and plaques on the PET scans, meaning they had a much lower risk of developing Alzheimer’s disease. (2) While any type of exercise is certainly better than sitting around, if you’re time strapped, [**Burst training**](https://draxe.com/7-ideas-for-burst-training-at-home/), also known as high-intensity interval training, or HIIT, is a great option. Here are 3 [**HIIT workouts**](https://draxe.com/hiit-workouts/) to help you get started. Keep in mind, though, that we need more research on how HIIT impacts the brain. We know that it does melt away fat faster than traditional steady state cardio (and a lower BMI lowers your risk of the tangles and plaques associated with Alzheimer’s, according to the latest UCLA study). However, a previous study did find that steady state cardio creates more brain neurons compared to weight training or HIIT. ([4](http://onlinelibrary.wiley.com/doi/10.1113/JP271552/abstract)) More research is needed to see if one form of exercise is best to prevent Alzheimer’s. For now, just focus on any physical activity and getting into a healthy BMI range.

**New Scientist article – worth examining in detail.**

<https://www.newscientist.com/article/2191814-we-may-finally-know-what-causes-alzheimers-and-how-to-stop-it/>

AFTER decades of disappointment, we may have a new lead on fighting Alzheimer’s disease. Compelling evidence that the condition is caused by a bacterium involved in gum disease could prove a game-changer in tackling one of medicine’s biggest mysteries, and lead to effective treatments or even a vaccine.

Now researchers from Cortexyme and several universities have reported finding the two toxic enzymes that *P. gingivalis* uses to feed on human tissue in 99 and 96 per cent of 54 human Alzheimer’s brain samples taken from the hippocampus – a brain area important for memory (*Science Advances*, [doi.org/gftvdt](http://dx.doi.org/gftvdt)). These protein-degrading enzymes are called gingipains, and they were found in higher levels in brain tissue that also had more tau fragments and thus more cognitive decline.

*Note: Seems unlikely that Di or I have gum disease, having been checked recently.*

**UK National Health – useless!**

<https://www.nhs.uk/conditions/dementia/cure/>

There is currently no "cure" for dementia. In fact, because dementia is caused by different diseases it is unlikely that there will be a single cure for dementia.

Research is aimed at finding cures for dementia-causing diseases, such as [Alzheimer's disease](https://www.nhs.uk/conditions/Alzheimers-disease/) and [vascular dementia](https://www.nhs.uk/conditions/vascular-dementia/). Developing new medicines to treat dementia takes many years and millions of pounds. Repurposing existing drugs used for other conditions is another, often quicker, way of finding medicines to treat dementia.

----------------------------

**May 2017 – UCLA research – promising! Focus on life-style changes. Along the lines of Dr Bredesen which the paper refers to, but without checking body’s chemistry.**

<https://qz.com/977133/a-ucla-study-shows-there-could-be-a-cure-for-alzheimers-disease/>

Last summer, a research group from the University of California, Los Angeles (UCLA) quietly published the [results](http://www.aging-us.com/article/100981/text) of a new approach in the treatment of Alzheimer’s disease. What they found was striking. Although the size of the study was small, every participant demonstrated such marked improvement that almost all were found to be in the normal range on testing for memory and cognition by the study’s end. Functionally, this amounts to a cure.

Acknowledging these difficulties, the researchers at UCLA opted for a different approach. Beginning from the premise that Alzheimer’s disease is a particular manifestation of a highly complex system in disarray, they sought to optimize the system by changing the inputs. Put another way, the scientists chose to set aside the molecular box which has proven so vexing, and to focus instead on the context of the box itself. Although we cannot say precisely how the intervention worked, on a cellular level, the important thing is that it did work.

The method isn’t entirely novel. Researchers have already shown that multi-faceted, comprehensive lifestyle interventions can significantly improve outcomes in cardiovascular disease, diabetes and hypertension. But it’s difficult for these approaches to gain traction for two reasons. First, these protocols are more challenging than simply taking a pill at bedtime. Patients need ongoing education, counselling and support to effect meaningful change. And second, the pharmaceutical mode of treatment is deeply embedded within our current medical system. Insurance companies are set up to pay for medication, not lifestyle change; and physicians are taught pharmacology, not nutrition.

<https://www.naturalnews.com/2019-01-14-cure-for-alzheimers-disease-found-in-our-synapses.html>

**This article has several similarities to Dr Bredesen’s**

# The CURE for Alzheimer’s Disease can be found in our synapses

Monday, January 14, 2019 by: [S.D. Wells](https://www.naturalnews.com/author/sdwells)

## Understanding the neuroscience of Alzheimer’s and Parkinson’s shows us the cause and the cure at the same time

The point of connection of neurons is called a synapse, and that’s where neurotransmitters are released and communication happens in the brain. This is where we experience all of our senses and engage in thought processes, including critical thinking and memory. This is also exactly where dementia happens.

The synapse is where neurons release hormones, glutamates, and small peptides called amyloid beta. The amyloid beta are the brain’s “trash” and a prime factor involved in Alzheimer’s disease, functioning as the main component of plaques that cling to each other and clog up the neural pathway. These are the plaques found in the brains of Alzheimer’s patients.

Normally, these amyloid plaques are swept out of the neural pathway (like trash) by the “custodians of the brain” called microglea. These amazing microglea are the brain’s own immune cells and are the answer to beating brain diseases. Scientists recently discovered through [sophisticated experiments](http://brainblogger.com/2012/01/06/mighty-microglia-the-brains-immune-cells-could-be-the-key-to-treating-brain-diseases/) that these cells constantly search for brain damage, like a perpetually-running computer virus scan, running surveillance for different levels of damage. The microglea are literally capable of eating infected and damaged cells before infection spreads, while clearing out “debris” from dying cells.

Diseases of dementia therefore begin when amyloid beta begins to accumulate, because too much is released, overwhelming the microglea, and leaving waste in the neural pathways, blocking communication. The synapse piles up with plaques (trash and waste) that become sticky and bind to themselves (think of animal fat clogging your sink drain).

At a certain tipping point, when the body and brain have created too much “trash” for too long, creating massive inflammation and tangles, the microglea become overwhelmed and enter a hyper-mode, where they actually begin attacking healthy cells. Scientists believe the microglea may even, at the tipping point, begin clearing away the synapses themselves. Get it? The cure lives in keeping amyloid plaques from reaching the “tipping point.” Here’s how you do that.

## Stop consuming foods that create plaques in the brain – so your brain’s “custodians” can clear out the sticky trash that blocks your synapses

Amyloid plaque accumulation may never be “cured” with a chemical drug or vaccine, but that doesn’t matter, because you can cure the problem yourself. Are you ready to start taking your preventative medicine? It’s not very difficult you know. Let’s break it down to its simplest form, then you decide if you can “pull it off.”

You wouldn’t pick up a poisonous snake just to see if it bites you, and then start searching the internet for the anecdote, would you? You wouldn’t pick some poison ivy and rub it on your skin on purpose, would you? If you were severely allergic to peanuts, you certainly wouldn’t eat a handful just to see what happens. That’s just common sense.

So what if you knew what caused dementia, would you stop eating it? Guess what. Now is the time to stop marching for the cure and start living it, because knowledge is power. Now get this.

White foods are known to cause [excess plaque build-up](https://www.alzheimers.net/foods-that-induce-memory-loss/) in the brain, leading to dementia. These white foods include white bread, white flour, white rice (except basmati, which is naturally white), white pasta, and white sugar. Stop eating bleached food.

Processed foods and meats cause excess plaque in the synapses, fuelling dementia. Avoid processed cheeses (think American cheese especially here), and processed meats, like sausages, bacon, hot dogs, and cold cuts (especially smoked deli meats), and even beer. Nitrosamines in smoked meats cause the liver to produce fats that are toxic to the brain.

Stop eating foods that contain diacetyl, a chemical commonly found in microwave popcorn. Diacetyl increases amyloid plaques in the brain.

## Animal fat and canola oil coagulate in your blood and create tangles of plaque in the brain

You’ll hear it time and time again, that a plant-based diet cures almost every preventable disease and disorder known to humans. It’s true. If you’re a heavy meat eater, your body is struggling to process all that animal fat, creating heart and brain “trash” that your body’s “janitors” just can’t sweep away fast enough.

If you think organic or “expeller pressed” canola oil means that the oil doesn’t coagulate in your body, you’d be dead wrong. After about six weeks, any canola oil that your body hasn’t cleared out [looks like a sticky glue](https://www.naturalnews.com/2018-01-02-the-most-popular-toxic-food-ingredient-in-the-united-states-canola-oil.html) you could use to bond cement. Think of all that “trash” blocking your synapses and causing dementia, because that’s exactly what happens.

Did you know that in the U.S. alone, Alzheimer’s care already costs $2 billion a year (one out of every five Medicare dollars)? Dementia kills more people than cancer. Did you know that? Sure, Big Pharma will tell you Alzheimer’s and Parkinson’s are not preventable, but both are, and the cure lives in prevention. You may begin now.