Alzheimer's Disease (AD) is the third leading cause of death in America and in the United Kingdom it is the NUMBER ONE cause. Dr. Dale Bredesen says AD and other neurodegenerative diseases like ALS and Parkinson's disease SHOULD BE RARE DISEASES.

However it is our lifestyle and environment that is driving the epidemics of disease in children and adults. He has identified “36 holes” or risk factors that lead to cognitive impairment, thus a PILL for AD will never work for we have to address what is driving the disease as completely and thoroughly as possible and thanks to Dr. Bredesen...we CAN DO THIS!

Alzheimer’s disease starts at least twenty years prior to onset so we should ALL be in a cognitive enhancement program and I highly suggest after age 45 to come see me and have what we call a Cognoscopy (screening to see where you stand regarding risks). This includes extensive laboratory tests (about 35 tubes which should all be covered by your insurance), a NeuroQuant MRI, and a simple in-office cognitive screen.

Know your genetics. Although genetics is important, we are ALL AT RISK FOR AD.

- If you don’t have ANY copies of the APOE 4 AD gene, your risk based on genetics alone is about 9%
- If you have one copy of the gene your risk = 30%
- If you have two copies of the gene, your risk = 50%

The amyloid and tau are NOT the problem. These are what gum up your brain over the years because of what they are fighting in the first place. We need to know what is CAUSING their build up.
Here are some things that do:

- **Know your Glucose and Insulin resistance.**
  - Know your HgA1 C. We want this to be LESS THEN 5.0 or ideally 4.8 and your fasting insulin also needs to be less than 5.0. We now call AD Type 3 Diabetes and it is the Standard American Diet that has driven us into the biggest epidemic of diabetes in human history in both kids and adults.

- **Identify anything that gives you chronic inflammation.**
  - Leaky gut, chronic low grade infections like Lyme, mold or bacteria, gum disease, viruses, environmental chemicals and toxins; especially Glycophate or Round Up, STRESS, lack of sleep.

- **Identify anything that does not support synaptic and trophic support**
  - **Hormones.** One of the reasons why 65% of AD is in women is because we LOSE hormones like estradiol, pregnenelone, progesterone, and testosterone after menopause or after having a hysterectomy at a young age. Women and men NEED hormones for trophic support to the brain and as well other reasons. Sadly, we are seeing hormonal imbalance in just about everyone these days due to all the hormone disrupting chemicals in our world; i.e. plastics & phalates are the worst. I check hormones on ALL my patients. We need hormonal balance for an optimal immune system. Identify anything that does not support synaptic and trophic support.

  - Vitamin D levels (50-90 is the level we want) and Vitamin B12 (must be over 600). In functional medicine we look at OPTIMAL values on your lab and not just at the within normal limits. Important to have a well balanced diet with all the nutrients and minerals. I LOVE Whole Coffee Fruit extract; it is a great supplement to boost BDNF which is like miracle grow for your brain! In the Bredesen protocol we recommend quite a few supplements and herbal products which are strategically designed to improve immune and mitochondrial function and enhance cognition.

  - **Exercise** is a must. Important to do both cardiovascular; high intensity training and you need to be doing weight training because it helps lower your insulin resistance.

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**Toxins and biotoxins like mold and Lyme as well as environmental toxins.** We live in a toxic world. It is important to eat organic OTHERWISE you are just putting poison in your body. Glycophosphate (also called Roundup) is a carcinogen and a neurotoxin. It destroys your gut lining. Gluten will cause leaky gut. All wheat in America is toxic because all wheat is doused with Roundup before it goes to harvest. We need to be doing something for detoxification every single day as our bodies have sadly become toxic waste dumps. We eliminate toxins in our urine, stool and sweat but there are other things you can use for detox. Infrared sauna therapy, dry brushing, Epson salt baths, good air filters (I love the Molekule air filter), making a change to environmentally safe cleaning and cooking products, and GET RID OF TOXINS IN YOUR GARAGE. THROW OUT THE ROUNDUP, recycle, reduce your plastic use, drink only filtered water and get a water filter for your bath and shower head. Make sure and do an ERMI dust sample on your home just to see if you have high mycotoxins. You can order a kit at the website mycometrics.com. These are deadly to your brain and your immune system and I’m finding this to be a huge silent epidemic of our time. I think toxins that are released AFTER menopause (stored all those years in bone and fat) is ANOTHER reason why women have more AD and not to mention ALL the personal care products we have used through the years, women just have a higher TOXIC load.
• Realize and identify your other risks

– Statins. We need cholesterol for brain support and to make hormones. Ensure you don’t lower your cholesterol less than 150 and realize that 50% of those that have heart attacks have NORMAL cholesterol. Check your LDLP or oxidized LDL. Get a Boston Heart panel for more in-depth cardiac risks. However, cholesterol and triglycerides tell you very little. The right diet and lifestyle should be enough in most people to bring down these markers. Realize and identify your other risks

– Anesthesia. I don’t recommend elective surgery in patients with cognitive problems due to the chemicals and due to the risk of low grade hypoxia during the procedure. Sometimes this will “tip them over the edge.”

– Other medications. Avoid anything that causes leaky gut. Overuse of antibiotics as well as proton pump inhibitors have been associated with increased risk of cardiovascular disease and dementia. While overuse of other meds such as NSAID’s (ibuprofen and naproxen), steroids, chemo drugs, and antidepressants deteriorate the intestinal lining.

– Sleep. Minimum of 7-8 hours of sleep per night is crucial. Liken sleep to when the janitor comes in and cleans up everything that crossed that very penetrable bloodbrain barrier. Poor sleep WILL lead to cognitive decline. Check your pulse oximeter at night to see if you have low grade hypoxia which also increases risk of macular degeneration if you do.

What can we do now to improve our BRAIN FOG?

• Diet. Food is medicine and ANY protocol needs to start here. The diet is key to success.

– Diet Recommendation. KETO FLEX 12-3 is a low grade ketogenic, high fat, plant based, low protein (meat no more than twice a week) low carbohydrate and VERY low simple carbohydrate food protocol. Anything in a bag or box or is processed needs to GO.

– The 12-3 means fast for 12 hours each night, starting 3 hours before bedtime. So after dinner, eat your next meal at breakfast or even better, fast until brunch or lunch. Our brain works best when fueled with fat or when we are in low grade ketosis (1.5-4 mm beta hydroxy butyrate on a ketone monitor).

• Exercise. Move your body at least 4-5 times per week. Even a 20 minute walk is helpful. Add strength training as well.

• Alcohol. Sadly, alcohol is a neurotoxin and less or none is best. Excess alcohol can also increase your risk of cancer and heart disease. It is rarely organic so most alcohol you drink will have chemicals and toxins especially ROUNDUP. There is a great company called Dry Farm Wine. ALL of their wine is delicious and is organically sourced with most originating from Europe. Check out the website at dryfarmwines.com

– How much Alcohol? Heavy drinking is defined as 8 or more drinks per week for women and 15 or more drinks per week for men. This level of drinking has clearly been shown to have many dangers including tripling the risk for DEMENTIA, elevating the risk for cardiovascular disease, and many other chronic conditions. Alcohol. Sadly, alcohol is a neurotoxin and less or none is best. Excess alcohol can also increase your risk of cancer and heart disease. It is rarely organic so most alcohol you drink will have chemicals and toxins especially ROUNDUP. There is a great company called Dry Farm Wines. ALL of their wine is delicious and is organically sourced with most originating from Europe. Check out the website at dryfarmwines.com
– Moderate drinking is defined as 2 drinks per day for men and one drink a day for women, although the research findings are a bit more controversial but is still associated with increased health risk.

– My take on alcohol is it’s all about genetics but probably best is to say moderation, moderation, moderation. One one drink per day might be okay.

• Electromagnetic fields (EMFs). Our bodies and brains were not designed to live in and under constant unnatural light. EMF’s are also driving disease and effecting brain health. I encourage you to GET OUTSIDE, turn off your Wi-Fi at night and take the TV out of the bedroom.

• Avoid activities that pose a higher risk of head injury

• Engage in mindfulness training and brain training.

– Use binaural beats to help turn off your brain. Download the “Beatfulness” app on your app store or ask me about ICAROS, available on iTunes and about to be released as an app. It is AMAZING!

– Use Brain HQ for brain training, it works. Check out the website at brainhq.com to learn more.

– Music and dance, or learn a new language. Travel and gather new experiences. Do what fills your heart and soul.

Final Thoughts. The Bredesen protocol is designed as a comprehensive personalized program that aims to reverse the biological causes of cognitive decline and early AD. The new treatment for Alzheimer’s prescribed by Dr. Dale Bredesen starts with lifestyle. Through Dr. Bredesen’s breakthrough research, we know that while genetics play a role in this disease, it is triggered by a broad range of factors that have foundation in how we live our lives day to day. On your journey to health, me and my staff can equip you with the education and tools needed to achieve a higher quality of life. You do have control over your destiny and we hope you will allow me to assist you with your journey to optimal health.