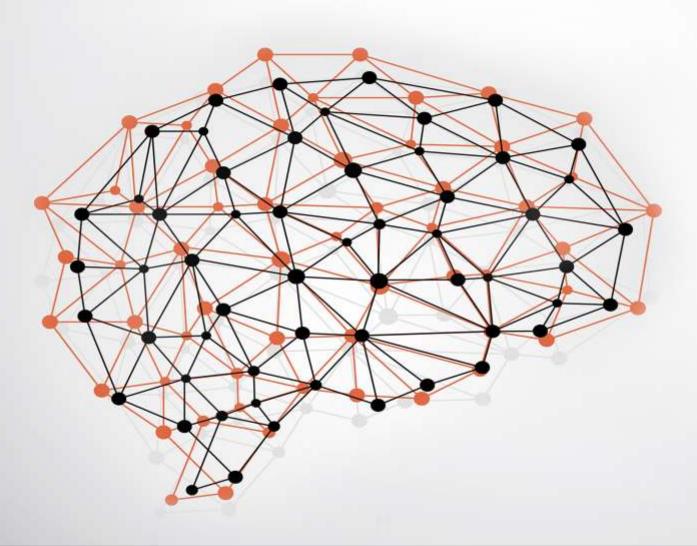
17 MODERN DAY ALZHEIMER'S CAUSING HABITS



17 Modern Day

Alzheimer's Causing Habits



Introduction

It's very exciting to be empowered with knowledge that liberates us from being a victim of disease. By understanding what causes or contributes to a disorder and changing our lifestyle habits we can protect and prevent ourselves from a ghastly demise. Changing our habitual tendencies requires us to be informed so that we know what we need to change.

Strangely enough, research has found that a lack of education is a risk factor for Alzheimer's - this makes sense because without knowing what habits are harming us we are powerless to execute meaningful change.

Another fascinating study has clearly shown that childhood dietary habits potentiate long term neuro-effects¹. It is quite clear that Alzheimer's disease is a progressive accumulation of our toxic habits and our collective ignorance of how our biology really functions. It is interesting that in changing habits that are harmful to us we will also be shifting our experience of life and so our biology can be thought of as rewriting our biography giving us a wonderful opportunity to script a healthy and meaningful life free from lifestyle diseases.

This is the purpose of this book – to inform all of us that we can alter our lives positively or negatively – it's up to us. We will cover 17 habits endemic to our modern lifestyle that contribute to AD. The list is short and there are many other areas to explore but the items listed in this book provide an excellent foundation to begin your new journey to health freedom.

 $^1\,http://www.rhode is land hospital.org/services/alzheimers/memory-disorders/diet-and-dementia-toxic-preservatives-contribute-to-alzheimers-disease.html$



#1 Sugar addiction² – a major player in developing Alzheimer's

Obesity and Type 2 Diabetes have been identified as key risk factors for Alzheimer's disease (AD). Both of these chronic lifestyle disorders can be avoided through diet and lifestyle changes³. It is the same solution for preventing chronic cardiac disease and atherosclerosis that leads to strokes. These modern disorders collectively contribute to causing AD and all can be avoided by making different lifestyle choices.

A meta-analysis of current research into therapeutic diets reveals an emerging type of diet that confers significant health benefits to humans and animals alike. What the main diets have in common is the type of foods that need to be avoided to protect against chronic lifestyle disease.

 $^{^2\} http://articles.mercola.com/sites/articles/archive/2015/08/13/sugar-alzheimers-disease-link.aspx$

³ https://www.ncbi.nlm.nih.gov/pubmed/20937964

One of the most dangerous modern dietary habits stems from our obsession with glucose. Anything that we do that increases insulin resistance will result in neurodegenerative disorders — especially Alzheimer's. Our sugar addiction is helping us develop AD!

Eat THIS To Amplify "Good" Fat-Eating Bacteria In Your Gut by 400%

We've all heard of "good" and "bad" bacteria in our gut, and by "good" bacteria – nutritionists and scientists mean it...

In fact – there is a certain type of bacteria that is so "good" it actually **LOVES eating fat cells**.

You may be asking "how can we get more of this good bacteria"?

The answer lies in this simple home-made meal that costs exactly \$5.68 to create. It will force the "good" bacteria to multiply like rabbits, enhancing your fat burning power literally overnight.



Sugar addiction is rampant in our modern world. It is a global phenomenon. Even when people claim that they don't like sugary treats and that sugar is not their problem you will find that they get their sugar through alcohol or smoking. Others get their sugar fix through fruit juice or milk and still, others eat packets of commercial snacks such as crisps which although savory are packed with sugar.

When we take in high quantities of refined sugar (white processed sugar is the worst offender) then we cause our blood sugar levels to spike and insulin floods the into the blood to move the glucose into cells which then drops the blood sugar level. This causes us to experience a craving and we repeat the cycle. This type of pattern eventually leads to diabetes where the body is unable to produce sufficient insulin to cope with the high glucose levels. This results in severe inflammation cascades on an ongoing basis.

Controlling our sugar habit is necessary to lead a healthy life filled with vitality and energy. Some scientists believe that there is sufficient

evidence to support the view that Alzheimer's is nothing more than diabetes of the brain – they have called it Type 3 Diabetes⁴. It turns out that the brain needs insulin to function – scientists have discovered that insulin resistance is a prominent feature in the brains of AD patients. High brain glucose levels create a chronic pattern of inflammation that further exacerbates the oxidative stress of brain cells. Damage sustained by these nerve cells ultimately accumulates causing Alzheimer's⁵.

The new energy to fuel the brain according to current scientists— in fact, super-fuel for the brain- are healthy fats such as cold pressed virgin coconut oil, canola as well as olive oil in addition to fish oils. The brain actually burns off fat for energy and efficiency. Glucose needs to be managed with care so as not to fry our brains⁶!

It's ironic that the 50's meme from the Mary Poppins movie, 'Just a spoonful of sugar makes the medicine go down' turns out to be prophetically true!

What sugars (carbohydrates) cause problems?

It is all the foods that spike the blood sugar level close to the levels that glucose achieves. A high glycemic load is the best way to ensure dementia later in life.

Simple sugars found in processed sugar, fruit juice, and milk are the worst and are added to foodstuffs during manufacturing and processing phases everywhere. High fructose corn syrup is a modern form of extracted sugar that is super toxic as well.

Fruit juice is healthy if the pulp is added back to the juice so that all the polyphenols high in health benefits are retained and there is a balance between simple and more complex sugars. The sweetened fruit juices processed *en masse* are guaranteed to impact memory and cognitive function⁷.

 $^{^4 \} http://www.rhode is land hospital.org/services/alzheimers/memory-disorders/diet-and-dementia-toxic-preservatives-contribute-to-alzheimers-disease.html$

⁵ http://jamanetwork.com/journals/jamainternalmedicine/fullarticle/1819573

⁶ http://articles.mercola.com/sites/articles/archive/2015/08/13/sugar-alzheimers-disease-link.aspx

⁷ http://artides.mercola.com/sites/articles/archive/2015/08/13/sugar-alzheimers-disease-link.aspx

Hawaiian Dr discovers groundbreaking diabetes breakthrough

They are calling it the **biggest diabetes breakthrough** in recent times...

This weird "60-second a day" trick is reversing type II diabetes for thousands worldwide. Trial users of this trick report a 100% success track record.

And the doctor responsible is **finally** releasing it to the public...

All is explained to you by the doctor himself in **this shocking free presentation** that the diabetes pharmaceutical companies are desperate to keep you from seeing.

#2 Unhealthy fats - we are what we eat

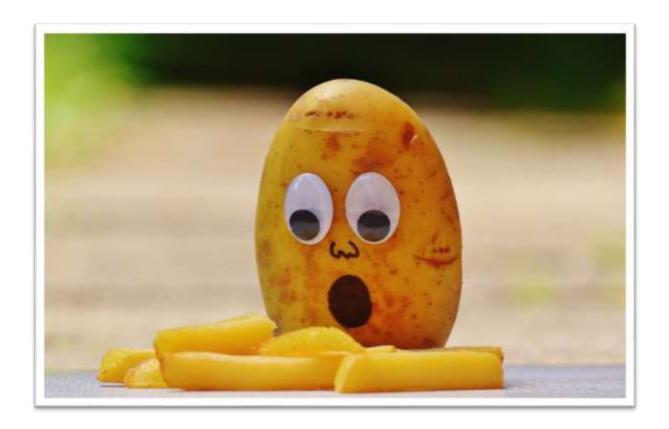
Scientists have discovered that eating a diet rich in saturated fatty acids contributes to chronic lifestyle disease⁸. These fats are found in high quantities in animal products such as in red meat and in dairy products derived from animal sources.

Vegetable oils that are exposed to heat during industrial practices also contain increased quantities of harmful fatty acids. Industrial processes also use saturated fats in most of their products which promote inflammation in the body and increases free radical formation ultimately causing mitochondria (our body's energy production factory inside each cell) to malfunction. This causes oxidative stress and is a classic feature of AD. It robs us of our energy and health.

⁸ https://www.ncbi.nlm.nih.gov/pubmed?cmd=Link&db=pubmed&dbFrom=PubMed&from_uid=22090468

Consider that our brains and nervous system contain high levels of lipids with each nerve cell covered by a lipid sheet (myelin sheath) that conducts electrochemical messages quickly from one cell to the next. Neurons are packed with mitochondria and these need to be functional for our brains to work optimally. If our mitochondria produce excess free radicals from dietary toxins then these cause oxidative damage to the myelin sheaths and increased inflammatory cascades – all of these are implicated in the pathology underlying AD⁹.

Another fat that has transformed our modern diets are the trans-fatty acids. These are fats that undergo an industrial process of adding hydrogen to molecules so that the fat is more solid at room temperatures making it easier to use. They are known to wreak havoc in our bodies. Saturated fats and trans-fatty acids both need to be eradicated from our lives if we want to age naturally free from dementia.



⁹ http://www.rhodeislandhospital.org/services/alzheimers/memory-disorders/diet-and-dementia-toxic-preservatives-contribute-to-alzheimers-disease.html

We need to avoid fried foods and oils that have been subjected to commercial processes involving high temperatures or hydrogenation. A diet that is devoid in fish oils rich in omega 3 fatty acids as opposed to the omega 6 fatty acids found in most animal food sources and commercially produced oils will definitely increase your risk of developing cognitive impairment and ultimately brain degenerative disorders¹⁰.

#3 Exercise – What you don't use you lose!

Leading a sedentary life is listed as a key risk factor for developing Alzheimer's disease. Being a couch potato is a hallmark of the modern lifestyle typified by stressful indoor working environments and evenings relaxing in front of television¹¹. The tendency is that as we mature the less exercise we do. Finally when we retire our unexercised muscles are in poor condition and we stick to the habitual tendencies that we have built over our adult lifetime with frailty and physical complaints reinforcing our sedentary states. The less we do the less we feel like doing and the less we are able to do because our muscles no longer function optimally.

¹⁰ https://www.ncbi.nlm.nih.gov/pubmed/22349682

¹¹ https://www.ncbi.nlm.nih.gov/pubmed/18022060



Doing moderate exercise regularly is something we can do to protect our mental and physical attributes from degenerating. The latest research is really compelling and demonstrates the power exercise has to prevent and delay the onset of degenerative brain disorders like Alzheimer's¹². Some studies have shown that exercise increases the size of the hippocampus which is the part of our brain that is responsible for working memory¹³. Generally, this area typically decreases in size and function as we age but now we can see that this need not be automatic if we exercise moderately.

The results from numerous other studies confirm that exercise increases memory retention and also raises levels of BDNF a factor used as a biomarker for neurogenesis (brain growth) that is linked to the hippocampus. Generally, there is an increase in BDNF when there

¹² https://www.ncbi.nlm.nih.gov/pubmed/12086747

¹³ http://www.pnas.org/content/108/7/3017.full

is increased volume in the hippocampus. This signals new cell growth in the area that regulates our memory¹⁴. It is safe to say that exercise reverses brain changes related to aging.

Is THIS Bathroom Habit Really the Cause of Your Hearing Loss?

You wake up in the morning.

Brush your teeth.

And then you do **THIS**.

Could this everyday bathroom habit be KILLING your hearing?

That's exactly what Harvard Medical School has concluded in a recent study.

In fact, **doing this just twice a week** was shown to increase hearing loss by up to 24%.

One study showed increased telomere length in participants who had exercised regularly throughout their lives 15. A telomere is a part of DNA that acts as a timer for a cell to know when it should stop reproducing. Usually, each cell has the capacity to divide 51 times before it undergoes programmed cell death. Each time a cell divides the telomere is shortened acting as a marker to let a cell know that it is time to die. In people who rarely exercised the telomere is much shorter than in athletic folk that regularly maintained an exercise routine through their lives demonstrating that exercise protects against early aging and Alzheimer's.

¹⁴ http://onlinelibrary.wiley.com/doi/10.1111/j.1460-9568.2004.03720.x/a bstract

 $^{^{15} \} http://health.usnews.com/health-news/family-health/heart/articles/2009/11/30/exercise-guards-white-blood-cells-against-aging$

A study that reviewed the research available on exercise and declining cognitive functions concluded that all forms of exercise significantly protected against measures of cognitive decline¹⁶. In another amazing study, exercise was able to enhance our ability to adapt to changes in our environment (neuroplasticity) and to improve our memory through the effect on the hippocampus¹⁷.

Another interesting study showed that exercise undertaken during midlife years prevented the onset of cognitive decline ¹⁸. In other words, if you don't use it – you lose it!

#4 Lost Sleep Leads to Lost Neurons

We all know how difficult it is to focus when we don't get enough sleep but what we probably didn't know is that we actually destroy brain cells when we have periods of extended wakefulness. Our modern lifestyles allow us to stay up late into the night tricking ourselves that it is still daylight with our artificial lights. Whether it is stress or too much caffeine that keeps us up at night doesn't really matter because we still lose neurons if we don't get a good night's sleep. Student's, shift workers and long distance truck drivers should take note – in the past, it was thought that we could just catch up the sleep we have 'lost' but disturbing new evidence¹⁹ strongly suggests that chronic sleep deprivation may lead to structural brain changes that result in irreversible physical changes and loss of brain cells!

One study explains that nerves cells in the locus ceruleous region have increased rates of firing when we stay awake for long periods. This study proposed that sustained wakefulness acts as a metabolic stressor for nerve cells. The mechanism is believed to involve mitochondria (the site of energy production in our cells) that undergo extensive oxidative stress leading to the death of the nerve cells (apoptosis)²⁰.

¹⁶ https://www.ncbi.nlm.nih.gov/pubmed/20831630

¹⁷ https://www.uvic.ca/medsci/assets/docs/Christie%20artide%20Oct.%202015.pdf

¹⁸ https://www.ncbi.nlm.nih.gov/pubmed/19595973

¹⁹ http://www.uphs.upenn.edu/news/News_Releases/2014/03/veasey/

²⁰ http://jneurosci.org/content/34/12/4418.short

This molecular pathway called the Sirtuin 3 (SirT3), links metabolic stress from sleep deprivation to a host of neurodegenerative disorders²¹.

Initial studies have been confirmed by additional research clearly showing that burning the candle at both ends may have devastating consequences leading directly to Alzheimer's and other disorders.

Researchers have stressed that further research needs to be done to determine whether some people are more at risk than others. Currently, it is thought that people with diabetes, obesity, high-fat diets and sedentary lifestyles may all have reduced SirT3 already and therefore may be far more vulnerable to nerve cell loss when deprived of sleep than others. Cell loss was measured at 25% of the locus ceruleous cells in this study²².

Such a common habit – staying up late and one that begins in childhood really with being able to stay up late given elevated status as



²¹ http://jneurosci.org/content/34/28/9179

²² http://www.uphs.upenn.edu/news/News_Releases/2014/03/veasey/

something synonymous with being an adult. There may be a reason why young folk have such high energy levels when one considers the amount of sleep they have compared to adults ...

#5 Pesticides – not only lethal to pests

Recent research has revealed that the pesticides DDT and DDE (decayed DDT) may be involved in causing AD. Concentrations were 4 times higher in blood levels of Alzheimer's patients compared to those who didn't have the disorder²³. DDT was first used to control crop pests and reduce insect-borne diseases like malaria. This chemical was banned in the US since 1972 but is still used by some countries today in spite of the damaging effects it has on our environments and especially to human health.



²³ http://news.rutgers.edu/research-news/pesticide-exposure-linked-alzheimer%E2%80%99s-disease/20140127#.WBjlp8mYYzN

Another study confirmed that high levels of lead had been correlated with Alzheimer's disease patients²⁴.

Exposures to grains grown with fertilizers containing nitrates or nitrites were detrimental to brain health and correlated with AD. These pesticides wreak havoc with our endocrine systems too according to some researchers. The most common offenders are pesticides containing organophosphates²⁵.

People may already have heard of the massive bee deaths where massive colonies of bees have been dying off at alarming rates over the last two decades. Puzzled scientists held global conferences and pooled information only to discover that the colonies of bees were being contaminated by pesticides, herbicides, and fungicides. It is not surprising then to find that the same problem is affecting human health and is highly implicated in causing Alzheimer's disease and other dementias²⁶.



²⁴https://www.researchgate.net/publication/7259086_Environmental_Risk_Factors_and_the_Developmental_Basis_for _Alzheimer%27s_Disease

²⁵ https://www.sciencedaily.com/releases/2016/10/161007115919.htm

²⁶ http://www.nature.com/articles/srep33207

#6 Television

Millions of people globally watch television for hours on a daily basis. Television has since its inception become a modern habitual phenomenon that is used for a host of different reasons - from 'babysitting' toddlers and educating school children, to being a major form of adult entertainment and relaxation. Many people organize their lives around favorite TV programs even eating TV dinners to avoid missing broadcasts.

This modern habitual tendency, however, appears to be robbing our populations of their mental and physical health according to experts who claim that watching TV regularly causes cognitive decline²⁷. Watching TV was negatively associated with verbal memory and executive functioning according to a large-scale study²⁸. There has been a steady increase in the number of studies that have linked television watching to cognitive decline²⁹. It has been correlated with decreased exercise³⁰, lack of hobbies and increased social isolation – all of which are known risk factors for Alzheimer's disease³¹.

It turns out that this supposedly innocent pastime is having disastrous consequences on our mental performance across all sectors of the lifespan³² and may well be the largest preventable contributing factor for developing Alzheimer's disease which is the 6th largest cause of death in the US alone.

²⁷ http://www.wholehealthinsider.com/brain-health/can-your-tv-habits-cause-cognitive-decline/

²⁸ https://www.ncbi.nlm.nih.gov/pubmed/11248097

²⁹ http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0047831

³⁰ https://www.ncbi.nlm.nih.gov/pubmed/18022059

³¹ https://www.ncbi.nlm.nih.gov/pubmed?db=pubmed&cmd=link&linkname=pubmed_pubmed&uid=19595973

³² https://www.ncbi.nlm.nih.gov/pubmed/18022058

#7 Smoking



Smoking is linked to multiple negative outcomes including cardiovascular disease, diabetes, and strokes. These are all classified as risk factors for developing brain degenerative disorders such as Alzheimer's and there are many studies that show evidence that smoking is linked to an increase in risk for dementia – no surprise really³³.

Smoking as a modern addiction has to be classified as another major preventative cause of Alzheimer's. Changing this one addictive tendency will improve healthy life expectancy by reducing multiple medical conditions including cancer. This life robbing habit is no longer fashionable and averting serious debilitating disorders like Alzheimer's by quitting is probably one of the most positive investments you can make in your mental and physical wellbeing.

³³ http://www.alzheimersresearchuk.org/about-dementia/helpful-information/reducing-the-risk/

#8 Alcohol

Alcohol has wreaked havoc in many people's life and health profiles globally across our planet. It's interesting that some alcoholic beverages such as enjoying certain red wine in moderation can actually help prevent or delay the onset of Alzheimer's.



Although in general, alcohol use is associated as a potent risk factor for cognitive decline. One study revealed that alcohol resulted in decreased memory through structural and functional damage to brain cells³⁴. Chronic methanol toxicity has been shown to produce pathological changes in the brain consistent with Alzheimer's disease. Methanol is also known to be metabolized into toxic formaldehyde in the body – this is poison to living cells³⁵. This risky behavior is a modern lifestyle problem in many communities and contributes to increased aging and premature death in many cases.

³⁴ https://www.ncbi.nlm.nih.gov/pubmed/24787915

³⁵ https://www.ncbi.nlm.nih.gov/pubmed/24787917

The fun drink that makes you skinny? (try it tonight!)

Imagine if you could go out every weekend, have fun, drink alcohol, do ZERO exercise all week, and still burn belly fat.

Scientists at Washington State University have found that a little known ingredient found in a very specific alcoholic drink can increase your body's fat-burning powers by up to 370% - allowing you to burn 1-2 pounds of belly fat overnight, and achieve life-changing weight loss in less than 30 days.

>> Click here to reveal the alcoholic drink that makes you skinny.

In our modern world, it is easier to gain access to alcohol with it being mass produced and virtually on tap. Mass production has caused us to discard many tried and tested fermentation techniques to facilitate larger commercial yields that also produce an increase in related pathology. Additionally, these modern processes have a tendency of creating more damage than generally understood since so many chemical additives are used to speed up production times. 'Time is money,' is a common saying in the business world, where health is now regulated by economic principles.

The main point is that saving time in production processing decreases our lifespan and costs humanity a much greater price in the end. Drinking alcohol habitually in our modern world increases the toxic burden placed on our bodies and robs us of valuable time that could be used to enhance an enjoyable healthy natural aging process³⁶.

³⁶ http://www.alzheimersresearchuk.org/about-dementia/helpful-information/reducing-the-risk/

#9 Fluoridation – Toothpaste and Drinking Water

Here is a shocker that I am sure most of us are unaware of! All over the planet people are brushing their teeth with toothpaste that contains fluoride and sugar or sugar substitutes.

To begin with, sugar is probably the worst ingredient to add to toothpaste because it creates cavities. It is worthwhile thinking about all the sugar that is embedded in our foods and collectively contributes to the rising incidence of diabetes type 2 statistics that is seen across the globe. Sugar is known to interfere with short-term memory (working memory). Diabetes along with its precursors, insulin resistance or insensitivity, are clearly identifiable risk factors for Alzheimer's disease. Glucose is now perceived as an addictive substance with psychogenic effects that may be as difficult to rehabilitate as heroin according to some researchers. Selecting toothpaste that has synthetic sweeteners added in place of glucose is just as harmful to our health.



Fluoride is known to enhance the effects of Aluminum and is able to bypass the blood brain barrier to deposit aluminum into our brain and nerve cells. Considering that our teeth are located in close proximity to the brain and can be absorbed directly through the oral mucosa into the brain it is one of the modern practices that should be banned. Until then brushing teeth with fluoridated toothpaste is a modern recipe for AD and other health disasters.

Research into the effects of fluoride reveal that the amounts added to our drinking water are sufficient to cause serious detrimental effects³⁷ that include:

- Fluoride is known to increase the risk of contracting Type 2 diabetes and insulin resistance.
- Binds to Aluminum forming complexes that are readily transported and accumulated in brain tissue
- Decreases IQ
- Causes brain cell pathology as seen in Alzheimer's disease
- Causes dental fluorosis mottled decay from increased porosity into inner enamel leaving channels open for micro-organisms and bacteria – breakdown of tooth structure
- Causes bone fractures due to skeletal fluorosis osteosclerosis of the spine and pelvis – increases risk of hip fractures
- Causes arthritis doses added to water cause pain and stiffness in joints but there is still mobility
- Depresses the thyroid gland function effects are further magnified by the absence of iodine in the diet
- Causes neurotoxicity and neurobehavioral effects³⁸

³⁷ http://media.khi.org/news/documents/2012/07/23/FJ2006_v39_n3_p163-172.pdf ³⁸ Doull J, Boekelheide K, Farishian BG, Isaacson RL, Klotz JB, Kumar JV, Li meback H, Poole C, Puzas JE, Reed N-MR, Thiessen KM, Webster TF, Committee on Fluoride in Drinking Water, Board on Environmental Studies and Toxicology, Division on Earth and Life Studies, National Research Council of the National Academies. Fluoride in drinking water: a scientific review of EPA's standards [book on the Internet, the print version is forthcoming]. Washington, DC: The National Academies Press; 2006. [cited 2006 Aug 24, 467 p.]. Available for purchase online at: http://www.nap.edu

#10 The Shadow aspect of Aluminum – an Inconvenient Truth

Aluminum (AI) has developed a reputation as being a dangerous neuro-toxin. Research on AI has been accumulating steadily over the last few decades with mounting evidence pointing to AI's destructive role in developing neurodegenerative disorders. It is recognized for inhibiting over 200 important biological functions and is toxic to life human, animal and plant kingdoms alike³⁹. Recent research findings provide compelling evidence of a causal link between Alzheimer's disease and Aluminum toxicity⁴⁰.

Aluminum (Al) accumulates in the body over time so that its effects are most felt in our senior years. Environmental exposure to Al is even a classified risk factor for Alzheimer's disease. Multiple studies have revealed that it is involved in many harmful effects – some of these findings are listed below:

- Plays a role in promoting amyloid beta protein deposits in the brain that correlates to AD⁴¹
- Correlated to Parkinson's, Alzheimer's, amyotrophic lateral sclerosis and dialysis⁴² encephalopathy⁴³
- Al promotes neurofibrillary tangles with lesions similar to those found in AD⁴⁴
- Al accumulation targets the hippocampus the area that regulates short-term memory⁴⁵
- it blocks the input and output flow of information into the hippocampus effectively isolating this site by depleting microtubules in the limbic region⁴⁶
- Causes nerve cell endings (dendrites) to shrink
- It is suggested that AD is caused by AI toxicity that develops through accumulation over time⁴⁷

³⁹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3056430/

 $^{^{40}\} http://www.medicalnewstoday.com/releases/272573.php$

⁴¹ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3056430/

⁴² http://www.nejm.org/doi/full/10.1056/NEJM197601222940402

⁴³ https://www.ncbi.nlm.nih.gov/pubmed/1490420

⁴⁴ https://www.ncbi.nlm.nih.gov/pubmed/3316495

⁴⁵ https://www.ncbi.nlm.nih.gov/pubmed/22928148

⁴⁶ https://www.ncbi.nlm.nih.gov/pubmed/19591863

⁴⁷ https://www.ncbi.nlm.nih.gov/pubmed/22928148

- Decreases brain stem cells so that new brain cells cannot be produced – it does this by increasing oxidative stress resulting in harmful free radical production⁴⁸
- In the body, Al binds to iron molecules in our red blood cells and is transported around the body to all sites and has an increased affinity for the brain and central nervous system

Aluminum is found everywhere – it doesn't disappear. Al transforms itself by binding to different molecules it comes into contact with. The widespread use of Aluminum is a major modern trend that negatively impacts all of us throughout our life spans. Given this information let's look at some of our modern habits that involve Aluminum use and contribute to AD.

#10.1 Unfiltered Water Supply

We find abundant quantities of Aluminum in our rain and therefore all water. This means that AI is present in all our fresh food produce from rain and also in preprocessed foods that use water to prepare readymade products⁴⁹. The negative impact of this neuro-toxic substance can be completely avoided by filtering our water so that what we drink, cook with and wash ourselves and our clothes with is completely purified and free from pollutants. Don't forget to check that your filter can remove fluoride and Aluminum because the damage is increased when these two are combined⁵⁰.

⁴⁸ https://www.ncbi.nlm.nih.gov/pubmed/26243606

⁴⁹ http://www.sciencedirect.com/science/article/pii/S0048969701011226

⁵⁰ http://media.khi.org/news/documents/2012/07/23/FJ2006_v39_n3_p163-172.pdf



#10.2 Aluminum in Food & Beverage Packaging

Aluminum foil is commonly used to package food items that are sold in our stores. Convenience foods come pre-packed in Al containers whereas other items such as coffee, tea, garlic bread etc. come wrapped in Al foil of varying thickness⁵¹. We use Al foil for barbecues and for baking in the oven. Aluminum is used to conveniently contain beverages in cans, *en masse*⁵². All of these processes contribute to our daily intake of this dangerous metal that accumulates and causes serious damage and decay to our bodies and environments. Stopping our modern obsession with Al may be difficult but we do have the choice to avoid Al packaging in our private lives and take a positive stand for our own health. We can avoid preprocessed foods and buy our produce in different packaging easily enough!

⁵¹ http://link.springer.com/artide/10.1007%2FBF01242057

⁵² http://link.springer.com/artide/10.1007%2FBF01193181



#10.3 Aluminum in common commercial Products

Most people will be unaware that Aluminum is added to many common products that we use in households daily. One of the main sources of Al intake is through the use of antiperspirants and some deodorants that are not only made in Al canisters but derive roughly 25% of their content from Al salt crystals. One scientific review estimated that 0.012% of Al is absorbed from each antiperspirant application – imagine what a lifetime exposure of antiperspirant does to our nervous system⁵³!

⁵³ https://www.ncbi.nlm.nih.gov/pubmed/11322172?dopt=Abstract

Alzheimer's Reversed by Doing THIS Simple Activity Backwards

Stunning new research from Yale University has revealed that if you're doing this simple daily activity, you're accelerating your Alzheimer's and dementia symptoms by a frightening 87%.

But there is good news.

Doctors have shown that doing this activity 'backwards' can actually reverse Alzheimer's, regenerating dying neurons and restoring brain function.

Find out more here:

Do this daily activity "backwards" to reverse Alzheimer's

The active ingredient in antiperspirants is Aluminum which blocks or clogs the underarm pores preventing the release of perspiration and therefore we don't experience nasty odors that are usually released when we perspire. This pleasantry comes at great cost to our health because perspiration is one of the major avenues for detoxification in our bodies. The underarm area is also a major site for lymph glands and blocking our ability to remove toxins through perspiration also burdens the lymphatic system and causes an increased toxic burden for our bodies to cope with. Antiperspirants negatively impact our immune function and as we continue with our daily toiletry habits we are gradually and consistently accumulating more Al into our bodies along with an increase in chronic health conditions ultimately leading to a negative state of dementia.

Recent awareness about this metal that is found naturally in vast quantities in the crust of our planet has alarmed scientists as laboratories have started to test commercial products for this toxic element that is not meant to be inside our body. The results are alarming with many products containing high percentages of Al without our even realizing it we are taking in vast quantities and gradually our habitual choices are dooming us to a future filled with degenerative brain disease and an undignified aging process. Some of the main offenders are listed below⁵⁴:

- Baking powder, self-rising flour, salt, baby formula, coffee creamers, baked goods and processed foods, colorants and anticaking agents
- Cosmetics and personal care products such as antiperspirants, deodorants, alum salt crystals, many lotions, sunscreens, and even shampoos - we even use AI in certain hairdressing processes such as 'foil highlights'

#11 Pharmaceutical sources of AD

Many pharmaceutical preparations routinely use AI in their products including common over the counter preparations such as analgesics, anti-diarrhea medicines, and antacids used for reflux problems. It is also present in any product that contains magnesium stearate that is a common binder or filler in many tablet compositions.

Another source of this toxic metal is found in vaccines such as:

- Hepatitis A and B vaccines
- Hib vaccine
- Diphtheria, tetanus and pertussis (DTaP) vaccines
- Pneumococcal vaccine

⁵⁴ http://enveurope.springeropen.com/articles/10.1186/2190-4715-23-37

Gardasil HPV (Human Papilloma Virus) vaccine



How much Aluminum are we really taking into our bodies daily?

According to a study conducted in 2011 contamination of our food with Aluminum is rampant⁵⁵. Researchers checked 1 431 non-animal food products and discovered that nearly 78% had Al in concentrations up to 10mg / kg with over 17% having higher content up to 100mg / kg. Another study showed that cooking animal products in foil increased Al content of the meat by up to 378 times, making a compelling case for avoiding foil products altogether⁵⁶.

The Al problem appears to be larger than was previously believed because of the cumulative effect amalgamated from a vast array of Al sources. The enormity of Al toxicity as a widespread phenomenon is understandable when we realize that Al compounds are widely

⁵⁵ http://enveurope.springeropen.com/articles/10.1186/2190-4715-23-37

⁵⁶ http://www.sciencedirect.com/science/article/pii/S0309174006001719

distributed as additives to foods, spices, dried herbs, flours and condiments⁵⁷.

Another source of AI intake is through cooking in Aluminum cookware⁵⁸ – another modern manufacturing solution making possible to avoid having to lift heavy cast iron cookware. Although baking and cooking utensils are generally oxidized and promoted as giving protection from AI contamination, the reality is that even small surface wear and tear causes AI to be exposed⁵⁹. Choosing other materials to cook in is an easy way to break this harmful widely accepted AI source of contamination.

Other sources of Aluminum exposure is found as a finish on the surface of many modern processed floors that are laminated – Al can be absorbed by walking barefoot on these floors whilst at home.

As we have seen Aluminum is everywhere — it's in our water, in our food, in our drinks, in our cooking apparatus, on our floors, in our medicines and in our vaccines⁶⁰ — it all adds up! Unfortunately, this unavoidable set of convenient choices for a modern world also adds up to dementia and Alzheimer's disease!

This metal has no positive biological function at all – in fact injecting Al into animal ventricles directly causes AD pathology and through multiple studies, we now know that it has severe detrimental effects. It may well be convenient but we think the cost for that is too high – it's up to each of us to decide.

These practices in our modern world are leading surely and inevitably to our own demise. Limiting our exposure to this super potent poison seems a sure way to help ourselves and those we love to avoid AD and lead a long and healthy natural life⁶¹.

#12 Stagnant minds vs Cognitive Novelty

⁵⁷ http://www.tandfonline.com/doi/abs/10.1080/02652030500073584

⁵⁸ http://www.sciencedirect.com/science/article/pii/S0308814600000686

⁵⁹ http://www.sciencedirect.com/science/article/pii/S0925400506002899

⁶⁰ http://enveurope.springeropen.com/articles/10.1186/2190-4715-23-37

Many studies have correlated Alzheimer's with a stagnant mind where novelty is no longer encountered. As with exercise where regular workouts maintain muscular functionality and tones our bodies so it turns out that if we stimulate our minds it keeps our cognitive functions agile. Remember the saying 'Use it or lose it' that was applied to exercise well it is just as appropriately applied to our brain function – we need to use our minds in order not to lose our minds. People who watch TV also fall under the stagnant mind banner. In today's world, many people stop learning new and stimulating activities.



People from midlife onwards tend to reduce activities and become stagnant in their ways which increases their risk of developing AD⁶². Keeping a flexible mind that is spontaneous and able to respond to new situations and problem solve have a far better chance of warding off dementias⁶³.

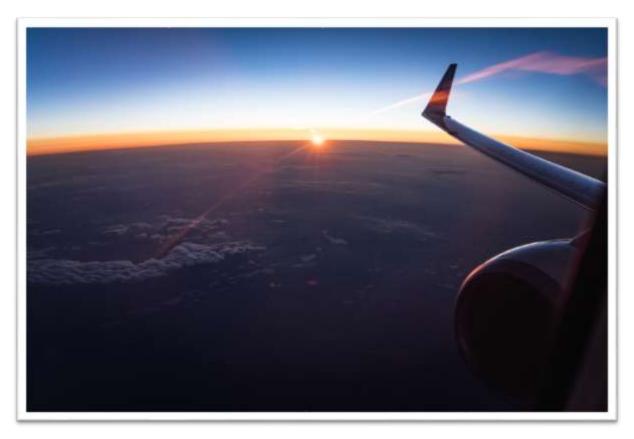
⁶² https://www.ncbi.nlm.nih.gov/pubmed/16239176

⁶³ https://www.ncbi.nlm.nih.gov/pubmed/11248097

#13 Ionizing Radiation

Alzheimer's statistics⁶⁴ have skyrocketed over the last decade with prediction models estimating that 80 million people will suffer from this disease by 2040. As a result of this dramatic increase in AD prevalence, there are more studies being undertaken to determine causes and cofactors that contribute to its onset and progression.

The University of Southern Denmark published a study to determine the effects of low levels of radiation on the development of AD. They felt that increased rates of Alzheimer's may mirror the higher levels ionizing radiation exposure experienced by modern populations globally. They comment that medical equipment and increased



airplane travel have exposed many people to increased levels of radiation. In their study, they determined that low doses of ionizing

⁶⁴ http://www.washingtonpost.com/wp-dyn/content/article/2008/03/18/AR2008031802101.html

radiation caused changes in brain molecules that were consistent with pathology seen in AD patients⁶⁵.

The scientists expressed concern that medical diagnostic and therapeutic radiation practices have increased dramatically in our current era. They note that 62 million CT scans were performed annually in the US alone and of these approximately a third are dedicated to scanning the brain region. Their position was that it is not too much of a concern having a scan occasionally but with increasing radiation exposure the effects would be cumulative and possibly provide a confounding factor in the etiology of AD⁶⁶.

The study showed changes in the hippocampus where learning and working memory are mainly processed. These changes are the same as those seen in AD. The study stands as a caution to these modern lifestyle technologies as the radiation doses were 1000 times less than those used in a CT scan and yet still produced significant changes that overlap those with degenerative brain disorders⁶⁷.

Low levels of ionizing radiation that is being incorporated rapidly into our modern lives may be a contributing risk factor for neuro-disease.

#14 Dental Amalgams

Dental amalgams containing high levels of mercury which accumulates in body tissue and cells is a serious risk factor for Alzheimer's. This relatively modern practice has only been recognized as neuro-toxic since 2008 and most of the planet's population has been contaminated. Considering that our teeth are in extremely close proximity to the brain it is only logical to conclude that mercury would be easily able to accumulate in brain and nerve cells and tissues. This exactly what we find when examining AD brains in post-mortem studies – almost all AD cases had up to 4 times the amount of mercury in the brain than those who did not suffer from AD⁶⁸.

⁶⁵ https://www.sciencedaily.com/releases/2016/10/161027122751.htm

⁶⁶ https://www.sciencedaily.com/releases/2016/10/161027122751.htm

⁶⁷http://www.impactjournals.com/oncotarget/index.php?journal=oncotarget&page=article&op=view&path%5b%5d=12 376

⁶⁸ http://customers.hbci.com/~wenonah/hydro/amalgam.htm

Another finding is that mercury accumulation in the brain is 50 - 75 % contributed through dental amalgams and the balance from other sources such as fish from industrial processes contaminating our



oceans. Another source of mercury comes from vaccines.

Mercury accumulation in brain tissues causes the destruction of microtubules which cause nerve cells to die. Increased mercury causes inflammation that is also implicated in neuronal death. Mercury is associated with genetic changes and is thought to be involved with genetics involved in ApoE4 which blocks excretion of mercury from the brain. Although mercury still accumulates in people who do not have an active ApoE4 status⁶⁹.

Mercury prevents or reduces the effect of, dopamine, norepinephrine, serotonin and acetylcholine that are all chemical imbalances observed in AD. Interesting nicotine tends to improve levels of these neurotransmitters and may explain why people with amalgams tend to

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⁶⁹ http://customers.hbci.com/~wenonah/hydro/amalgam.htm

smoke more than people without amalgams according to one researcher.

Mercury has been shown to be a major component of neurological illness⁷⁰ although this still remains a highly charged controversial topic.

#15 Lack of Sunlight – Causes More than Depression



Spending time in the sun diminishes as we age and in our current world it is seen as dangerous to spend time in the sun without sunblock to protect our skin from damaging solar radiation. A few decades ago scientists revealed that our ozone layer was rapidly depleting with holes appearing in different regions leaving us unprotected from

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 $https://scholar.google.com/scholar_lookup?title=Biomarkers\%20supporting\%20mercury\%20toxicity\%20as\%20the\%20major\%20exacerbator\%20of\%20neurological\%20illness\%2C\%20recent\%20evidence\%20via\%20the\%20urine\%20prophyrin\%20tests\&author=B.\%20Haley&author=T.\%20Small&journal=Medical\%20Veritas&volume=3&pages=1-14&publication_year=2006$

harmful radiation. This sparked a major campaign for global citizens to wear sun block and hats to protect against skin cancer. What we did not anticipate was the effect that sun avoidance would have on our health.

It turns out that we need sunshine to naturally manufacture vitamin D in our bodies. It was noticed that the Alzheimer's population are deficient in this vitamin in several studies — not very surprising since these patients spend hardly any time outdoors in nature and engaging in activities where they could have sunlight. This observation led to studies being conducted to determine the effect of Vitamin D deficiency and its role in AD.

One study showed that low levels of Vitamin D are correlated with a decline in cognitive abilities with higher levels demonstrating normal mental functions in terms of learning and memory⁷¹. The findings have been confirmed by several other studies⁷². In another study that was conducted over a 7 year period, it was concluded that higher rates of Vitamin D was associated with a significant decrease in risk for dementia⁷³. A recent study showed poor cognitive performance and a decrease in episodic memory due to low levels Vitamin D.

Vitamin D also known as the sunshine Vitamin is not the only nutrient that delays the progression of AD. Vitamin K⁷⁴, Vitamin B12 and folate⁷⁵, that are low in AD patients are also purported to prevent or delay the progression of AD and dementias in people with high levels of these natural nutrients.

Nutritional deficiencies of Vitamin D3 indicates a lack of natural sunlight as well as indicative of a diet that lacks fish or cod liver oil that are good sources of this vital nutrient that protect against rapid cognitive decline⁷⁶.

⁷¹ http://jamanetwork.com/journals/jamaneurology/article-abstract/2436596

⁷² https://www.ncbi.nlm.nih.gov/pubmed/23008220

⁷³ https://www.ncbi.nlm.nih.gov/pubmed/22503994

⁷⁴ http://www.alzheimers.net/2014-07-09/vitamin-k-alzheimers-prevention/

⁷⁵ http://www.alzheimers.net/2013-12-16/vitamin-b-slows-alzheimers-progression/

⁷⁶ http://www.alzheimers.net/8-27-14-vitamin-d-and-dementia/

#16 Isolation



Experiencing loneliness in aging populations doubles the risk of developing Alzheimer's disease⁷⁷. Considering how alienated our mature citizens are it's not a surprising fact that many feel lonely but what is surprising is the role this plays in the progression of dementia.

Loneliness has been correlated with increased hypertension, morbidity, and death in a study conducted over a six year period⁷⁸. Other studied effects of loneliness include:

- Depression
- Impaired sleep
- Increased daytime dysfunction
- Impaired mental health and decreased cognition
- Reduced physical activity

⁷⁷ https://www.sciencedaily.com/releases/2007/02/070206095635.htm

⁷⁸ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3303190/

- Increased systolic blood pressure
- Increased hypothalamus, pituitary and adrenal functions
- Increased inflammatory markers
- Altered immunity
- Predicts mortality

Although the mechanism that supports these studies in their observation about loneliness and isolation is not yet understood what is clear is that avoiding social contact, lack of pets and declining from engaging in stimulating activities involving others are definite ways to increase the odds of rapidly developing AD⁷⁹.



⁷⁹ http://link.springer.com/artide/10.1023/A:1005516002792

#17 Stress

The modern lifestyle is often characterized by high levels of stressors. Stress resistant individuals are rare and envied by most that are bombarded with socio-economic and political stressors for the majority of their lives. Retirement increases economic stress in addition to the stress of losing loved ones and cherished friends as people pass away. Many elderly face the prospect of aged care facilities where all their contents may often fit into a single suitcase and further create identity and depression due to altered lifestyle circumstances. The world may appear foreign and fast paced to our elderly citizens and so understanding that stress plays a role in developing Alzheimer's disease is not surprising.

Many studies have been conducted and have strongly associated stress with atrophy of the hippocampus – the site where learning and memory are processed. One study has proposed that stress causes an abnormal quantity of glucocorticoids to be released that may be the underlying causative mechanism resulting in structural damage to the hippocampus after years of stressful conditions⁸⁰.

Another paper cautions that stress management is necessary to avoid increased risk of brain damage, depression, and dementia⁸¹. Another study has conclusively confirmed these findings⁸².

Stress-reactive responses often become habitual over time and are one of the hallmarks of modern lifestyles that if left unaddressed results in disastrous consequences that can be avoided.

Quite amazingly the way facilities are designed have an impact on patient wellness according to research conducted over 30 years ago. Generally, patient facilities are designed to fulfill building budgets and functional criteria but lack interior design aimed at the wellness of the patient. It is interesting that scientists have linked poor design (not

⁸⁰ http://science.sciencemag.org/content/273/5276/749

⁸¹ https://www.sciencedaily.com/releases/2016/01/160121121818.htm

⁸² https://www.ncbi.nlm.nih.gov/pubmed/26651008

psychologically supportive) to anxiety, delirium, and increased need for pain medication and elevated blood pressure⁸³.

The tendency to negate individual well-being on the basis of budget or functional efficiency increases negative health consequences that ironically increases the burden placed on health care facilities. Environments that help to reduce patient stress and that accommodate giving patient control including access to nature resulted in healthier patients. It follows then that living in stress-free environments that are psychologically appealing plays a pertinent role in health and wellness particularly in avoiding AD where loneliness and isolation are already risk factors for disease progression.

Amazonian Tribe "Immune" To High Blood Pressure Say Experts

A small, isolated tribe living in the depths of the Amazonian rainforest are effectively immune to Hypertension say leading researchers.

It's all because they eat this fruit and herb combo daily.

>> Eat this Amazonian Fruit+Herb combo to safely lower blood pressure

⁸³

 $https://www.researchgate.net/profile/Roger_Ulrich4/publication/273354344_Effects_of_healthcare_environmental_design_on_medical_outcomes/links/557ed93408aec87640ddee0b.pdf$