

Dementia Risk Factors and Preventative Strategies

Risk Factors:

Non-Modifiable:

1. Age – the older you get the more your risk increases
2. Sex – women make up 2/3 of people with Alzheimer's Disease
3. Family history – having a parent or sibling with AD increases risk, more than one = even greater risk
4. Genetics – genes APOE-e2 or APOE-e3 or APOE-e4 all increase risk but are not determinants (not a sure thing that AD will develop)

Modifiable or preventable:

1. Stress – increases the release of the hormone cortisol; chronic stress leads to chronic exposure of the brain to cortisol; cortisol is a neurotoxin to the hippocampus (primary center of memory function in the brain)
2. Lack of sleep – restorative functions in the brain occur during sleep – toxic protein Beta Amyloid (present in plaques in brains of those with AD) may be cleared from the brain during sleep
3. Chronic inflammation – associated specifically with development of AD, CAD, atherosclerosis, insulin resistance – can be caused by lack of sleep, poor eating patterns, stress, TBI, metabolic disorders, chronic infections
4. Hypertension* #
5. Elevated serum cholesterol* #
6. Diabetes* #
7. Obesity* #
8. COPD and Sleep Apnea #
9. Smoking #
10. Head injury – including multiple subclinical hits to the head
11. Environmental toxins – heavy metals

* part of what is known as Metabolic Syndrome, all of which have a significant component of inflammation

risk factors for cerebrovascular disease and thereby risk factors for AD and vascular dementia

Preventative Strategies to Build Cognitive Reserve:

- **Healthy lifestyle:**

1. Diet – no specific diet but, healthy for your heart = healthy for your brain (such as the Dash Diet and Mediterranean); moderation is the key; rich in good fats and multi-colored fruits/vegetables and fish
2. Exercise – routine exercise that raises the heart rate
3. Socially engaged – the more social contacts and social contexts the better
4. Cognitively engaged – new learning, especially in a social setting, is the most beneficial
5. Adequate sleep – research indicates that optimal functioning occurs with 7.5 to 8.5 hours of sleep per night

- **Control of risk factors that cannot be eliminated or prevented**

Cardiovascular disease, respiratory disease, diabetes

Factors that have a positive impact on brain health:

- Purpose in life – those who scored higher on purpose in life were found to be 2.4 times less likely to develop Alzheimer’s Disease and found to have slower rates of cognitive decline
- Personality traits: conscientious, organized, self-disciplined, dependable, driven to achieve = reduction in risk for AD
- Education – those with higher education have lesser risk; strive for lifelong learning
- Being married – lifelong singles are 42% more likely to develop dementia; widowed are 20% more likely
- Other habits to embrace – be creative, cultivate curiosity, laugh often, take time to play