SCARY



Alcohol Damages the Brain

Shrinks the brain

People who drink every day have smaller brains than nondrinkers. When it comes to the brain, size matters!

You do not want a smaller brain because your brain is involved in everything you do:

- **>** How You Think
- > How You Feel
- How You Act
- How You Interact With Others





Reduces blood flow to the brain

The brain uses 20% of your body's blood flow and it's critical for healthy brain function. At Amen Clinics, which has built the world's largest database of brain SPECT scans related to behavior, low blood flow is the #1 brain imaging predictor that a person will develop Alzheimer's disease. On SPECT scans, low blood flow has also been seen with:

Depression • ADD/ADHD • **Bipolar Disorder • Schizophrenia** Traumatic Brain Injuries

LOW BLOOD **FLOW IS THE** brain imaging predictor that a person will develop = Alzheimer's disease

Shrivels memory centers

Drinking just 1-2 glasses of wine a day leads to atrophy in the hippocampus, a brain region that's critical for learning and memory. Located within the temporal lobes, the hippocampus is a critical gateway to long-term storage for memories. If it is damaged, you may not be able to recall what happened yesterday.

> Loss of volume in the hippocampus has been associated with:

- Memory Loss
- Depression
- Alzheimer's Disease

Reduces the number of new brain cells

Excessive alcohol consumption lowers the generation of new brain cells. Studies with animals show that consuming high doses of alcohol leads. to a 58% decline in the number of new brain cells. To perform at your best, you need those new brain cells. New research suggests we can produce up to 700 new cells a day if we put the brain in a nourishing environment with: Brain Healthy **Nutrition • Omega-3 Fatty Acids**

New Learning • Exercise



Increases risk of dementia

Compared with nondrinkers and light drinkers, moderate to heavy drinkers have a 57% higher risk of dementia and they develop it earlier. Drinking can literally make you lose your mind. Brain SPECT imaging shows that dementia isn't just one thing.

Common types of dementia include:



- Alzheimer's Disease
- **Alcohol-Related Dementia**
- Frontal-Temporal Lobe Dementia
- **Vascular Dementia**
- **Normal Pressure Hydrocephalus**
- **Pseudodementia**

Prematurely ages the brain

In the largest known brain imaging study, scientists from Amen Clinics, Google, Johns Hopkins, UCLA, and UC San Francisco evaluated 62,454 brain SPECT scans of people from 9 months old to 105 years of age to investigate factors that accelerate brain aging. The study found that alcohol abuse is one of the top 5 factors that make the brain age faster.

Other top factors include:

- Schizophrenia
- Cannabis Abuse
- **Bipolar Disorder**



At Amen Clinics, we use brain SPECT imaging as part of a comprehensive evaluation to help our patients discover the root causes of addiction. Healing any underlying brain dysfunction that may be contributing to substance abuse is an important factor that helps prevent relapse. Addiction counselors and treatment centers across the nation refer patients to Amen Clinics for brain imaging and brain optimization because a healthier brain is the key to being able to follow through with a treatment plan and to maintain sobriety.

> To learn more, call us at (833) 973-1633 or visit our website at www.AmenClinics.com