

## Lowering Your Risk of Alzheimer's Disease

Not many diseases have generated as much interest over the past few years as Alzheimer's disease (AD). As our life expectancy increases and our population ages, we see more and more patients develop this condition, and more families impacted when a loved one falls victim to AD. The definition of AD has changed even since I was trained. In the 1960's and early 1970's, it was also called "pre-senile dementia," because Dr. Alzheimer actually described the first cases in patients in their 40's and 50's who became demented. At that time it was considered normal for older people to gradually lose brain function as a part of the aging process. The term AD is now applied when there is loss of mental capacity without another cause, such as stroke, brain trauma, tumor, or a metabolic disease. Like all organs, the brain undergoes some degenerative changes with aging; some however suffer what appears to be an acceleration of that process. This results in loss of memory, orientation, recognition, comprehension and other aspects of brain function, and eventually victims lose the ability to remain independently functional in any way. The fact that AD may be more than one disease and has multiple causative factors complicates research into the causes and treatment. We do know some factors that are at least related to AD. The recent discovery of a gene called the APOE-e4 allele has confirmed the suspicion that there is at least some genetic basis to the development of AD. There is now a test that can be done for the presence of this gene, though it is very expensive and still considered primarily a research tool. Other less exotic and more practical information is available. Smoking appears to increase the risk of developing AD. Drinking red wine appears to decrease the risk. More good news, at least for many of us, comes from some recent research that shows that being married decreases one's risk, even if one is divorced or widowed when reaching older age. Women who are post-menopausal are less likely to develop AD if they take some form of estrogen replacement. And there seems to be a connection between high blood pressure and AD; well-controlled blood pressure seems to decrease the chances of developing AD in both men and women. A recent study of diabetics showed that their risk of developing AD is overall twice that of non-diabetics, and that the more severe the diabetes, the higher the risk. Another recent study showed that the higher the educational level one achieves, the greater the risk of developing AD; it may be however that more highly educated persons are diagnosed earlier, due to earlier self-recognition of symptoms, or better access to health care. Head trauma has been suspected of being related to AD; however no connection was found in recent research from the Netherlands. Aluminum consumption has also been blamed for AD, but no convincing evidence has ever been published; there is ongoing researching this area. Can AD be treated? We have some new drugs that are showing promise of improving symptoms and delaying progression, but presently no "cure" is in sight. Can it be prevented? Certainly we can lower our odds by not smoking, by keeping blood pressure under control, diagnosing and controlling diabetes, and if a post-menopausal woman, taking estrogen. We can also consider the benefits of red wine in AD prevention, and in general maintain good health, diet and exercise habits. I suppose that one should consider the risks versus the benefits of marriage before taking that somewhat drastic preventive step. Meanwhile we will wait the dawn of gene therapy that will hopefully prevent this and many other chronic diseases.