

## BDNF May Prevent Alzheimer's Disease

Alzheimer's disease is on the increase; it has grown over 1200 percent in the past 20 years and America has fully one-fourth of the globe's Alzheimer's cases!

Help may be on the way to actually prevent this dreaded disease. Researchers from the University of California at San Diego have discovered proof that a natural protein called BDNF (brain-derived neurotrophic factor) is able to not only treat, but prevent the on-set of Alzheimer's disease.

Researchers used a variety of laboratory animals in their studies. They injected BDNF directly into the animals brain memory circuits. BDNF stimulated the cells and prevented them from dying from the underlying disease.

According to lead researcher Mark Tuszynski, MD, PhD, "In each case, when compared with control groups not treated with BDNF, the treated animals demonstrated significant improvement in the performance of a variety of learning and memory tests. Notably, the brains of the treated animals also exhibited restored BDNF gene expression, enhanced cell size, improved cell signaling, and activation of function in neurons that would otherwise have degenerated, compared to untreated animals. These benefits extended to the degenerating hippocampus where short-term memory is processed, one of the first regions of the brain to suffer damage in Alzheimer's disease.

Dr. Tuszynski also stated that BDNF can prevent and reverse Alzheimer's disease independently of amyloid plaque tangles.

Aerobic exercise can boost the body's production of BDNF. And as far as nutrients are concerned, pantethine provides the basic compound cysteamine that nerve cells need to make BDNF. Also, acetyl-l-carnitine, fish oil, blueberries, and curcumin assist in helping to make BDNF or stop it from declining.