

## **JUICES, LOW GLUTEN DIET AND EXERCISE CUT ALZHEIMER'S RISK**

Drinking fruit and vegetable juices frequently may significantly cut the risk of developing Alzheimer's disease, a study appearing in the American Journal of Medicine suggests.

US researchers followed almost 2,000 people for up to 10 years - providing a powerful set of results.

They found the risk was 76% lower for those who drank juice more than three times a week, compared with those who drank it less than once a week.

Alzheimer's is linked to the accumulation of clumps of beta-amyloid protein in the brain. There is some evidence to suggest that this process may be controlled by the chemical hydrogen peroxide.

Various studies have suggested that polyphenols - chemicals available in many foods - might disrupt these processes and provide some protection against Alzheimer's disease by neutralising the effect of damaging compounds called free radicals. Fruit and vegetable juices are particularly rich in polyphenols. Lead researcher Dr Qi Dai, of Vanderbilt University, said: "We found that frequent drinking of fruit and vegetable juices was associated with a substantially decreased risk of Alzheimer's disease.

"These findings are new and suggest that fruit and vegetable juices may play an important role in delaying the onset of Alzheimer's disease."

The research was carried out on Japanese Americans, but researchers said the findings were applicable to the general population.

Harriet Millward, of the Alzheimer's Research Trust, said: "Many scientists believe there is a link between the release of free radicals within the body and early changes to brain cells in people who ultimately go on to develop Alzheimer's disease.

"Since fruit and vegetable juices are rich in antioxidants which 'mop up' free radicals, this interesting piece of research adds weight to this theory."

Dr Millward said previous studies had produced mixed results, and some had suggested the benefits of fruit and vegetables were short lived. But she said the results of the latest study were significant because it was long-term, and had followed a relatively large group of people.

"Diet almost certainly plays a part in every person's Alzheimer's risk - and offers a relatively inexpensive way to fight a disease that ruins countless lives and costs the NHS more than cancer, stroke and heart disease put together."

Clive Ballard, director of research at the Alzheimer's Society, said fruit and vegetables might also help cut the risk by helping to lower blood pressure, and keep the blood vessels in good order.

Alzheimer's has been linked to poor blood supply to the brain.

His colleague Dr Susanne Sorensen said:

"This is an exciting study as it helps build the case that for taking action whilst still in good health may reduce the risk of developing the disease in later life. We hope GPs will be able to use this information and pass it on to people who are deemed to be at high risk.

A Mediterranean diet of lots of fruits, vegetables, legumes, cereals, some fish and alcohol, and little dairy and meat is recommended, as it is healthy and high in antioxidants.

It is also important to take exercise and keep mentally active."

## **LOW GLUTEN DIET**

Another comprehensive and long term study found that gluten intolerance is linked with senile mental deterioration, dementia and Alzheimers disease. In this study many of the subjects with 'senile memory loss' were found to be gluten sensitive. Eliminating gluten from the diet over a period of 3 months resulted in over 70% showing marked signs of improvement of memory.

It appears that more and more people are becoming gluten sensitive or intolerant, and many report that their minds are clearer when they are on a gluten free diet.

### **EXERCISE AND SENILITY**

A group of scientists studying the production of brain neuro-transmitters which activate nerve connections (synapses) in the brain, found that they were greatly increased by exercise. It was found that more complex 'cross-body' movements released the most neuro-transmitters. These neuro-transmitters are vital for memory.

In a comparison of various activities including exercise, reading, and crossword puzzle solving it was found that exercise produced the greatest increase in these vital brain chemicals.

This discovery led scientists to conduct a study of a cross section of the population over a 10 year period in which they established that people who did regular exercise had over 70% less incidence of senile deterioration and memory loss.

It may be concluded that exercise increases and improves both circulation and oxygenation within the brain, which is very important to prevent the formation of amyloid plaques (found in the brains of most cases of senility).

While creating a surge in the quantity of neuro-transmitters, exercise also activates cross-over nerve fibres in the corpus callosum, which connect left and right lobes.