See off Alzheimer's with the color purple

December 8 2010

Ground-breaking research from Professor Douglas Kell, published in the journal *Archives of Toxicology*, has found that the majority of debilitating illnesses are in part caused by poorly-bound iron which causes the production of dangerous toxins that can react with the components of living systems.

These toxins, called hydroxyl radicals, cause degenerative diseases of many kinds in different parts of the body.

In order to protect the body from these dangerous varieties of poorly-bound iron, it is vital to take on nutrients, known as iron chelators, which can bind the iron tightly.

Brightly-coloured fruits and vegetables are excellent sources of chelators, as is green tea, with purple fruits considered to have the best chance of binding the iron effectively .

However, despite conflicting reports, the widely-publicised benefits of red wine seem to work in a different way, and have no similar benefits, Professor Kell's paper noted.

This new paper is the first time the link has been made between so many different diseases and the presence of the wrong form of iron, and gives a crucial clue as to how to prevent them or at least slow them down.

Professor Kell argues that the means by which poorly-liganded iron accelerates the onset of debilitating diseases shows up areas in which

current, traditional thinking is flawed and can be dangerous.

For instance, Vitamin C is thought to be of great benefit to the body's ability to defend itself against toxins and diseases.

However Professor Kell, who is Professor of Bioanalytical Science at the University, indicates that excess vitamin C can in fact have the opposite effect to that intended if unliganded iron is present.

Only when iron is suitably and safely bound ("chelated") will vitamin C work effectively.

Professor Kell said: "Much of modern biology has been concerned with the role of different genes in human disease.

"The importance of iron may have been missed because there is no gene for iron as such. What I have highlighted in this work is therefore a crucial area for further investigation, as many simple predictions follow from my analysis.

"If true they might change greatly the means by which we seek to prevent and even cure such diseases."

Provided by University of Manchester