

Onions 'cut heart disease risk'



Onions are a good source of quercetin

Eating a meal rich in compounds called flavonoids reduces some early signs of heart disease, research shows.

An Institute of Food Research team focused on one of the compounds, quercetin, which is found in tea, onions, apples and red wine.

The Atherosclerosis study examined the effect of the compounds produced after quercetin is broken down by the body.

They were shown to help prevent the chronic inflammation which can lead to thickening of the arteries.

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Dr Paul Kroon
Institute of Food Research

Previous research has shown quercetin is metabolised very quickly by the intestine and liver and is not actually found in human blood.

So instead the researchers concentrated on the compounds that enter the bloodstream after quercetin is ingested, absorbed and metabolised.

The compounds were used - in concentrations similar to those that would be produced following digestion - to treat cells taken from the lining of the blood vessels.

Lower dose, bigger impact

Lead researcher Dr Paul Kroon said: "We tested compounds that are actually found in the blood, rather than the flavonoid in food before it is eaten, as only these compounds will actually come into contact with human tissues and have an effect on arterial health.

"The effect is more subtle than laboratory experiments using the parent compound.

"But the metabolites still have an effect on the cells lining the blood vessels."

The research found that, in the case of one inflammatory process, a lower dose of the compounds - achievable by eating 100g to 200g of onions - actually had a bigger impact.

Bridget Aisbitt, a nutrition scientist at the British Nutrition Foundation, said: "Inflammation is an important process in the furring up of arteries that can lead to heart disease and stroke and this study gives us clues as to why a diet rich in fruit and vegetables appears to reduce the risk of these conditions.

"In the UK we are only consuming about two portions of fruit and vegetables per day on average, so this study underlines the importance of getting your five a day to stay healthy throughout life."