Olive oil 'can cut cancer risk'

Adding plenty of olive oil to a diet could help protect against cell damage that can lead to cancer, experts say. A study of 182 European men found those who had 25 millilitres of olive oil per day had reduced levels of a substance which indicates cell damage. The Danish team said it may explain why many cancer rates are higher in northern Europe than the south, where olive oil is a major part of the diet. The study is in the Federation American Societies for Experimental Biology.

The Copenhagen University Hospital researchers looked at 182 healthy men aged between 20 and 60 from five European countries.

"These data provide evidence that olive oil consumption explains the difference in cancer incidence between north and southern Europe"

Dr Henrik Poulsen
Copenhagen University Hospital

The scientists added either virgin, common or refined olive oil to their diets over two weeks.

At the end of study, scientists measured levels of the substance which indicates oxidative damage to cells, called 8oxodG, in the men's urine.

Oxidative damage is a process whereby the metabolic balance of a cell is disrupted by exposure to substances that result in the accumulation of free-radicals, which can then damage the cell.
The men were found to have around 13% less 8oxoG compared with their levels at the beginning of the study.

At the beginning of the study, men from northern Europe had higher levels of 8oxoG than those from southern Europe, supporting the idea that olive oil had a reductive effect.

**North-south difference**

Olive oil contains a number of compounds, called phenols, which are believed to act as powerful antioxidants.

"*More long-term research is needed to confirm these effects*

Dr Anthea Martin, Cancer Research UK

But the Danish researchers said the men in the study used the three different oils, which had different levels of phenols, so that was unlikely to explain the protective effect.

They said that, instead, the monounsaturated fats in olive oil were probably behind the effect.

The scientists, led by Dr Henrik Poulsen, wrote in the FASEB journal: "These data provide evidence that olive oil consumption explains the difference in cancer incidence between north and southern Europe."

Dr Anthea Martin, science information officer at Cancer Research UK, said: "The effect of diet on cancer risk is very complex because of the many different components of the food we eat.

"Although this study suggests that olive oil can reduce DNA damage that could lead to the development of cancer, more long-term research is needed to confirm these effects."

She added: "We do know that a healthy, balanced diet, including plenty of vegetables and fruit and limited amounts of red and processed meat, can help reduce the risk of cancer."