

'Eat more beans' to stop cancer

Beans contain a potent anti-cancer compound

A diet rich in beans, nuts and cereals could be a way to prevent cancer, believe UK researchers.

Scientists at University College London have discovered that these everyday foods contain a potent anti-cancer compound. This blocks a key enzyme involved in tumour growth, they told *Cancer Research journal*.

The researchers say, in the future, it might be possible to mimic this compound in an anti-cancer drug.

“ **Our study suggests the importance of a diet enriched in foods such as beans, nuts and cereals which could help prevent cancer** ”

Researcher Dr Marco Falasca

Scientists have been exploring the enzyme phosphoinositide 3-kinase as a target for cancer treatment for some time but inhibitors have been difficult to develop because of problems with chemical stability and toxicity.

Dr Marco Falasca and colleagues have discovered that a natural compound, called inositol pentakisphosphate, which is found in most legumes as well as in wheat bran and nuts, blocks the activity of the enzyme.

When they tested its action in mice with ovarian and lung cancer they found it not only blocked tumour growth but also enhanced the effect of other cancer-killing drugs.

In addition, it appeared to be non-toxic, unlike conventional chemotherapy agents.

Dr Falasca said: "Our study suggests the importance of a diet enriched in foods such as beans, nuts and cereals which could help prevent cancer.

"Our work will now focus on establishing whether the phosphate inhibitor can be developed into an anti-cancer agent for human therapy.

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Henry Scowcroft of Cancer Research UK

"We believe that inositol pentakisphosphate is a promising anti-cancer tool and we hope to bring it to clinical testing soon."

Henry Scowcroft of Cancer Research UK said: "It is always encouraging when a newly discovered chemical is shown to have anti-cancer activity in the laboratory, especially when it occurs naturally in foods like beans and peas.

"Obviously, the next step is to look at whether inositol pentakisphosphate is able to inhibit tumour growth in cancer patients, in properly controlled clinical trials."

He said researchers were also looking at whether people who eat more lentils, peas and beans are actually at lower risk of developing cancers

"What we do know already is that a diet that includes at least five portions of fruit and vegetables a day can help to reduce the risk of cancer."