

HOW A DIET PACKED WITH FRUITS AND VEGETABLES

CAN WARD OFF CANCER

By Jo Willey

A HEALTHY fruit and vegetables diet could help guard against one of the deadliest cancers, scientists say.

A potent super-nutrient found in a range of everyday healthy foods can block the way cancer cells communicate and instruct cells to grow and spread, research shows.

The discovery could lead to the possible development of new treatments to tackle bowel cancer, the second most common cause of death from cancer in the UK after lung cancer.

The secret lies in a plant flavonoid called luteolin. The compound has been shown in laboratory tests to have anti-inflammatory, anti-oxidant and anti-cancer properties.

Previous studies looking at the causes of cancer had failed to pick up the positive effect luteolin can give.

But now researchers have discovered that the flavonoid, which is found in foods including celery, green pepper, thyme, chamomile tea, carrots, olive oil, peppermint, rosemary, navel oranges and oregano, can in fact halt cancer spread.

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Team leader Professor Jung Han Yoon Park

The study, published in BioMed Central's open access journal BMC Gastroenterology, shows that luteolin inhibits the activity of cell signal pathways which lead to the growth of colon cancer cells.

The researchers from South Korea showed that luteolin was able to stop the colon cancer cells secreting a so-called pathway receptor.

Team leader Professor Jung Han Yoon Park said: “Blocking these pathways stops cancer cells from dividing and leads to cell death.

“Our study, showing that luteolin interferes with cell signalling in colon cancer cells, is a step forward in understanding how this flavonoid works.”

Around 40,000 people are diagnosed with bowel cancer each year in the UK and the disease kills more than 16,000 victims. Dr Joanna Owens, science information manager at Cancer Research UK, said: “This study is a really early exploratory step towards finding chemicals that could be used to develop cancer- preventing drugs.

“Fruits and vegetables contain many compounds that could help protect against cancer.

“Pinpointing those that could be harnessed as cancer- preventing drugs is a significant challenge, and one our scientists are working on too.”

Previous research has shown that luteolin could also be used to treat a range of brain conditions including Alzheimer's.