

# Green vegetables may cut cancer risk

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Men at risk of prostate cancer should eat their greens to cut the dangers, an academic nutritionist has said.

Margaret Rayman, professor of nutritional medicine at the University of Surrey, said such foods as broccoli, pak choi, rocket and watercress could help significantly lower risk.

However, such foods need to be either eaten raw or cooked lightly to have any effect.

There is convincing evidence to suggest that diet plays a leading role in determining whether men develop prostate cancer, and modifying the way food is cooked could help to lower the risk, Professor Rayman said.

Cruciferous vegetables, such the examples given, release an enzyme called myrosinase when chopped, bruised or chewed, which reacts with natural substances called glucosinolates to convert them into isothiocyanates and indoles - both of which have anti-cancer properties.

Myrosinase is also destroyed by heating, so eating these vegetables raw, or steaming them lightly and using the waste water for gravy, can still be beneficial because certain bacteria that live in the gut can produce myrosinase to act on the glucosinolates that pass through the digestive system.

"There is a growing body of scientific evidence that strongly suggests that diets rich in certain foods can help to prevent this disease or its spread," she told the British Science Festival.

"There is evidence that eating certain foods in the appropriate quantity and with sufficient frequency can reduce the risk of prostate cancer or slow its progression." By preparing or cooking food in ways that do not destroy any natural anti-cancer ingredients, men with a family history of prostate cancer, or who are in remission, can also benefit from the psychological boost that cooking can give, she said.

"Consciously making changes to diet and lifestyle is associated with a positive, optimistic attitude and a feeling of being in control. This has long been known to improve the immune system and can therefore have a direct effect on how disease progresses."

Allium vegetables, such as onion and garlic, are best prepared by leaving them for 10 minutes after chopping them up before heating them in a pan, she suggested.

This allows an enzyme called alliinase, which is destroyed by heating, to work on sulphur compounds in the vegetables and turn them into diallyl sulphides, which are known to have an anti-cancer effect and are not destroyed by heat.

"Prostate cancer is often slow to develop and spread and so strategies that can influence its progression have considerable potential. For those living with the condition, a controlled diet

may provide the only means of active treatment," Professor Rayman said.

"Some of the evidence is very flimsy ... [but] on the other hand the principle is that there is nothing here that is going to do you any harm" and it may make a difference.

- INDEPENDENT