

## Vegetable compounds fight skin cancer

Extracts of broccoli and cabbage mixed with those from Brazil nuts used to fight cancer.

Compounds extracted from cabbage and broccoli and mixed with selenium have been found to be effective in fighting skin cancer, according to US scientists.

The scientists believe that mixing isothiocyanates, the substances that give the greens flavour, and selenium found in the nuts, may even be added to sun screen lotion in future.

Laboratory tests suggest that these compounds target tumours more safely and effectively than traditional methods. Now work is under way to develop the first commercially available drugs made from a cocktail of compounds to fight skin cancer.

Researchers at Pennsylvania State University in the US have already made a drug which can halt the growth of skin cancer tumours in mice by up to 60%.

Professor Gavin Robertson, of the university's College of Medicine, said up until now there have been no drugs that target proteins which trigger melanoma.

Initial tests found the potency of the broccoli and cabbage compounds was so low that a successful drug would require large, impractical amounts of these compounds.

Instead, the researchers boosted the effectiveness of the compounds by adding selenium, a trace mineral already known for its antioxidant properties.

The result was a much more potent drug that can be delivered intravenously in low doses.

In tests on mice, the mixture was found to reduce the growth of tumours by 60%.

Human trials of the new drug are still some years away, but researchers forecast a drug that could be delivered either intravenously to treat skin cancer or added to sunscreen lotion to prevent the disease occurring.