Caffeine may reduce skin cancer risk Updated: 12:04, Friday February 27, 2009

Scientists are getting closer to understanding how drinking tea or coffee can reduce the risk of skin cancer.

A US study has found caffeine plays a protective role for damaged skin by boosting the body's natural process called apoptosis, or synchronised cell suicide.

A 'two- to three-fold increase in apoptosis' is seen when cells damaged through UV exposure - sunlight - are 'pretreated with caffeine', according to the study.

Several earlier studies have linked drinking tea or coffee with a lower incidence of non-melanoma skin cancer, and scientists are now working to find out why.

'This paper finds the cell death response of skin cells to UV irradiation is enhanced by caffeine,' University of Sydney Associate Professor Graham Mann said in response to the findings.

'Deleting sun-damaged cells from the skin is a plausible way to reduce the chance that they will be mutated, persist and potentially form later cancers.'

The research, conducted primarily at the Cutaneous Biology Research Centre in Massachusetts, will be published online this week in the Journal of Investigative Dermatology.

The findings raise the prospect of adding caffeine to sunscreen or products designed to repair sundamaged skin.

It also follows a 2007 study of more than 93,000 women, which found for each additional cup of coffee they drank they had a five per cent decreased risk of developing non-melanoma skin cancer. Drinking de-caffeinated coffee showed no such benefit.

Prof Mann, an expert in the genetic and environmental causes of skin cancer, said there was mounting evidence that caffeine played a 'modest' role in preventing skin cancer.

'There are reasonable data from human epidemiology studies, supported by laboratory and animal studies, that caffeine, whether in tea or coffee, has a modest protective effect on skin cancer risk,' he said.