High doses of vitamin D can reduce the risk of developing some common cancers by as much as 50%, US scientists claim. Researchers reviewed 63 old studies and found that the vitamin could reduce the chances of developing breast, ovarian and colon cancer, and others.

Experts said more research was needed to draw firm conclusions. Charities cautiously welcomed the University of California study but warned too much vitamin D could harm the kidneys and liver. The "natural" form of the vitamin, called D3, is normally produced in the skin after exposure to sunlight, but is also obtained from certain foods such as oily fish, margarine and meat.

"The easiest and most reliable way of getting the appropriate amount [of Vitamin D] is from food and a daily supplement"

Professor Cedric Garland

The research, done at the University of California in San Diego, looked at the relationship between blood levels of vitamin D and cancer risk. Survival rates for Afro-Caribbean people with breast, colon, prostate and ovarian cancers are worse than for white people, possibly because dark skins are not as good at making vitamin D, the researchers said. The papers reviewed, published worldwide between 1966 and 2004, included 30 investigations of colon cancer, 13 of breast cancer, 26 of prostate cancer and seven of ovarian cancer. Scientists said analysis showed that, for at least some cancers, the vitamin D factor could not be ignored.

Taking 1,000 international units (IU) - or 25 micrograms - of the vitamin daily could lower an individual's cancer risk by 50% in colon cancer, and by 30% in breast and ovarian cancer, they said.

'Action needed'

The study acknowledged large doses of vitamin D should be treated
"They failed to provide any mechanism for how low levels of vitamin D are actually linked to high incidence of cancer"

Professor Colin Cooper

More than 2,000 IU - 50 micrograms - a day can lead to the body absorbing too much calcium, possibly damaging the liver and kidneys.

Professor Cedric Garland, who led the review study, said: "A preponderance of evidence, from the best observational studies the medical world has to offer...has led to the conclusion that public health action is needed."

In the absence of sunshine, a beneficial level of vitamin D could be obtained from a combination of food sources and supplements, he said.

Professor Garland warned that sun exposure had its own concerns.

"Dark-skinned people, however, may need more exposure to produce adequate amounts of vitamin D, and some fair-skinned people shouldn't try to get any vitamin D from the sun.

"The easiest and most reliable way of getting the appropriate amount is from food and a daily supplement."

No proof

Professor Colin Cooper, of the Institute of Cancer Research, said further research was needed to provide definitive proof of the benefits of vitamin D.

But he said: "If you look at any individual study the evidence is really suggestive, rather than providing absolute proof.

"Also, they failed to provide any mechanism for how low levels of vitamin D are actually linked to high incidence of cancer."

Dr Mark Metfield, of the Association for International Cancer Research, agreed the latest study provided no proof of the benefits of vitamin D.

"I am a bit cautious. There is no doubt there is a correlation between
people who have higher levels of vitamin D in their blood and a lower risk of cancer - but it is only a correlation."

The findings have been published in the American Journal of Public Health.