



MEDIA RELEASE

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VITAMIN C: COLD COMFORT UNLESS YOU'RE STRESSED

Vitamin C has been proven ineffective in combating the common cold in most people, but significantly effective in reducing the incidence of cold in people exposed to cold and/or physical stress, such as marathon runners, skiers and soldiers, according to a new study.

The new review of the role of vitamin C in the prevention and treatment of the common cold, conducted by ANU Professor Bob Douglas and Finnish colleague Associate Professor Harri Hemilä, includes findings from 55 comparative studies that have been carried out over the past 65 years.

The reviewers set out to discover whether vitamin C in doses of at least 200 milligrams daily reduces the incidence or duration of the common cold when used either as continuous preventive treatment or after the onset of cold symptoms. The results of the research are published in the June issue of PLoS Medicine, an international peer reviewed, open access online medical journal.

"We found that incidence of the common cold was not altered in 23 community studies representing 10,435 participants where regular preventive doses as high as two grams daily were used," Professor Douglas said.

"However, in a subgroup of six studies, representing 642 participants who were marathon runners, skiers or soldiers exposed to significant cold and/or physical stress, incidence of common colds was reduced by 50 per cent by those taking vitamin C.

"In 30 studies that examined the duration of colds while people were taking preventive vitamin C, involving 9,676 volunteers, adults taking vitamin C experienced a reduction in duration of cold illnesses by about eight per cent when compared with those taking a placebo; while children experienced a 13 per cent reduction in duration of colds.

"We do not consider this degree of reduction in cold symptoms enough to justify regular use of vitamin C as a preventive agent. But the consistency of this finding points to the probability that vitamin C is having a minor ameliorating biological effect."

The researchers also studied seven therapeutic trials, involving 3294 participants, where vitamin C was used only when cold symptoms had begun. These trials failed to demonstrate a consistent reduction in the duration of the illness, but in one trial, where an eight-gram dose was used on the first day of illness, there was a reported benefit which the authors believe warrants further exploration.

In the Cochrane review, which is also available on the journal web site, the authors discuss the earlier evidence on which Linus Pauling built his belief that vitamin C would turn out to be a panacea for the common cold. Pauling was particularly influenced by a trial in Swiss schoolchildren attending a ski school. In the careful trials

that have been done since the publication of Pauling's book in 1970, the evidence does not support his optimism.

"Vitamin C has proven not to be a magic bullet to solve the common cold, but there are some issues that warrant further research. In particular, further research is required to examine the clear benefit experienced by marathon runners from preventive use of the vitamin. It is also possible that a high dose of vitamin C at the onset of a cold might be shown to reduce the duration of childhood colds," Professor Douglas said.

The article and the Cochrane review are available on the PLoS Medicine website:
<http://medicine.plosjournals.org/perlserv/?request=index-html&tissn=1549-1676>

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