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Common colds: Can vitamin C prevent or relieve them?

Taking vitamin C every day does not prevent colds for most people. People will not recover from a cold more quickly if they start to take vitamin C when the symptoms of a cold start. Taking vitamin C every day could shorten the amount of time you are sick with colds by a very small amount.

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You need a minimum amount of vitamins to stay healthy and well, and to build up your body's defence systems. Most people get enough vitamins from their daily diets. Vitamin C (ascorbic acid) is found in fruits and vegetables, for example, especially in citrus fruits and berries.

Despite this, many people take extra vitamin C supplements every day in the hope that it will protect them against illnesses - especially the common cold. Some of these supplements have more than 1g (1000mg) of vitamin C in them - so-called mega-doses. That is more than 10 times the recommended daily dose. Because the body cannot store vitamin C, the excess vitamin usually leaves the body in urine within a few hours. In very large quantities vitamin C can also cause diarrhoea. This can cause problems, especially in small children and older people. An overdose of vitamin C can also interfere with the accurate measurement of levels of substances in the blood, such as glucose.

To find out whether taking large doses of vitamin C has more pros than cons, researchers from the Cochrane Collaboration analysed the results of trials including more than 11,000 children and adults. The doses were 2g of vitamin C daily in most of the trials.

The review showed that, even at such high doses, vitamin C could not protect most of the people from getting colds. Even when adults and children had been taking vitamin C every day before getting ill, it made hardly any difference to how long their colds lasted. The effect was very small: Overall, it reduced the length of participants' colds by less than one day per year. If adults took vitamin C once they already had a cold it did not make any difference at all.

The effect may be different in people who are exposed to short periods of really strenuous activity and/or extreme cold, like marathon runners or skiers. Research has shown that high doses of vitamin C might be able to prevent this group of people from getting colds.

There have been no reports of any noticeable adverse effects of vitamin C.

Glossary

Vitamin C

Vitamin C is water-soluble. It is also called ascorbic acid. It is the vitamin that people need to have the most of every day. It occurs primarily in fresh fruit and vegetables. Vitamin C is one of the antioxidants. This means it protects cells from damage caused by particular aggressive atoms and molecules called free radicals. The food industry uses it frequently as a conservative. A major vitamin C deficiency leads to tiredness, irritability, and symptoms in bones, cartilage and teeth.

Cochrane Collaboration

The Cochrane Collaboration is an international network of thousands of researchers and others. They work together in teams called Cochrane Review Groups to answer questions about health care by doing systematic reviews of evidence. To achieve this, the members of the Collaboration have developed systems and methods for systematically finding and analysing the results of trials of health care interventions. The goal of the Cochrane Collaboration is to help patients, health care practitioners and others make more informed decisions about health care. You can read more about the Cochrane Collaboration at their website.

Sources

Douglas RM, Hemilä H, Chalker E, D'Souza RRD, Treacy B. Vitamin C for preventing and treating the common cold. *Cochrane Database of Systematic Reviews* 2007, Issue 3. [Cochrane summary (URL: <http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD000980/frame.html>)]

The German Institute for Quality and Efficiency in Health Care (IQWiG)

The German Institute for Quality and Efficiency in Health Care (IQWiG) was established by legislation to provide evaluations of the effectiveness, quality and efficiency of healthcare services. This includes the assessment of medicines as well as the publication of health information for consumers and patients.

Evidence basis of our health information

Our information is based primarily on systematic reviews of the effects of health care. Systematic reviews are necessary to gain an objective picture of health care. In order to do this, a clear question is formulated. Researchers then find all the relevant studies that could answer this question. They then evaluate those studies.

You can find a list of the evidence and other scientific literature on which this information is based at [**www.informedhealthonline.org**](http://www.informedhealthonline.org)

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