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[Letter to the Editor]

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To the Editor,

Mainardi et al¹ reviewed the use and effects of complementary and alternative medicines on respiratory symptoms. They stated that early studies on vitamin C did not demonstrate an effect on the duration or intensity of the common cold, and as a support to this statement, they referred to 2 articles from 1975.^{2,3}

I showed a decade ago that the Karlowski trial was erroneously analyzed.^{4,6} The authors argued that the results of their placebo controlled double-blind trial might be explained, paradoxically, by the placebo effect. However, their suggestion was based on a subgroup analysis in which they excluded 42% of recorded common cold episodes without any justification. In addition, there were logical inconsistencies in the explanation. Thus their placebo effect explanation can be confidently rejected.^{4,6} Karlowski et al² had 4 arms in their trial: A, placebo; B, 3 g/d vitamin C regularly over the trial; C, 3 g/d therapeutic vitamin C when a participant caught a cold; and D, both regular and therapeutic administration so that the dose was 6 g/d during the cold episodes. The results were consistent with dose dependency: the duration of colds in the 6 g/d arm was reduced twice as much as in the 3 g/d arms. In the 6 g/d arm the common cold episodes were shortened by 1.22 days (17%, $P = .05$), from 7.14 to 5.92 days.^{2,4}

Dykes and Meier³ reviewed the early studies on vitamin C and the common cold. They discussed the technical aspects of certain studies, but in most cases they did not present the original results, thereby hampering the reader in drawing his or her own conclusions about the trial results.^{6,7} They uncritically accepted Karlowski et al's placebo effect explanation,² although careful reading of the report would have shown that it is not valid. There are many further problems in the Dykes and Meier review,³ as described elsewhere.^{6,7}

The coverage of Mainardi et al's review¹ is wide, and they could not properly discuss the extensive literature on vitamin C and the common cold on the basis of original trial reports. Nevertheless, for a reader it would have been more useful to refer to an up-to-date review that covers also the trials carried out after 1975 and gives references to other recent literature⁸ instead of referring to 3-decade-old articles that have been shown to be erroneous 1 decade ago. There is firm evidence that regular vitamin C supplementation shortens the duration of colds that occur during the supplementation period, but the practical significance of this finding is not clear.⁸

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