Norwalk, Iowa—“High-dosage (≥400 IU/d) vitamin E supplements may increase all-cause mortality and should be avoided.” Such is the conclusion of “Meta-analysis: High-dosage vitamin E supplementation may increase all-cause mortality,” published in the January 4, 2005, issue of Annals of Internal Medicine (Vol. 142, Iss. 1), authored by E. R. Miller III, et al.

When a practicing DC and Foundation for Chiropractic Education and Research (FCER) Board member expressed concern about the study—and the anticipated media hype based on it—FCER Director of Research, Anthony L. Rosner, Ph.D., examined the study with a critical eye. The critique urges caution about such sweeping conclusions.

Among the weaknesses identified in the study are:

1. Chronically ill, rather than healthy, patients were studied.
2. There are eight forms of vitamin E occurring naturally; there is no indication of the variant studied.
3. Authors place a hazard at doses equal to and above 400 IU/d—with no explanation or rational for this seemingly arbitrary cutoff. In the studies examined there is too much variation in statistical analysis, making it virtually impossible to come to a single conclusion. In fact, some of the studies showed reduced mortality for people taking vitamin E at doses above 400 IU/d.
4. There is little mention of benefits found with vitamin E supplementation, which is needed information when suggesting a risk:benefit hazard.
5. The conclusions contradict previous studies.
6. Potential bias suggested by statistical tests chosen and used.
7. Also not answered where questions such as length of supplementation and previous history of use.

Dr. Rosner concludes, “Until a study which explicitly defines the different isoforms of vitamin E with clearly defined populations is undertaken, it would be premature to case a cloud of suspicion upon doses of vitamin E at 400 IU/d or higher. . . . At this stage, one cannot accept with any reasonable degree of confidence the results presented” in this study.

For the complete commentary, please go to http://www.fcer.org/html/News/vitaminE.htm. FCER strives to respond to faulty reporting—both in the scientific and popular media—which negatively impacts chiropractic and its practices. Responses and critiques to additional circumstances may be found at FCER’s Web site.

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