

The Nutrition Reporter™

EXTRA

© Jack Challem December 2008 Vol 19 No 12

The independent newsletter that reports vitamin, mineral, and food therapies

Perspectives on Recent Issues

By Jack Challem

Most medical journals claim to publish “peer-reviewed” articles, implying that the research has passed the muster of qualified physicians or researchers. In practice, many journal articles lack any substantial critical analysis before publication. I believe this is one reason why so much poor-quality research, especially research critical of nutritional therapies, finds its way into print. Then, once in print, this junk science becomes an urban gospel – repeated in the form of poor advice to patients and in newspaper articles. The real peer review occurs after publication, often months later as letters to the editor, and without any newspaper headlines. Consider the following study as an example.

B Vitamins and Cardiovascular Disease

Earlier this year, researchers from the Harvard Medical School published a study in *JAMA (Journal of the American Medical Association)* in which female health professionals took either B-complex vitamins or placebos for an average of 7.3 years. The vitamin supplements lowered levels of homocysteine – a risk factor for cardiovascular diseases – but did not seem to reduce the risk of cardiovascular disease.

The study was touted as proof that B vitamins were worthless when it came to lowering the risk of heart disease and stroke. But four months later, in letters to the editor of *JAMA*, other physicians pointed out what should have been obvious early on: the study’s subjects, who were doctors and other medical professionals, were unlikely to be deficient in folic acid. In fact, the blood levels of the vitamin were normal in more than two-thirds of the subjects, meaning that they were less likely to benefit from supplements.

The original researchers acknowledged the critics’ comments and responded in part by writing that the folic acids’ lack of benefit “may not apply to populations with a greater prevalence of folate deficiency.” So, the vitamin might work after all.

The body’s use of folic acid is strongly influenced by genetics. Some genetic variations – an important variable – increase individual requirements for folic acid. These genetic variations were not assessed in this study, so it is very possible that folic acid supplements did benefit some people, but not others.

Glucosamine and Chondroitin

In October, researchers published the latest findings of the Glucosamine/Chondroitin Arthritis Intervention Trial (GAIT), a study that compared these natural building blocks of knee cartilage against the drug Celebrex and placebos. Based on x-rays of the subjects’ knees, the researchers concluded that none of the treatment groups fared any better than the placebo group, according to their report in *Arthritis & Rheumatism*.

A valid study? It helps to track the history of the GAIT study. In 2006, the researchers reported how the different treatments affected symptoms of knee osteoarthritis after just six months. At the time, they wrote that there was no reduction in pain or swelling. But the study actually showed that people with the most pain had significant benefits from a combination of glucosamine and chondroitin supplements. In fact, these supplements led to greater pain relief than with the drug Celebrex. No conclusions could be drawn from people with mild osteoarthritic pain because such cases are difficult to assess.

In the latest GAIT report, the researchers acknowledged numerous problems with their data: the progression of osteoarthritis among people taking placebos was less than half of what had been anticipated. That alone would have skewed all data from the study, yet the researchers still argued that glucosamine and chondroitin were of no value.

My friend Jason Theodosakis, MD, author of *The Arthritis Cure*, told me that the study had three methodological problems – fatal flaws, if you will.

Continues on next page

First, the number of subjects remaining in the study was too small to achieve statistical significance. Second, the study ran for only two years, whereas other studies have shown that three years is the minimum time needed to demonstrate regeneration of knee cartilage. Third, the x-ray instruments used to measure joint-cartilage deterioration or growth was not sophisticated enough to make clinically meaningful measurements.

Despite all of these limitations, glucosamine hydrochloride supplements did lead to an improvement in joint cartilage compared with all of the other treatments. Inexplicably, however, people taking a combination of glucosamine and chondroitin experienced the greatest progression of joint damage. (I'm guessing, but it is conceivable that the patients taking glucosamine and chondroitin had such a great reduction in pain that they became too active physically, and in the process they injured their tender joints.) Meanwhile, a separate article by the same researchers, published in *Osteoarthritis and Cartilage*, found that people taking chondroitin supplements benefited from substantial reductions in joint swelling. Essentially, the researchers published positive findings in one journal and negative findings in another journal. My head was left spinning.

Ensuring Vitamin D Deficiency in Children

One of the ironies in health care is that drug treatments laden with dangerous side effects will almost always be quickly adopted by conventional physicians, in part because of aggressive and shrewd marketing by pharmaceutical companies, but doctors fret over the alleged dangers of nutrients.

In October, the American Academy of Pediatrics took the "bold" step of recommending a doubling of the amount of vitamin D for infants, children, and adolescents. The previous recommendation had been for 200 IU daily of vitamin D beginning sometime during the first two months of life. The new recommendation called for 400 IU of vitamin D daily starting within a few days after birth.

As a reader of *The Nutrition Reporter*TM newsletter, you have seen many articles describing the remarkable research on vitamin D. Nearly everyone becomes deficient during the winter months, when the sun is too low to stimulate production of the vitamin, and large percentages of the population are deficient throughout the year.

As a result, even generally conservative and cautious physicians, such as Walter Willett, MD, of Harvard University, have been recommending 1,000 IU of vitamin D daily for every infant, child, and

adult – with a doubling of this dose for people with dark complexions (who are more resistant to the vitamin D-producing effect of sunlight on skin).

So while the American Academy of Pediatrics has increased its recommendations for vitamin D, the organization essentially chickened out when it came to a meaningful recommendation. By proposing that infants and children receive only 400 IU of vitamin D daily, the Academy has ensured continued, widespread deficiencies.

Food Matters: A Film Review

Food Matters is about food and vitamin therapies, but it focuses primarily on the politics and economics of nutritional therapies versus drug therapies. One of the interview subjects, Andrew Saul, PhD, bottom-lines the issue when he points out that health makes sense, but health doesn't make anywhere near as much money as disease does in modern societies.

This 80-minute film begins with Hippocrates' quote, "Let thy food be thy medicine and thy medicine be thy food." Although Hippocrates was the father of medicine, the importance of nutrition in health is now largely ignored. The film takes the viewer on an impassioned journey through raw foods, the toxicity of drug therapies, the first use of high-dose vitamin C to combat viral infections in the 1940s, and the current use of nutritional therapies in such diseases as cancer and depression.

The film points out that many reports have warned about the dangers of vitamin supplements. But only a handful of deaths have been blamed on supplements over the years, whereas 106,000 people die each year from properly prescribed drugs in hospitals.

If you like reading *The Nutrition Reporter*TM, you'll enjoy most of *Food Matters*. To order: Go to www.foodmatters.tv or call 1.866.585.1947 for a DVD for \$29.95. Alternatively, you can watch the film on your computer for \$4.95.

The Nutrition ReporterTM newsletter (ISSN 1079-8609) publishes full monthly issues except for August and December and is distributed only by prepaid subscription. This issue, Vol 19 No 12, © December 2008 by Jack ChalleM. All rights reserved. Reproduction without written permission is prohibited. Phone: (520) 529.6801. Email: nutritioncomment@cs.com. The Nutrition ReporterTM is strictly educational and not intended as medical advice. For diagnosis and treatment, consult your physician. Subscriptions are \$27 per year in the U.S.; either \$33 US or \$48 CDN for Canada; and \$41 for all other countries, payable in U.S. funds through a U.S. bank. The Nutrition ReporterTM is a trademark of Jack ChalleM.

The Nutrition ReporterTM

Post Office Box 30246 • Tucson AZ 85751-0246 USA

Editor and Publisher: Jack ChalleM

Copy Editor: Mary E. Larsen

Medical and Scientific Advisors

Richard P. Huemer, MD Lancaster, Calif. • Ralph K. Campbell, MD Polson, Montana

Peter Langsjoen, MD Tyler, Texas • Ronald E. Hunninghake, MD Wichita, Kansas

Marcus Laux, ND San Francisco, Calif. • James A. Duke, PhD Fulton, Maryland