

UPDATE



Making Sense of the Disappointing Results of SELECT: Were the Results Expected or Unexpected?

by David J. Waters

In late 2008, the field of cancer prevention was turned upside down by the announcement that SELECT, the largest-ever prostate cancer prevention trial, was being halted. Interim analysis of data from more than 32,000 men indicated that selenium supplements were not protecting men against prostate cancer. Moreover, selenium supplementation was associated with an alarming trend toward increased risk of developing type 2 diabetes. As a result, the Murphy Foundation, along with more than 400 other centers across North America, instructed all study participants that they must discontinue their study supplements.

But upon careful examination of the study results, published in the prestigious **Journal of the American Medical Association (JAMA)** in December 2008, an intriguing fact surfaced: the average selenium status in men before starting the SELECT study was *already in the optimal selenium range predicted by Murphy researchers*. In our eyes, failing to show benefit by further supplementing a group of men already replete with the cancer-fighting nutrient was **more of an expected result than an unexpected one**.

For this reason, **Dr. Waters**, along with two other experts on selenium — **Dr. Margaret Rayman** of Great Britain and **Dr. Gerald F. Combs, Jr.** from the USDA Human Nutrition Research Center in North Dakota — submitted a **letter to the editor of JAMA** requesting that the SELECT study results be put into proper context. Further, they urged scientists to abandon the belief that any particular agent administered at the same dose should benefit everybody and instead move toward a strategy of **personalized cancer prevention**.

So, what should men do about taking selenium supplements? Today, muddled messages about the health-promoting vs. health-detrimental effects of selenium abound. **Our advice, unchanged by the results of SELECT, is this : Each man should get his selenium level right.** It's still sound advice, just like getting your blood pressure right. Men (and women!) can get their selenium in the optimal range — not too low, not too high — by using the Murphy Foundation's personalized cancer prevention product, the **SeleniumHealth™ toenail test**.

This selenium story so clearly illustrates one of the big problems that the Murphy Foundation is tackling head on: helping the public get information on health research that is in context and relevant. You can count on us to continue working hard to accomplish just that — personalizing your cancer prevention.