

Save The Dates...

**August 27 – 31, 2008**  
UICC World Cancer Congress  
Geneva, Switzerland  
Details at: [www.uicc.org/congress08](http://www.uicc.org/congress08)

**September 11, 2008**  
The Prostate Net  
**4th Annual "In The Know Awards" Presentation**  
Details at: [www.theprostatenet.org/knowawards.html](http://www.theprostatenet.org/knowawards.html)

**September 12 -13, 2008**  
Nemours Children Clinic  
**Childhood Cancer Awareness & Education Symposium**  
Wilmington, DE  
Details at: [www.Nemours.org](http://www.Nemours.org) and [www.KidsHealth.org](http://www.KidsHealth.org)

**October 25 – 29, 2008**  
American Public Health Association Annual Meeting  
San Diego, CA  
Details at: [www.apha.org/meetings](http://www.apha.org/meetings)

**November 4 – 6, 2008**  
World of Health IT 08 Conference & Exhibition  
Copenhagen, Denmark  
Details at: <http://debussy.hon.ch/cgi-bin/confevent?aff2+CONF08755>

**November 4 – 8, 2008**  
The Chemotherapy Foundation Annual Symposium  
New York, NY  
Details at: [www.mssm.edu](http://www.mssm.edu)

**November 9 – 10, 2008**  
Barbers International Annual Conference  
Sam's Town Hotel and Casino  
Tunica, MS  
Details at: [www.barbersinternational.com](http://www.barbersinternational.com)

**November 16 – 17, 2008**  
Prostate Cancer Foundation of Australia 1<sup>st</sup> National Conference  
Crowne Plaza Royal Pines Resort  
Brisbane, Queensland, Australia  
Details at: [www.prostate.org.au](http://www.prostate.org.au)



## Update on Selenium : More is Not Necessarily Better

David J. Waters, PhD, DVM is Professor and Associate Director of Purdue University's Center on Aging and Life Course and the Executive Director of the Gerald P. Murphy Cancer Foundation, West Lafayette, IN. He has conducted research on selenium and genetic damage in the prostate, which has shown that more selenium is not always better. This work has led to the development of a toenail test, SeleniumHealth™, which men can use to measure and adjust their selenium intake. I spoke with Dr. Waters about the latest research on selenium and prostate cancer as well as the idea that when it comes to cancer-fighting nutrients, more is not necessarily better.

- Q: Dr. Waters, tell us about the SeleniumHealth™ test.
- A: We have developed a simple toenail test called SeleniumHealth™ that gives every man the opportunity to find out his own selenium level. The SeleniumHealth™ toenail test accurately reflects how much selenium a person has received from his diet and from supplements over the last three months. The goal is to tap into the health benefits of selenium and at the same time avoid oversupplementation by adjusting the amount of selenium you get from food and supplements to the amount that is best for you.
- Q: Scientists are hard at work trying to find out more about the cancer-fighting properties of selenium. An example is the SELECT Trial. Can you tell us about that study?
- A: SELECT is a randomized clinical trial designed to determine if daily supplementation with selenium, vitamin E, or both will substantively decrease the number of men who will get prostate cancer. The Murphy Cancer Foundation is one of more than 400 study sites that have enrolled more than 32,000 men in this largest-ever prostate cancer prevention trial.
- Q: So just how strong is the evidence that low selenium is a risk factor for prostate cancer?
- A: In 1996, Larry Clark and his colleagues reported the findings from a 13-year, randomized, placebo controlled study of more than 1000 older Americans. In that study, daily supplementation with 200 micrograms of selenium in the form of selenium-enriched yeast was associated with a significant reduction in the incidence of several cancers, most notably cancer of the prostate (63% risk reduction). These compelling results provided strong rationale to launch the SELECT prostate cancer prevention study. I would also mention that using data from the Physicians Health Study, we estimate that, this year alone, up to 17,000 men in the United States will develop the aggressive form of prostate cancer because their selenium levels are too low.
- Q: Clearly then selenium is a good thing. So why bother with testing their selenium levels? Why not just take supplements to increase your overall selenium intake?
- A: I can answer this with two simple words: Dose matters. Let me explain. A closer look at the men in Larry Clark's study showed that not everyone benefited from selenium supplementation. Men with the lowest selenium levels prior to the start of the study had an impressive 92% reduction in prostate cancer risk after selenium supplementation. However, those men who had the highest selenium levels prior to the start had no protection from prostate cancer. In fact, these men had an alarming and statistically significant 88% increase in overall cancer incidence. These results informed us that more of a good thing is not always a good thing. The implications are clear-cut: *Men need to know their baseline levels of selenium prior to supplementation.* And now they can do just that with the SeleniumHealth™ toenail test.
- Q: Who should use the test?
- A: SeleniumHealth™ is a test for men of all ages because, as you know, prostate cancer is a process that takes 20 to 30 years to develop so it's not too early for men in their 30s and 40s to be thinking about selenium and their own personalized prostate protection. SeleniumHealth™ is not a prostate cancer-screening tool like PSA. In contrast, SeleniumHealth™ tells you whether you have one of the risk factors for cancer – low selenium status. And if your level is low, you can correct it.



David J. Waters PhD, DVM

Director, Gerald P. Murphy Cancer Foundation

# Update on Selenium

(Continued from pg. 1)

- Q: I've read recommendations that 200 micrograms is the optimal dose of selenium supplement to use. Would you agree with this?
- A: A dose of 200 micrograms might be right for some guys, but is probably too much for others. We conducted a study of more than 50 men which showed that men taking the same amount of selenium supplement have very different selenium levels, which probably reflects differences in how much selenium men are consuming in their diet, differences in the form and source of their selenium supplement, and biological differences in how each guy handles selenium.
- Q: Recently, I heard a news release that taking selenium supplements might cause diabetes. What do you think about this?
- A: This story came from a recent analysis of Larry Clark's original study. Investigators asked people if they were diabetic before the study started and again about 7 to 10 years later. It turned out that men in the selenium treatment group were 1.5 times more likely to develop diabetes than those who received placebo. But when you take a closer look at the scientific article, you find something quite interesting: It was the selenium status prior to the start of the study that predicted who developed diabetes. *Only those men who started with the highest selenium and then took more selenium had an increased risk for diabetes;* this increase was threefold. Men who had the lowest or middle range selenium did not have a higher risk to develop diabetes than placebo-treated men.
- Q: The idea of tailoring selenium and other cancer-fighting nutrients according to each person's needs sounds like a good one.
- A: Yes. We think that cancer researchers need to turn more of their attention to prevention rather than just treatment. Now more than ever, we need personalized cancer prevention as a strategy that will enable each person to reduce his or her risk for lethal cancer by matching the dose, duration, and timing of an intervention with their own cancer risk profile.
- Q: How do men get the test?
- A: Well, the easiest way is to go to our online site - [www.seleniumhealthtest.com](http://www.seleniumhealthtest.com) - that will enable you to download and print the application form. Follow the instructions and send the completed application along with your toenail clippings and we will measure your selenium. You will be informed of your results in about 2 weeks. If your levels are outside the optimal range, the Nutritional Guidance Staff at the Murphy Cancer Foundation will recommend how you can adjust your selenium intake. The cost of the test and consultation is less than \$100. For a closer look at why men should be tested, read "Straight Talk about Selenium and Your Health" by David J. Waters, at [www.gpmcf.org](http://www.gpmcf.org).

## LETTER FROM HOME

### BEHIND THE MASK

# Prostate cancer: It's all about screening

It was at once private and public. Last November, at the invitation of Prime Minister Ehud Olmert, 100 members of the Israeli Knesset had their prostates checked for cancer. No world leader with prostate cancer had so inspired to do this: not Emperor Akihito, not François Mitterrand, not even Desmond Tutu.

Should we cheer? Are men ably led to defeat prostate cancer?

Not really. There is no coordinated global action on prostate cancer or, indeed, on any form of cancer. The United Nations succeeded in eliminating smallpox and has made the eradication of malaria and tuberculosis part of its Millennium Development Goals. This, even as cancer kills more than malaria and tuberculosis together.

Enter an affable Scot. His goal is to eradicate cancer from Earth. Peter Boyle directs the International Agency for Research on Cancer in Lyon, France. His argument is stark. He knows that as we live longer, cancer will happen more often. He says we're heading for a tumor tsunami. He shuttles from Krakow to Beijing to Miami warning: Stop smoking now!

As Knesset members got tested in Jerusalem, Boyle spoke in Miami. His audience was 300 men and women who will not wait for the United Nations to act. They are part of Miami's Prostate Cancer Mission.

He told us that prostate cancer is unfair. It is rare in Koreans and Japanese, but common in African Americans and Austrians. What do African Americans and Austrians share that explains this? Nobody knows. We don't know why one man or one group gets prostate cancer when another does not.

He also told us that the Tyrol, one of nine Austrian federal states, uniquely gave its residents cost-free testing with prostate-specific antigen (PSA), a blood test for early detection of prostate cancer, and digital rectal examination (DRE), the test administered in the Knesset. The Tyrol also modified prostate-cancer treatments. For example, it aggressively adopted modern American standards in prostate-cancer surgery. In the past few years, Tyrol has seen a 55-percent reduction of prostate-cancer

mortality. When is the last time you heard of a 55-percent reduction in death from any cause?

Tyrol's observation parallels an American one. Last June, a study from Seattle showed a reduction of more than 60 percent in fatal prostate cancer among men who had screening tests similar to those in the Tyrol.

Tyrol and Seattle do not answer all our questions, but they provide a cause for optimism -- they argue that in at least some populations testing and modern treatments will lower prostate-cancer deaths.

Boyle said that we are ready to solve the world's prostate-cancer problem. Shortly after he spoke, we learned that rocker Dan Fogelberg had died of prostate cancer — at 56. Soon after that, word came that rocker Stephen Stills, 62, had been diagnosed at a curable stage. We teeter from fear to hope as Boyle's postulate is tested. We also look for what more we can do.

Recently, former Secretary of Health and Human Services Tommy Thompson wrote: "The candidates [for president] should address the importance of setting goals for finding [a] cure for . . . prostate cancer." Yes, but we don't need promises. We need action. It is time for a very real gesture. And so I cast my eyes back to Zion and from there up north to Washington, D.C., and I offer what a prostate surgeon can offer. So what do you say, President Bush? Will you issue an invitation as Olmert did? If you bring the prostates, I'll bring the gloves.

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Boyle's presentation  
is archived on  
[www.laprp.com](http://www.laprp.com)

