

Questions and Answers

- Stephanie: There is one question asking you if you could to please **comment about the risk of arsenic in rice**? Do you have any information about that? In rice, there has been some notification about that in general and in the media, but I don't know if you knew anything specifically about that because rice of course is grown in water.
- Dr. Wright: No, I don't, but it certainly would make sense if you're in an endemic area of arsenic and with growing rice there that it could certainly seep in and be part of it. That's something I would like to look into too.
- Stephanie: I do just want to mention for anybody who's interested in water and that connection to bladder cancer. We did a really interesting webinar on environmental risks that really specifically focused, with a researcher from the NCI, National Cancer Institute, who spent her career researching water risks for developing bladder cancer. She did a really interesting presentation for us. I encourage people to look at the bcan.org website and go to our patient insight webinars and watch the recording on the environmental risks, specifically focused on water.

- Stephanie: There's a question about Oncovite vitamins for secondary prevention, do you know anything about them and would you recommend them?
- Dr. Wright: Well, I think a multivitamin a day is a good thing, I take one myself. As far as what specific and what levels of different things in the multivitamin, interestingly our multivitamins now as opposed to 20 years ago when they started the multivitamin study, have become packed with more and more and higher levels of things. Whereas the study was more or less testing what's now a children's vitamin. So, I do think a vitamin is a good thing because it helps you get the recommended daily allowance of a number of different factors that are good for you. So, whether or not a specific type of vitamin or supplement, there's just not enough data to be able to stay that. Again, it goes with eating a well-balanced diet and getting all of your necessary supplements. Certainly there's a lot of preclinical work, meaning in testing of vitamins, where we see lots of different things that have the potential to kill a cancer cell in a test tube and those often then get put into supplements. We don't have studies to show a benefit or a risk, but I would say again, a lot of these things in moderation and I can't comment on anything specific along that line.
- Stephanie: Okay. Well, here's another one that relates with what you said about healthy eating. **Do you recommend eating certain** food for secondary prevention?
- People ask me "should I go vegan?" I don't recommend that. I Dr. Wright: don't discourage it either, but I think that for myself and what we've done in our household is trying to really get more of our fruits and vegetables, cruciferous vegetables in particular. We've done a lot more substitution of turkey for red meat. It gives you less fat in that sense too. I try not to over cook the meat if we do it steak because the overcook can lead to nitrosamines that are carcinogenic. Again, it would be very difficult to not have any sugar, I like having a donut from time to time too, but trying to really limit those simple sugars that just aren't doing a lot of good for you. It's okay to have them from time to time and I do think drinking a lot of water is beneficial to just flush those evil humors out, but in general, more fruits and vegetables. Most people don't get it and a balanced diet and limiting your simple sugars. Of course, Omega three's, more fish, those kinds of things are all good.
- Stephanie: Thank you so much. BCAN did a number of different really interesting conversations about bladder cancer. Specifically,

Bladder Cancer Risks and Prevention Dr. Jonathan Wright with Dr. Jill Hamilton-Reeves and a oncology nurse who is also a chef, Laura Pole, and our co-founder Diane Quale talking specifically about nutrition and bladder cancer. We even have recipes on our website. So, just look up the bcan.org website and look up nutrition and you'll find that page. There's a lot of really good resources on there as well to follow up with everything that Dr. Wright has said about eating a heart healthy diet, but also how you can do that with some good flavors and be a little bit healthier in some ways. So, you can certainly watch that.

- Dr. Wright: Dr. Hamilton-Reeves has done some excellent nutrition work. She's leading a big study now too that we're going to be opening here as well looking at immuno-nutrition around the time of cystectomy, bladder removal, to try to reduce complications too. So, some exciting stuff as well. Trying to bring this immuno-nutrition to the forefront and again, studying it to see if it can work.
- Stephanie: A question about the diagnostics, **what do you think about blue light for diagnostics**? Explain what it is first, but then give your thoughts on whether that's beneficial?
- Dr. Wright: So, for a standard cystoscopy we just look into the bladder with what we call white light, a normal light source. With blue light, a compound is instilled into the bladder and then you look in and you switch from the white light to a blue light and it's been shown in studies that it can pick up the carcinoma in situ better. It's been looked at for doing resections and being able to work toward doing a more complete resection. It's not available everywhere and it's not standard to do it everywhere, but certainly more and more places are using it and it's been an exciting development to have the blue light technology available. I know we're going to continue to see more and more of it. It is in the guidelines for when available to use it. So, it's an exciting development and I think we'll hear more and more and see more and more of it.
- Stephanie: There's an NIH study of 84,000 men that found that cannabis users had a 46% reduced occurrence of bladder cancer. **Do you have any information that you could comment specifically about this**?
- Dr. Wright: No, I'm actually going to go look and try to find that study. I wasn't aware of that study. It's always great to hear and be directed to other opportunities to look at. So, I do not have that to look at, but I will look into that.

Stephanie: Alcohol consumption and bladder cancer, is there any connection that you know of?

- Dr. Wright: I think alcohol in general, any excessive alcohol intake is negatively associated with many detriments to our health. There is a work that a small amount of alcohol daily may be helpful or may be healthy, but it's a slippery slope to having too much. There is certainly evidence that resveratrol, which is one of the active agents in red wine, may have anti-cancer properties, but I'll leave it at that.
- Stephanie: **Does it make sense to have your genomic profile or your genetic testing done, especially if there's no factors that would show any risk for primary cancer in the first place**? If you weren't a smoker, or you didn't have certain behaviors or live in a certain area with high arsenic content in your water.
- Dr. Wright: Yeah, that's a great question, and we're seeing a lot more genetic testing done, but at this point I would not recommend routine genetic testing for patients to look for a risk of bladder cancer. We do a lot more extensive family history asking patients when they come in and trying to identify if there may be something in the family that's passing on. So, I think one thing that individuals can do is just ask around more when you have a family reunion or just asking the parents and grandparents, did anybody else have any cancers because if there's a number of them and there's a pattern to them then that can dictate meeting with a genetic counselor and considering genetic testing. Routinely doing it, no, I would recommend against that at this point.
- Stephanie: Here's another question. "I spray painted unprotected with enamels and lacquers when I was a teenager, bladder cancer and prostate cancer were detected 40 years later. **Is there an average time lapse between exposure and symptoms?**"
- Dr. Wright: For most exposures it's, I would say on average 20 plus years for something to develop. Again, even though, as I mentioned, with these different exposures, we don't necessarily know that that's what caused the cancer in most instances. Now, doing that for two or three years or two or three summers as a teenager, is that enough to lead to a cancer developing 40 years later? Probably not, but then there are things like Agent Orange with exposure in Vietnam where it certainly was a pretty concentrated exposure time, which has been associated with prostate cancer and growing interest in whether it's associated with the development of bladder cancer as well. Unfortunately,

most instances we won't be able to figure out the etiology, but I would say in general, it's 20 plus years when we see those develop. There are exceptions, atomic bomb radiation exposures and those kind of things.

Stephanie: Okay. Well, if there aren't any additional questions, I would like to thank everybody for joining us for this program and thank you so much, Dr. Wright. This has been a wonderful resource for us and we will have this recorded and available online within a few days. I just want to thank, again, our sponsors for the patient insight webinar series. Bristol Meyers Squibb, EMD Serono and Pfizer, Ferring, Genentech, Merck and Photocure for their support. I'd like to thank everyone and remind you to please complete the survey and thank you so much, Dr. Wright.

