

Bishop Natural Cancer Report

How to Decrease the Diet and Lifestyle Risks of Bladder Cancer

Researched and Written by

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www.NaturalCancerReports.com

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Bladder Cancer – How to Decrease Diet and Lifestyle Risks

Chemicals increase the risk of bladder cancer in all people.

We are exposed to chemicals at home, at work, at play and in our food. The liver processes these chemical and changes them into water soluble chemicals so that they can be eliminated through the bladder and the urine. As these chemicals pass through the bladder some of them may damage bladder cells or damage the DNA in the bladder cells and initiates a cancer cell. If the body can not kill or remove the cancer cell it continues to grow, replicate and create a tumor. ⁱ

The goal of this report is to help you limit your exposure to known bladder cancer causing chemicals. Hopefully, by limiting your exposure to the chemicals you will decrease your risk of bladder cancer or reoccurrence of bladder cancer.

Certain foods and lifestyle may also lower the risk of bladder cancer. This report has both the good and the bad

foods and lifestyle information so you can start making changes immediately.

The recommendations in this report can usually be implemented before, during and after cancer surgery and treatments.

More aggressive dietary supplement products and other Bishop Natural Cancer Reports should be integrated under the supervision of your healthcare provider. Additional natural cancer reports and information is available at www.NaturalCancerReports.com.

Information in this report is obtained from published medical research performed by doctors, government agencies, universities, hospitals and drug companies. This information and commentary is not comprehensive and is not meant to replace the advice given to you by your doctor. Consult with your doctor before making any changes to your treatment program.

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Water Disinfectants

Chlorine, chloramine and bromine are used as a disinfectant in drinking water and pool water. Disinfectant products decrease bacterial growth and resulting diseases in water sources. When disinfectants come into contact with contamination they break down into trihalomethanes, nitrosamines. Exposure to the disinfectant byproducts of this disinfectant process increases the risk of bladder cancer.^{2 3}

When disinfectants are exposed to urine and other body chemicals they change into nitrosamines. This is a common occurrence in public swimming pools and hot tubs. Nitrosamines increase the risk of bladder cancer.⁴

We are exposed to disinfectant byproducts in our drinking water, showers⁵, baths⁶ and pools. Disinfectant byproducts are absorbed through the skin and by breathing the air above the water sources.⁷

If you have bladder cancer you should filter your home water to remove chlorine. Swimming or showering/bathing with chlorinated water increases the risk of bladder cancer 1.6 to 2.0 fold.⁸

Can't filter your bath or shower water to remove chlorine? Turn on the exhaust fan and open the bathroom door! You

will breathe in and absorb more chemicals through your lungs than you will through your skin.

If you have bladder cancer you should avoid public swimming pools and hot tubs. These disinfectant byproducts are gasses that dissolve into the air above the water. Breathing the air above the water may also increase the risk of bladder cancer. Swimmers were found to have seven times higher disinfectant byproducts in their body than people that did not swim in the pool. They also had elevated levels of damaging chemicals in their urine.⁹

Indoor swimming pools and hot tubs may provide the highest risk of bladder cancer as the gasses are trapped inside the building. Outdoor pools may be a safer option as the gasses may not be as concentrated.

If you have a private pool or hot tub and get water from a public source you should filter your water to remove disinfectants and use a UV (ultraviolet) disinfecting system to decrease bacterial growth.

If you have a private well you may not need to filter your water to remove disinfectants. But you should test your water to make sure you do not have any arsenic, another known cause of bladder cancer.¹⁰ Additional information is located in the chapter on Metals.

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National Testing Laboratories provides reasonable priced, quality water testing and analysis on many chemicals in residential and commercial water sources. [Click here to go the National Testing Laboratories website.](#)

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Dairy

A study in Europe found a higher intake of cheese indicated a “possible *increased* risk of bladder cancer.”¹¹

A study from the Netherlands found weak evidence that bladder cancer risk *decreases* with higher intake of fermented dairy products (i.e., cheese, kefir, and yogurt). Higher intake of butter may increase the risk of bladder cancer. No change in risk was found with cheese, calcium, and lactose or nonfermented dairy intake.¹²

In 2011, the medical journal *Urology* published an analysis of 14 studies on milk and dairy products in 324,241 individuals throughout the world. They found there was no significant association between milk and dairy intake and bladder cancer. Although in the United States they found higher milk intake decreased the risk of bladder cancer. In Japan they found higher dairy intake may decrease the risk of bladder cancer.¹³

Another 2011 study evaluated 19 previous studies and found high milk intake was significantly associated with decreased risk of bladder cancer. The inverse association was stronger in Asia than North America, and no association was observed in Europe.¹⁴

An evaluation of 82,002 Swedish women and men found high intake of cultured milk (sour milk and yogurt) decreased the risk of developing bladder cancer.¹⁵

In summary, dairy consumption does not appear to increase the risk of bladder cancer.

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Hair Dye

Using hair dye increases the risk of bladder cancer.¹⁶

The International Journal of Cancer published research showing women with a college degree, who used hair dye and had a genetic issue (NAT2) removing toxins had an increased risk of bladder cancer.¹⁷

The college degree issue is an interesting issue that is not modifiable. Perhaps a person with a college degree has a tendency to use more hair coloring or dyes to help hide the gray and to compete in the business world.

Another study demonstrated that hair dressers that held their jobs for 10 or more years had a significantly increased risk for bladder cancer.¹⁸

Another study indicated that hair dressers are at an increased risk of lung cancer, larynx cancer, bladder cancer and multiple myeloma.¹⁹

Another study of Chinese women that used hair dye demonstrated a slight (17%) but not significant increased risk of bladder cancer.²⁰

If you dye you hair quit. Go natural!

If you are a hair dresser you need to avoid the chemicals, dyes and fumes.

Wear gloves when dealing with chemical.

You may have to change shops if adequate ventilation is not available.

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Meat

An analysis of 20 medical research studies revealed:

- High red meat consumption increased the risk of bladder cancer by 17%
- Processed meat consumption increased the risk of bladder cancer by 10%

Compared to those people with low meat intake. These risks are even more apparent for people in the United State and Canada.²¹

Eating barbequed meats increases the risk of bladder cancer.²² Browning and blackening of meats during cooking causes the formation of heterocyclic amines (HCAs).

The NIH-AARP Diet and Health Study (NIH – National Institutes of Health; AARP – American Association of Retired Persons) evaluation of the diet in 300,933 men in the U.S. Researchers found an increased risk of bladder cancer with total dietary nitrite and nitrate plus nitrite from processed meat. Results also suggested a positive association between red meat HCAs and bladder [carcinogenesis](#).

Based on research I recommend:

1. Avoid processed meats with nitrates or nitrites in the ingredient list. This includes most lunch meat, ham, bacon and hot dogs. **Read the ingredient labels.** More and more meat processing companies are offering preservative free meats.
2. Limit the consumption of red meat to once or twice a week.
3. Do not over brown or blacken any type of meat.
4. Cook meats at lower temperatures, over lower flames or further away from flames or heat source. This will extend your cooking times but is well worth it.
5. Trim excess fat and skins from meat before cooking. To decrease burning or flames.
6. When grilling do not allow flames to touch the meat and limit the smoke. Do not breathe in the smoke. The smoke may contain the HCAs.
7. Use marinades to decrease the browning and burning of meat.
8. Do a genomic test to see if you have an issue detoxifying and safely removing HCAs and other dangerous chemicals from the body. [SmartDNA](#) Even if you have a genetic risk issue, targeted supplements, diet and lifestyle may

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lessen the potential damage to your
body.

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Metals

Arsenic,^{23 24} cadmium,²⁵ chromium, lead and nickel exposure increases the risk of bladder cancer.^{26 27 28} These metals can be found in drinking water.

Chromium (III, IV, VI) found in some water supplies is different than the safe form of chromium found in many dietary supplements.

Copper blood levels tend to be higher in patients with bladder cancer compared to people without bladder cancer.^{29 30}

Copper levels in bladder tumors are much higher compared to normal bladder tissue.³¹

Copper is a necessary nutrient. But excessive intake should be avoided if you have cancer. Copper is used by many different types of cancer tumors to grow blood vessels ([angiogenesis](#)) to support their rapid growth.^{32 33 34}

Green tea brewed with water containing copper changed the green tea and copper into damaging oxidized chemicals.³⁵ Additional information is found in the beverage section of this document.

Toxic metals can be absorbed via drinking water, through the skin via bath water, shower water, bathing and pools and via the lungs in steam from bathing and saunas.

National Testing Laboratories provides reasonable priced, extensive quality water testing and analysis on many chemicals in residential and commercial water sources. [Click here to go the National Testing Laboratories website.](#) Local laboratories rarely test for the same number of toxins in water.

If your water has the toxic metals copper or lead your faucets and or the pipes in your house are probably the source of the contamination. You will need to install a carbon based filter at the outlet source, i.e., the faucet, the refrigerator, the shower head or tub faucet.

Check to see if you have copper pipes in your home. Go out to the hot water tank. If you have white or gray plastic pipes going into your home you probably don't have copper pipes. If you have copper pipes going into the home you probably have copper pipes.

If you have copper pipes and you have not used the water for more than an hour turn on the water long enough to flush the standing water out of the pipes. This may take a few minutes. Wasting water is better than exposing you to the toxic metals.

If you have gray pipes you may have brass elbow fixtures. If you have not used the water for more than an hour turn on the water long enough to flush the standing water out of the pipes. This

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may take a few minutes. Wasting water is better than exposing you to the toxic metals.

If you have white plastic water pipes you may only have to be concerned about your brass faucets.

Brass faucets can be a source of metal contaminates. Brass contains copper, zinc, tin and lead. Water sitting in the faucet will leach out the metals into the water. **Turn on the hot and cold water for a just a moment to flush out the contaminated water before collecting or using the water. Do not use the first portion of the water that is setting in the faucet as it may be the most contaminated source of metals.**

Do not use KDF filters. They contain brass (copper, zinc, tin and lead shavings). I have measured higher levels of copper after water has gone through a KDF filter.

If your water has toxic arsenic, cadmium, chromium, or nickel but no copper or lead you should install a filter for your whole house. Your local filter company can guide your decisions.

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Beverages

Consumption of wine and liquor/spirits decreased the risk of bladder cancer by 51% and 35% respectively. Consumption of beer did not affect the risk of bladder cancer.

Consumption of water, fruit juice, green tea and black tea did not affect the risk of bladder cancer.

Daily consumption of milk decreased the risk of bladder cancer by 51%.³⁶

A study of 49,566 men and 54,874 women in Japan demonstrated coffee slightly increased the risk of bladder cancer in the men.³⁷ A study in California found coffee consumption was associated with an increased risk of bladder cancer.³⁸

Numerous laboratory studies demonstrate green tea extracts stop bladder cancer cell growth and even kill bladder cells. Additional dietary supplement information is available in a separate report. Dietary consumption of green tea does not decrease the risk of bladder cancer and in some studies may increase the risk. Brewing the green tea with unfiltered water, water high in copper from copper water pipes and brass faucets, may be the problem. Researchers in India found green tea moves damaging copper into cells. The higher levels of copper in the cells

caused oxidative damage to the DNA. The damaged DNA increased the risk of bladder cancer.³⁹

Use carbon filters, to remove copper and other metals from your drinking water or consume bottled water proven to be free of copper!

Most water companies can provide an assay of the contaminants in their water.

Brass faucets are typically made of copper, tin, lead and zinc. The longer water sits in the metal the higher the amount of toxic heavy metals leached into the water.

The longer the water sits in the metal pipes the higher the amount of copper or other metal contamination.

If you must drink or bathe in water that comes through brass faucets or copper pipes that has been sitting for more than a couple of hours, flush the pipes before using the water. Turn the hot and or cold faucet on and let the water run through long enough to get fresh water.

Additional water information is found in the Metals section of this report.

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Olive Oil

In one study olive oil appears to decrease the risk of bladder cancer. ⁴⁰

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Vegetables and Fruit

Consumption of cruciferous vegetables (CVs) is inversely correlated to many human diseases including cancer (breast, lung, and bladder⁴¹), diabetes, and cardiovascular and neurological disease.⁴²

Extracts from cruciferous vegetables and garlic are being used in research to treat bladder cancer.^{43 44 45} Additional information is available in dietary supplement report available through www.NaturalCancerReports.com.

Increased vegetable and fruit intake provided a modest decrease in the risk of bladder cancer.⁴⁶ While increased consumption of green, orange and yellow vegetables decreases the risk of bladder cancer by about 50%.⁴⁷

Another study published by the medical journal Urology, states carrots, cruciferous vegetables and fruit decreases the risk of bladder cancer.⁴⁸

Agents associated with decreased risk of bladder cancer include carrots, selenium, cruciferous vegetables, and fruits.

Sulforaphane, a chemical found in broccoli, decreased the development of bladder cancer in human bladder cells grown in a laboratory test and exposed

to a known cancer causing toxin.⁴⁹

[Sulforaphane is available as a dietary supplement.](#)

Generally dark colored fruits and vegetables contain more antioxidants than light colored fruits and vegetables and may provide better cancer protection. Dark colored berries contain more antioxidants than apples and bananas. Sweet potatoes contain more antioxidants than white potatoes.

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Salt

A European evaluation of 19,732 patients with cancer found: Compared with never adding salt at the table, always or often adding salt at the table was associated with an increased risk of stomach, lung, testicular and bladder cancer. Processed meat was significantly related to the risk of the stomach, colon, rectum, pancreas, lung, prostate, testis, kidney and bladder cancer and leukemia.⁵⁰

Processed meat is high in salt (sodium) and preservatives (nitrates and nitrites).

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Smoking

Smoking increases the risk of bladder cancer.^{51 52 53}

If you smoke, you must stop!

**If you are exposed to passive smoke
you must remove the source or
remove yourself!**

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Vitamin D

A low intake of vitamin D is related to an increased risk of bladder cancer.⁵⁴

Low blood levels of vitamin D3 increases the risk of bladder cancer.⁵⁵

The risk of bladder cancer decreases in populations that live closer to the equator and increases in populations that live further North and South of the equator.⁵⁶

The vitamin D polymorphism, VDR Fok-I, increases the risk of bladder cancer.⁵⁷ Genetic VDR polymorphism test is available through [Smart DNA](#). Please contact [Flourish Pharmacy](#) if interested in doing a Smart DNA test.

In simple terms vitamin D3 attaches to cells in the body and controls abnormal cell growth. A vitamin D polymorphism does not allow vitamin D to attach to the receptor or does not allow the receptor to work properly and increases the risk of a cancer cell growth into a tumor.

Low vitamin D3 levels increase the risk of most cancers, diabetes I & II, depression, Alzheimer's disease, Autism Spectrum Disorder, autoimmune diseases, heart attacks and strokes.

Ask your doctor for a 25-Hydroxyvitamin D3 blood test. Normal vitamin D3 levels range from 30 to 100 ng/ml. An optimal level is 65 ng/ml.

[Flourish Pharmacy offers a finger stick blood drop test kit for \\$75.](#) Prick your finger, place drops of blood on a test pad and mail the test pad to the laboratory. You will receive your results typically within two weeks.

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References

¹ J Urol. 2006 Nov;176(5):1914-20. Chemoprevention for bladder cancer. Busby JE, Kamat AM. Department of Urology, University of Texas M. D. Anderson Cancer Center, Houston, Texas 77030-4009, USA.

² Environ Health Perspect. 2010 Nov;118(11):1523-30. What's in the pool? A comprehensive identification of disinfection by-products and assessment of mutagenicity of chlorinated and brominated swimming pool water. Richardson SD, DeMarini DM, Kogevinas M, Fernandez P, Marco E, Lourencetti C, Ballesté C, Heederik D, Meliefste K, McKague AB, Marcos R, Font-Ribera L, Grimalt JO, Villanueva CM. National Exposure Research Laboratory, U.S. Environmental Protection Agency, Athens, Georgia 30606, USA. richardson.susan@epa.gov

³ J Water Health. 2009 Jun;7(2):185-207. Health impacts of long-term exposure to disinfection by-products in drinking water in Europe: HIWATE. Nieuwenhuijsen MJ, Smith R, et. al., Centre for research in Environmental, Epidemiology (CREAL), Parc de Recerca Biomèdica de Barcelona-PRBB, Barcelona, Spain.

⁴ Environ Sci Technol. 2008 Feb 15;42(4):1032-7. Nitrosamine carcinogens also swim in chlorinated pools. Walse SS, Mitch WA. Department of Chemical Engineering, Mason Laboratory 313b, Yale University, 9 Hillhouse Avenue, New Haven, Connecticut 06520, USA.

⁵ Occup Environ Med. 2006 Apr;63(4):273-7. Assessment of lifetime exposure to trihalomethanes through different routes. Villanueva CM, Cantor KP, Grimalt JO, et. al., Respiratory and Environmental Health Research Unit, Institut Municipal d'Investigació Mèdica (IMIM), Barcelona,

⁶ Environ Health Perspect. 2010 Nov;118(11):1523-30. What's in the pool? A comprehensive identification of disinfection by-products and assessment of mutagenicity of chlorinated and brominated swimming pool water. Richardson SD, DeMarini DM, Kogevinas M, et. al., National Exposure Research Laboratory, U.S. Environmental Protection Agency, Athens, Georgia 30606, USA.

⁷ Mutat Res. 2007 Nov-Dec;636(1-3):178-242. Occurrence, genotoxicity, and carcinogenicity of regulated and emerging disinfection by-products in drinking water: a review and roadmap for research.

Richardson SD, Plewa MJ, Wagner ED, Schoeny R, Demarini DM. National Exposure Research Laboratory, US Environmental Protection Agency, Athens, GA 30605, USA. richardson.susan@epa.gov

⁸ Environ Sci Technol. 2007 Jan 15;41(2):363-72. Drowning in disinfection byproducts? Assessing swimming pool water. Zwiener C, Richardson SD, DeMarini DM, et. al., Engler-Bunte-Institute, Universitaet Karlsruhe, Karlsruhe, Germany.

⁹ Environ Health Perspect. 2010 Nov;118(11):1531-7. Genotoxic effects in swimmers exposed to disinfection by-products in indoor swimming pools. Kogevinas M, Villanueva CM, Font-Ribera L, et. al., Centre for Research in Environmental Epidemiology, Barcelona, Spain.

¹⁰ Int J Environ Health Res. 2011 Oct 24. Cancer incidence and pattern of arsenic concentration in drinking water wells in Córdoba, Argentina. Aballay LR, Díaz MD, Francisca FM, Muñoz SE. School of Nutrition, Facultad de Ciencias Médicas, Universidad Nacional de Córdoba, Enrique Barros esq. Enfermera Gordillo, Ciudad Universitaria, Córdoba , 5000 , Argentina.

¹¹ Eur J Cancer. 2011 Feb;47(3):436-42 Consumption of animal products, olive oil and dietary fat and results from the Belgian case-control study on bladder cancer risk. Brinkman MT, Buntinx F, Kellen E, Van Dongen MC, Dagnelie PC, Muls E, Zeegers MP. Department of General Practice, Katholieke Universiteit Leuven, Comprehensive Cancer Institute Limburg, LIKAS, Leuven, Belgium.

¹² Am J Epidemiol. 2010 Feb 15;171(4):436-46. Dairy intake and the risk of bladder cancer in the Netherlands Cohort Study on Diet and Cancer. Keszei AP, Schouten LJ, Goldbohm RA, van den Brandt PA. Department of Epidemiology, Maastricht University, Maastricht, the Netherlands.

¹³ Urology. 2011 Dec;78(6):1298-305. Milk and Dairy Consumption and Risk of Bladder Cancer: A Meta-analysis. Li F, An SL, Zhou Y, et. al., Department of Urology, Nanfang Hospital, Southern Medical University, Guangzhou, Guangdong, China.

¹⁴ Nutr Cancer. 2011 Nov;63(8):1263-71. Milk consumption and bladder cancer risk: a meta-analysis of published epidemiological studies.

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Mao QQ, Dai Y, Lin YW, et. al., Department of Urology, The First Affiliated Hospital, School of Medicine, Zhejiang University, Hangzhou, Zhejiang Province, China.

¹⁵ Am J Clin Nutr. 2008 Oct;88(4):1083-7. Cultured milk, yogurt, and dairy intake in relation to bladder cancer risk in a prospective study of Swedish women and men. Larsson SC, Andersson SO, Johansson JE, Wolk A. Division of Nutritional Epidemiology, Karolinska Institute, Stockholm, Sweden.

¹⁶ Asian Pac J Cancer Prev. 2010;11(3):601-6. Prominent bladder cancer risk factors in Iran. Shakhssalim N, Hosseini SY, et. al., Urology and Nephrology Research Center (UNRC), Shahid Labbafinejad Medical Center, Shahid Beheshti University, M.C. (SBMU), Tehran, I.R. Iran.

¹⁷ Int J Cancer. 2011 Dec 15;129(12):2894-904. doi: 10.1002/ijc.26245. Hair dye use and risk of bladder cancer in the New England bladder cancer study. Koutros S, Silverman DT, Baris D, et. al., Department of Health and Human Services, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA.

¹⁸ Occup Environ Med. 2010 May;67(5):351-8. Bladder cancer among hairdressers: a meta-analysis. Harling M, Schablon A, Schedlbauer G, Dulon M, Nienhaus A. Institution for Statutory Accident Insurance and Prevention in the Health and Welfare Services, Department of Occupational Health Research, Pappelallee 35/37, Hamburg 22089, Germany

¹⁹ Int J Epidemiol. 2009 Dec;38(6):1512-31. Risk of cancer among hairdressers and related workers: a meta-analysis. Takkouche B, Regueira-Méndez C, Montes-Martínez A. Department of Preventive Medicine, University of Santiago de Compostela, Santiago de Compostela, Spain.

²⁰ Cancer Sci. 2009 Jun;100(6):1088-91. Personal use of hair dye and cancer risk in a prospective cohort of Chinese women. Mendelsohn JB, Li QZ, Ji BT, et. al., Division of Cancer Epidemiology and Genetics, National Cancer Institute (NCI), National Institutes of Health, Bethesda, MD, USA.

²¹ Med Oncol. 2011 May 24. Meat intake and risk of bladder cancer: a meta-analysis. Wang C, Jiang H. Department of Urology, The First Affiliated Hospital,

School of Medicine, Zhejiang University, Qingchun Road 79, Hangzhou, 310003, Zhejiang Province, China.

²² Urology. 2010 Feb;75(2):340-6. Epub 2009 Oct 12. Evidence-based principles of bladder cancer and diet. Silberstein JL, Parsons JK. Division of Urology, Department of Surgery, University of California, San Diego Medical Center, San Diego, CA 92103-8897, USA.

²³ Rev Environ Contam Toxicol. 2008;196:123-46. Managing hazardous pollutants in Chile: arsenic. Sancha AM, O'Ryan R. Civil Engineering Department, University of Chile, Blanco Encalada 2002, Santiago, Chile.

²⁴ Am J Epidemiol. 2000 Mar 15;151(6):554-65. Respiratory cancer in a cohort of copper smelter workers: results from more than 50 years of follow-up. Lubin JH, Pottern LM, Stone BJ, Fraumeni JF Jr. Division of Cancer Epidemiology and Genetics, National Cancer Institute, Bethesda, MD, USA.

²⁵ Int J Occup Environ Health. 2007 Apr-Jun;13(2):202-12. Cadmium-induced cancers in animals and in humans. Huff J, Lunn RM, Waalkes MP, et. al., National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27514, USA.

²⁶ BMC Vet Res. 2009 Jul 18;5:24. Trace metals and over-expression of metallothioneins in bladder tumoral lesions: a case-control study.

Amaral AF, Cymbron T, Gärtner F, et. al., Spanish National Cancer Research Centre (CNIO), Genetic and Molecular Epidemiology Group, Madrid, Spain.

²⁷ J Environ Pathol Toxicol Oncol. 2000;19(3):281-6. Mechanisms of arsenic carcinogenicity: genetic or epigenetic mechanisms? Simeonova PP, Luster MI. Toxicology and Molecular Biology Branch, Health Effects Laboratory Division, National Institute for Occupational Safety and Health, Morgantown, West Virginia 26505-2888, USA.

²⁸ Actas Urol Esp. 2011 Aug 5. Hexavalent chromium and bladder cancer risk. [Article in English, Spanish] Stamatiou K. Departamento de Cirugía y Urología, Hospital General de Tebas, Tebas, Grecia.

²⁹ Int Urol Nephrol. 2010 Mar;42(1):89-93. The comparative study of serum iron, copper, and zinc

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levels between bladder cancer patients and a control group. Mazdak H, Yazdekhashti F, Movahedian A, et. al., Isfahan University of Medical Sciences, Hezar Jarib Street, Isfahan, Iran.

³⁰ Hinyokika Kiyō. 1985 Aug;31(8):1299-316.

[Serum copper and zinc levels in patients with malignant neoplasm of the urogenital tract].

[Article in Japanese] Sanada S, Ogura K, Kiriya T, Yoshida O.

³¹ Cancer. 1983 Sep 1;52(5):868-72. Copper and zinc levels in normal and malignant tissues. Margalioth EJ, Schenker JG, Chevion M.

³² Curr Med Chem. 2010;17(25):2685-98. Turning tumor-promoting copper into an anti-cancer weapon via high-throughput chemistry. Wang F, Jiao P, Qi M, et. al., Shandong University, Jinan, China.

³³ Dalton Trans. 2010 Sep 7;39(33):7625-36.

Bioinorganic aspects of angiogenesis. D'Andrea LD, Romanelli A, Di Stasi R, Pedone C. Istituto di Biostrutture e Bioimmagini, CNR, via Mezzocannone 16, Napoli, Italy.

³⁴ Curr Med Chem. 2009;16(10):1304-14.

Role of copper in angiogenesis and its medicinal implications. Xie H, Kang YJ. Division of Stem Cell and Tissue Engineering, State Key Laboratory of Biotherapy, West China Hospital, Sichuan University, Chengdu, Sichuan 610041, P.R. China.

³⁵ Phytother Res. 2003 Apr;17(4):358-63.

DNA degradation by water extract of green tea in the presence of copper ions: implications for anticancer properties. Malik A, Azam S, Hadi N, Hadi SM. Department of Biochemistry, Faculty of Life Science, AMU, Aligarh, India.

³⁶ Int J Cancer. 2010 Aug 1;127(3):638-45.

Fluid intake and the risk of bladder cancer: results from the South and East China case-control study on bladder cancer. Hemelt M, Hu Z, Zhong Z, Xie LP, et. al., Unit of Genetic Epidemiology, Department of Public Health, Epidemiology and Biostatistics, University of Birmingham, Birmingham, United Kingdom.

³⁷ Cancer Sci. 2009 Feb;100(2):294-91.

Coffee, green tea, and caffeine consumption and subsequent risk of bladder cancer in relation to smoking status: a prospective study in Japan.

Kurahashi N, Inoue M, Iwasaki M, Sasazuki S, Tsugane S; Japan Public Health Center (JPHC) Study Group. Collaborators (102) Epidemiology and Prevention Division, Research Center for Cancer Prevention and Screening, National Cancer Center, 5-1-1 Tsukiji, Chuo-ku, Tokyo, Japan.

³⁸ J Environ Pathol Toxicol Oncol. 1992 Sep-Oct;11(5-6):303-7. Epidemiological factors of cancer in California. Moran EM. World Institute of Ecology, University of California, Irvine.

³⁹ Phytother Res. 2003 Apr;17(4):358-63.

DNA degradation by water extract of green tea in the presence of copper ions: implications for anticancer properties. Malik A, Azam S, Hadi N, Hadi SM. Department of Biochemistry, Faculty of Life Science, AMU, Aligarh, India.

⁴⁰ Eur J Cancer. 2011 Feb;47(3):436-42. Consumption of animal products, olive oil and dietary fat and results from the Belgian case-control study on bladder cancer risk. Brinkman MT, Buntinx F, et. al., Department of General Practice, Katholieke Universiteit Leuven, Comprehensive Cancer Institute Limburg, LIKAS, Leuven, Belgium.

⁴¹ Cancer Epidemiol Biomarkers Prev. 2010 Jul;19(7):1806-11. Intake of cruciferous vegetables modifies bladder cancer survival. Tang L, Zirpoli GR, Guru K, et. al., Department of Cancer Prevention and Control, Roswell Park Cancer Institute, Elm and Carlton Streets, Carlton House Rm 365, Buffalo, NY 14263, USA.

⁴² J Proteome Res. 2011 Oct 7;10(10):4513-2. Identification of human urinary biomarkers of cruciferous vegetable consumption by metabonomic profiling. Edmands WM, Beckonert OP, et. al., Biomolecular Medicine, Department of Surgery and Cancer, Faculty of Medicine, Imperial College London, South Kensington, London SW7 2AZ, United Kingdom.

⁴³ J Biol Chem. 2011 Sep 16;286(37):32259-67. Allyl isothiocyanate arrests cancer cells in mitosis, and mitotic arrest in turn leads to apoptosis via Bcl-2 protein phosphorylation. Geng F, Tang L, Li Y, et. al., Department of Cancer Prevention and Control, California Institute of Technology, Pasadena, California 91125, USA.

Bladder Cancer – How to Decrease Diet and Lifestyle Risks

⁴⁴ Mol Med Report. 2011 Jan-Feb;4(1):9-16. doi: 10.3892/mmr.2010.380. Identification of a novel function of Id-1 in mediating the anticancer responses of SAMC, a water-soluble garlic derivative, in human bladder cancer cells. Hu H, Zhang XP, Wang YL, et. al., Department of Urology, Peking University People's Hospital, Peking University Health Science Center, Beijing, PR China.

⁴⁵ Carcinogenesis. 2010 Dec;31(12):2105-10. Epub 2010 Oct 1.

Allyl isothiocyanate-rich mustard seed powder inhibits bladder cancer growth and muscle invasion. Bhattacharya A, Li Y, Wade KL, et. al., Department of Cancer Prevention and Control, Roswell Park Cancer Institute, Buffalo, NY 14263, USA.

⁴⁶ Int J Cancer. 2011 Jun 15;128(12):2971-9. doi: 10.1002/ijc.25636. Variety in vegetable and fruit consumption and risk of bladder cancer in the European Prospective Investigation into Cancer and Nutrition. Büchner FL, Bueno-de-Mesquita HB, et. al., The National Institute for Public Health and the Environment, RIVM, Bilthoven, The Netherlands.

⁴⁷ Int J Urol. 2004 Jan;11(1):11-9. Foods and beverages in relation to urothelial cancer: case-control study in Japan. Wakai K, Hirose K, Takezaki T, et. al., Department of Preventive Medicine/Biostatistics and Medical Decision Making, Nagoya University Graduate School of Medicine, Nagoya, Japan.

⁴⁸ Urology. 2010 Feb;75(2):340-6. Epub 2009 Oct 12. Evidence-based principles of bladder cancer and diet. Silberstein JL, Parsons JK. Division of Urology, Department of Surgery, University of California, San Diego Medical Center, San Diego, CA 92103-8897, USA.

⁴⁹ Carcinogenesis. 2010 Nov;31(11):1999-2003. Sulforaphane inhibits 4-aminobiphenyl-induced DNA damage in bladder cells and tissues. Ding Y, Paonessa JD, Randall KL, et. al., Department of Cancer Prevention and Control, Roswell Park Cancer Institute, Buffalo, NY 14263, USA.

⁵⁰ Eur J Cancer Prev. 2011 Mar;20(2):132-9. Salt, processed meat and the risk of cancer.

Hu J, La Vecchia C, Morrison H, Negri E, Mery L; Canadian Cancer Registries Epidemiology Research Group.

⁵¹ Dermatoendocrinol. 2009 Jan;1(1):17-24.

How strong is the evidence that solar ultraviolet B and vitamin D reduce the risk of cancer?: An examination using Hill's criteria for causality. Grant WB. Sunlight Nutrition and Health Research Center (SUNARC); San Francisco, California USA.

⁵² Cancer Sci. 2009 Feb;100(2):294-91.

Coffee, green tea, and caffeine consumption and subsequent risk of bladder cancer in relation to smoking status: a prospective study in Japan. Kurahashi N, Inoue M, Iwasaki M, Sasazuki S, Tsugane S; Japan Public Health Center (JPHC) Study Group. Collaborators (102) Epidemiology and Prevention Division, Research Center for Cancer Prevention and Screening, National Cancer Center, 5-1-1 Tsukiji, Chuo-ku, Tokyo, Japan.

⁵³ Eur J Epidemiol. 2010 Jul;25(7):491-500. Epub 2010 Jun 18. CYP1A2 polymorphisms, occupational and environmental exposures and risk of bladder cancer. Pavanello S, Mastrangelo G, Placidi D, et. al., Occupational Health Section, Department of Environmental Medicine and Public Health, University of Padova, Via Giustiniani 2, 35128, Padova, Italy.

⁵⁴ Cancer Causes Control. 2011 Mar;22(3):469-78. Dietary intake of micronutrients and the risk of developing bladder cancer: results from the Belgian case-control study on bladder cancer risk. Brinkman MT, Buntinx F, Kellen E, et. al., Department of General Practice, Katholieke Universiteit Leuven, Comprehensive Cancer Institute Limburg (LIKAS), Leuven, Belgium.

⁵⁵ Cancer Res. 2010 Nov 15;70(22):9218-23. Serum vitamin D and risk of bladder cancer. Mondul AM, Weinstein SJ, Männistö S, et. al., Nutritional Epidemiology Branch, Division of Cancer Epidemiology and Genetics, National Cancer Institute, NIH, Department of Health and Human Services, Bethesda, Maryland, USA.

⁵⁶ Am J Prev Med. 2010 Mar;38(3):296-302. Ultraviolet B irradiance and incidence rates of bladder cancer in 174 countries. Mohr SB, Garland CF, Gorham ED, et. al., Department of Family and Preventive Medicine, University of California-San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0631, USA.

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⁵⁷ BJU Int. 2007 Apr;99(4):933-7. Association of vitamin-D receptor (Fok-I) gene polymorphism with bladder cancer in an Indian population. Mittal RD, Manchanda PK, Bhat S, Bid HK. Sanjay Gandhi PGIMS, Urology and Renal Transplantation, Lucknow, Uttar Pradesh, India.