



Reducing Your Risk of

Prostate Cancer

“How common is prostate cancer?”

Prostate cancer is the most common cancer among men in the United States after skin cancer. More than 200,000 new cases occur annually. It is the second leading cause of cancer deaths in men, after lung cancer. Roughly 27,000 deaths are attributed to prostate cancer each year.

“At what age do men usually develop prostate cancer?”

Your risk of prostate cancer increases with age. Most men with the disease are older than 65 and the median age at diagnosis is 72 years. The disease develops slowly and, in many cases, it causes no symptoms and remains undetected.

“Are particular races or nationalities more at risk than others?”

Prostate cancer is common in North America and northwestern Europe. It is rare in Asia and South America. African Americans have the highest prostate cancer incidence rates in the world. Studies suggest that 5 to 10 percent of cancer cases may be due to a genetic predisposition.

“Does early detection make a difference?”

Yes. Early detection and treatment may offer long-term survival or a cure. Survival rates are based on the stage of the cancer at diagnosis and the treatment course. The 5-year survival rate for patients whose tumors are diagnosed before the cancer has spread is near 100 percent. More than 90 percent of prostate cancers are detected at this local or regional stage. Two tests used to detect prostate cancer are a blood test for prostate-specific antigen (PSA), and a digital rectal examination. If either test suggests a problem, your doctor may send you to a urologist for an ultrasound examination. A biopsy may then be performed to detect cancer cells.

“How can I reduce my risk of prostate cancer?”

While age, ethnicity and family history are the greatest risk factors for prostate cancer, experts point to several diet-related factors that can modify your risk. There is probable evidence that foods containing lycopene (most common in tomatoes) and selenium (found in Brazil nuts, seafood, meat and poultry) decrease prostate cancer risk. Diets high in calcium (1,500 mg or more daily) probably increase risk.

What Is Prostate Cancer?

Prostate cancer is a malignant tumor in the prostate, the male gland that produces semen. The prostate gland is about the size of a walnut. It is attached to the bottom of the bladder and surrounds the urethra. The growth and function of the prostate are controlled by male hormones, such as testosterone. Prostate cancer is often slow-growing, and is sometimes present for years before symptoms appear. The five-year survival rate for patients with early diagnosis and treatment is close to 100 percent.

Causes

A person's age, ethnicity and family history are all risk factors that cannot be changed. Research is underway to clarify how risk linked to hormone levels, including testosterone and insulin-like growth factor (IGF), may be changeable. Current research suggests that you can reduce your chances of developing prostate cancer by making healthy dietary choices.

A Diet to Lower Cancer Risk

Making diet and lifestyle changes can reduce your risk of cancer. Research shows that eating a mostly plant-based diet (rich in vegetables, fruits, whole grains and beans), maintaining a healthy weight and getting regular physical activity lowers risk of prostate and other cancers.

Experts suggest that some food choices may be linked to prostate cancer. Foods that *probably offer protection against prostate cancer include*:

- Foods containing lycopene, an antioxidant. Lycopene is most commonly found in tomatoes and tomato products, and fruits such as red or pink grapefruit, watermelon and guava. (Lycopene supplements don't necessarily provide the same health protection benefits as lycopene from food.)
- Foods containing selenium. This mineral is plentiful in Brazil nuts (just 3 nuts supply the

safe daily maximum for selenium), and is also found in seafood, meat and poultry.

Foods that are *a probable cause of prostate cancer are*:

- Foods high in calcium. However, as the evidence of cancer risk and diets containing cow's milk, cheese and other foods high in calcium seems to be in conflict with findings on other types of cancer, there is no recommendation to change how much you consume. (Avoid foods highly fortified with calcium or supplements that give you more calcium than you need. Health experts recommend 1,000 mg of calcium a day; 1,200 mg if you're over 50; and 1,300 mg if you're 9 to 18 years old.

Risk Factors

Any man can get prostate cancer, but some men are at higher risk if these factors apply: Being over 50 years of age, being African-American, having a close relative (father, brother) with prostate cancer.

Screening Tests

Be sure to see your doctor right away if you experience any of the symptoms of prostate trouble. You may not have cancer, but if you do, the sooner it is detected, the better your chances of a successful recovery.

Annual PSA blood test beginning at age 50. The prostate-specific antigen blood test detects a protein made by the prostate gland. Higher levels of PSA indicate changes in the prostate, but not necessarily cancer. An elevated PSA level could also be due to infection or an enlarged prostate gland.

Annual digital rectal examination (DRE) beginning at age 50. The DRE is an effective, inexpensive way to detect cancer. It is one many men forego because of embarrassment. However, it is quick, painless and can be a lifesaver.

Men at higher risk, especially black Americans, should talk to their doctor about beginning these yearly tests at age 45.

Frequently Asked Questions

“Do selenium and vitamin E supplements prevent prostate cancer?”

There is strong evidence that selenium probably protects against prostate cancer. Selenium is found in many foods, including: Brazil nuts, whole grains, sunflower seeds, wheat germ, seafood, poultry and lean meats. If you eat a balanced diet, a selenium supplement is probably unnecessary. Furthermore, high intake levels of selenium can lead to toxicity. Emerging research will continue to inform us on recommended intake levels. The evidence supporting a protective effect of vitamin E is limited and inconclusive.

“What about tomatoes?”

The majority of studies on foods that contain the antioxidant lycopene—including tomatoes and tomato products—suggests that they probably protect against prostate cancer. Tomatoes appear to help prevent and slow the growth of the cancer, especially when they are processed into products

such as sauce, stewed tomatoes and tomato soup. Consuming tomatoes and tomato products as part of a diet high in vegetables and fruits is recommended. Remember that eating a variety of vegetables and fruits is most effective for cancer protection because the different phytochemicals in these foods work together to protect health.

“Are soy foods beneficial?”

Soy—a member of the legume or bean family—has shown cancer-fighting promise in some studies. Researchers speculate that phytochemicals in soy known as isoflavones may offer prostate cancer protection. However, the evidence linking the two is limited and inconsistent, and there is no consensus that soy protects against prostate cancer. Soy foods (tofu, tempeh, soy milk, miso) can be incorporated as part of a balanced diet, providing a good source of protein and other nutrients.

Be Alert to Possible Symptoms

The following symptoms do not necessarily mean you have cancer, but see a doctor if you notice any of them:

- Any changes in urinary habits
- Need to urinate frequently, especially at night
- Sense of urgency to urinate, but difficulty starting
- Painful urination
- Inability to urinate or weak or interrupted flow
- Blood in the urine
- Continuing pain in the lower back, pelvis, or upper thighs



AICR Guidelines for Cancer Prevention

- Choose mostly plant foods, limit red meat and avoid processed meat.
- Be physically active every day in any way for 30 minutes or more.
- Aim to be a healthy weight throughout life.

*And always remember—
do not smoke or chew tobacco.*

For More Information

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