

Nutrition and Prostate Health

A Research Review

by

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Prostate cancer is the most common cancer in North American men and as well as in other Western countries. As reported in the Journal of the National Cancer Institute, as much as 75% of prostate cancer may be avoidable if men followed more prudent nutritional practices.⁽¹⁾ In Japan the incidence of prostate cancer is 80% lower than in North America and much of the Western world. Low rates are also found in Africa and Eastern Europe. Migration studies reveal that when men relocate from a low- to high-risk region of the world and abandon their traditional dietary patterns, their incidence of prostate cancer rises to approach that of North American men.^(2,3) In recent years a number of specific nutrients have been identified that are linked to prostate cancer and the age-related changes that lead to prostate enlargement (benign prostatic hyperplasia); which affects 50-60% of men by age 40-59 and 80% of men by the age 80. Thus, nutritional support for the prostate gland is an extremely important aspect of preserving the health and function of this gland and in the prevention and treatment of prostate disease.^(4,5)

Age-Related Changes To The Prostate

As men age (by age 40), the prostate gland tends to accelerate the rate at which it converts testosterone to dihydrotestosterone (DHT). The build up of DHT in prostate cells stimulates them to divide and multiply at a faster rate. This results in more prostate cells (more prostate mass) leading to prostate enlargement and other problems. As the prostate enlarges under the direction of DHT, men often notice symptoms such as reduced strength of their urine stream, more frequent urination, repeated night time urination, bladder urgency and related symptoms.⁽⁵⁾ More rapid cell division rates also increase the chances of forming cancerous DNA mutations in the genetic blueprints of the cell. In fact DHT is known to promote the spread of existing prostate cancer. Amazingly, males born without the genetic ability to synthesize DHT are virtually immune from ever developing prostate cancer in their lifetime. There is no question that DHT is linked to prostate cancer and prostate enlargement in a number of ways.^(6,7)

The exciting news for men is that there are specific nutrients and natural bioactive compounds that are available in foods and in certain supplement products that have been shown to block the conversion of testosterone to DHT and exert other protective effects within the prostate gland. As such, the consumption of these products at the correct dosage and standardized grade have been shown to be effective in the treatment of enlarged prostate problems and some of these natural agents mentioned below are associated with the prevention of prostate cancer (and more recently with prostate cancer treatment support).⁽⁸⁾

Nutrients That Block The Build Up Of DHT

There are several known natural agents that can effectively block the build up of DHT within the prostate gland. The primary ones include the standardized grade of Saw Palmetto, Pygeum Africanum, Beta-sitosterol, Soy isoflavones and Stinging Nettle (*urtica dioica*).

Numerous studies have shown that the fatty acids and sterols present in Saw Palmetto block the build up of DHT and exert other favourable effects on prostate health. Saw Palmetto extract is a proven therapy for enlarged prostate problems and has recently been used in trials with prostate cancer patients, yielding impressive results in helping to contain the disease.

Pygeum Africanum contains active compounds known as triterpenes, which have also been shown to be effective in the treatment of enlarged prostate problems in numerous human studies.

In recent years, prestigious medical journals such as the Lancet and the British Journal of Urology have published research papers demonstrating that Beta-sitosterol (found in saw palmetto, soy products and other in plant foods) is also extremely effective in reversing benign prostatic hyperplasia (prostate enlargement)

Soy products and soy extract contain several important isoflavones; the most important of which include genistein and diadzein. These isoflavones directly inhibit the build up of DHT and exhibit many other biological properties that are related to the prevention of prostate disease. As previously stated, in Japan, where soy isoflavone intake is high (avg. 50 mg per day), prostate cancer incidence is 80% lower than in North America.

The herbal agent Stinging Nettle also enjoys a reputation in Europe as natural agent that has consistently been shown to reverse trends of prostate enlargement. ⁽⁹⁻²⁹⁾

Prostate Antioxidants

Studies indicate that prostate cancer may result from free radical damage to healthy prostate cells, converting them into cancer cells. Evidence is very strong to suggest that the antioxidant lycopene (derived from tomatoes) plays an essential role in protecting prostate cells from free radical damage. Human studies such as the Physicians' Health Study and the Health Professionals' Follow Up Study have shown a striking correlation between higher lycopene blood levels and/or intake levels, and a marked reduction in prostate cancer development (as much as a 40% reduction). Experimental evidence also supports this protective effect of lycopene.

Soy isoflavones (mentioned earlier in this review) are also known to provide antioxidant protection to the prostate gland and soy intake is highly correlated with reduced prostate cancer development in epidemiological and experimental studies.

More recently, there has been the suggestion that vitamin E and selenium supplementation may provide antioxidant support to the prostate, further helping to reduce prostate cancer risk. ^(30-36,3,6)

Protecting Your Prostate

To help combat the age-related changes to the prostate gland that lead to problems of enlargement and the multi-step processes involved in prostate cancer development, all men should practice prudent nutritional practices throughout their lifetime. Due to the changes that occur at around age 40, men this age and older should consider taking a supplement that contains the correct dosage and standardized grade of Saw Palmetto, Pygeum Africanum, Beta-sitosterol, Soy isoflavones, Stinging Nettle, Lycopene and other prostate support ingredients. I suggest that you speak to your health practitioner about taking *Prostate 40 PLUS* (Adeeva) or a product yielding the same or very similar ingredients. In summary, the current scientific evidence suggests that the following nutrition factors can favorably affect prostate health and should be strongly considered by all men throughout their lifetime:

1. Consume a diet that is low in saturated fat.
2. Remain at or near your ideal body weight.
3. Consume alcohol in moderation or not at all.
4. Consume tomato and tomato products on a daily basis.
5. Use more soy products, such as tofu, veggie burgers, miso soup, soy nuts and soy milk.
6. By age 40, consider taking a prostate support supplement such as *Prostate 40 PLUS* (Adeeva); containing all the important prostate factors reviewed in this report. It is vital that the herbal and accessory compounds are present at the correct dosage and standardized grade, in order to yield sufficient amounts of their bioactive agents.
7. Consider taking a high potency multi-vitamin and mineral that is enriched with other antioxidants, including Vitamin E (400 I.U.), selenium (100-200 mcg), Vitamin C (1000 mg) etc., (eg. Adeeva *Multi Vitamin and Mineral* or a comparable supplement).

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