# Prevention Strategies/Emerging Trends and Issues

## Preventative Strategies: Nutrition and Public Health Perspective

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Reducing risk of prostate cancer begins with the overall picture of one's health. Major lifestyle changes are widely recommended but often difficult to accomplish; smaller contributions include cancer protective foods and nutritional supplementation. A serious prostate cancer risk reduction program encompasses both approaches.

CCRTD encompasses a three-pronged approach. Research brings together a core group of internationally known scientists who carry out highly productive basic research in cancer cell biology and contribute to the development of successful therapeutic strategies to combat cancer.

Training brings together students from different educational levels in cancer biology and helps develop future generations of high caliber African-American scientists.

Third, community outreach attempts to establish an educational program to help increase the awareness of prostate cancer prevention, early detection, and treatment, especially among African-Americans. CCRTD community outreach education corps plans, implements, and cosponsors several educational initiatives aimed at educating African-American men in the Metro Atlanta area.

Promoting prostate cancer awareness and annual testing for prostate cancer is emphasized through community health fairs, town hall meetings, and special presentations at community locations, and through print and electronic media.

Prostate cancer is the second leading cause of death in men. Prostate cancer rates differ among different racial and ethnic populations; the incidence and mortality rate due to prostate cancer is higher in African-American men.

Four strategies associated with prostate cancer prevention include general health maintenance, dietary factors, family history and genetics, and screening. Eating sensibly is important in protecting against prostate cancer. Smoking should be stopped, and alcohol should be taken in moderation. Physical activity is important in prostate cancer prevention, and as well, a healthy weight should be maintained. Chemical exposure should be limited, as with pesticides and herbicides.

Other guidelines for a healthy diet include adequate fruits and vegetables, primarily a rainbow: reds, oranges, yellows, greens, blues, and purples, brightly colored fruits and vegetables. Red meat, beef, pork, and lamb, should be limited, as well as processed meats. One should try to adopt a plant based diet to reduce risk of prostate cancer.

High fat foods should be limited, particularly those from animal sources. Simple carbohydrate intake should be limited as rapid absorption and conversion of carbohydrates into glucose can occur. One should strive for a high fiber diet. Omega-3 fatty acids should be included in the diet. Looking at dietary factors and specific foods and supplements, research in prevention has identified a number of individual substances that may be protective, including licopenes and pomegranate. Selenium and vitamin E supplementation has been shown to not add protective effects and may actually cause side effects. High calcium intake may a risk factor for prostate cancer; calcium should be capped at 1200 mg/day through food sources. Vitamin D regulates cell growth and

reduces risk of prostate cancer.
Looking at family history and genetics, an individual with family history (brother or father) of prostate cancer may wish to begin screening earlier in life. African-American should be screened for prostate cancer after the age of 45.
Prostate cancer is 95% treatable if detected early. The Cancer Center encourages every man to get screened.
Emerging trends in prostate cancer include basic research. Physicians cannot identify which prostate cancer will be fast-growing and need aggressive treatment. Research is focusing on better ways to prevent the disease and identify its mechanism of action. Genetic research is seeking to identify high risk individuals such that screening can begin earlier, and also to design medications and treatments to reverse the changes which lead to prostate cancer. Regarding prevention, research continues to look at foods which may reduce the risk of prostate cancer.