

PROSTATE CANCER-Is prevention possible?

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While you are reading this article, I want you to think of these concepts that give us reason to hope.

CONCEPT 1

- There are 70 to 140 trillion **CELLS** in the body.
- Health and disease are at the level of the **CELLS**.
- **ALL** have the ability to **HEAL, REPAIR** and there is a constant process of cell death (apoptosis) and rebirth (replacing old cells with new). Example –liver and skin cells change every 90 days, red blood cells – 120 days, stomach-2 days. Each year- 90% of our body cells are replaced, therefore, prevention and healing are always possible.

CONCEPT 2

- Give to the cells all they need and they will function 100%, therefore the whole body will function well. Cellular function depends on **CELLULAR NUTRITION**.

In general, cancers are influenced by a malfunction, or imbalance in our Immune System ‘the Policeman of the body’. This system prevents bacteria and other foreign matter from invading the body, and promptly removes imperfect cells which may develop into cancers. Many life style activities can cause the breakdown in our Immune System, and three that enhance and boost and balance the Immune System, and these are:

- 1. STRESS MANAGEMENT**
- 2. EXERCISE AND REST**
- 3. HORMONAL BALANCE**
- 4. NUTRITION**

STRESS is our body’s response to external and/or internal events called **STRESSORS**. eg. your significant other, the children, the boss, the traffic, the economy, crime and violence. We have a ‘**FIGHT OR FLIGHT**’ reaction to stressors. After short periods of stress response, our bodies are designed to relax and recover. Long periods of stress may cause changes and diseases. So, how can we manage our stress response and remain healthy?

Here are few tips:

- Change of general activity, relaxation exercises, go on a vacation.
- Indulge in the arts-music, art, theatre.
- Laughter and comedy.
- Prayer and mediation-most important.
- Counseling-talk to a friend.
- Be in touch with nature

EXERCISE:

Consistent, daily, planned or unplanned activity e.g. walking, instead of going by bus or car, take the stairs, play a sport instead of watching sports, resolve to stop using the remote control device and Kids – play ‘hopscotch’ once in a while.

Consistent, planned activity for half hour to one hour daily, 5 or more times per week e.g. jogging, swimming, power walking, aerobics, dancing, team games and sports.

Decrease in our level of **PYSICAL ACTIVITY & OPPORTUNITIES** to use our muscles and burn calories these days, has led to an **OVERWEIGHT/OBESE POPULATION**. Studies show that in the USA 62% of adults are overweight, 32% are obese, and 18-20% of children are overweight. Jamaican studies show similar figures 60%/133% of women are overweight/obese. Obesity is associated with high levels of Insulin and the wrong kinds of fats, and so increases the risk of cancers.

Obesity also causes hormone imbalance. Increase production of the female hormone oestrogen and decrease male hormone levels of androgen are found in obese men.

HORMONAL BALANCE is important for Prostate Health.

- Chronic low androgen (male hormone) causes shrinkage of the prostate, decreases Prostate Specific Antigen (PSA), and result in death of Prostate Cancer Cells. Studies show that men, who have been castrated before puberty, have **NO** Prostate enlargement (BPH), and **NO** Prostate Cancer.
- Androgen levels have been found to parallel Prostate Cancer in different races, eg. Dihydro-Testosterone/Testosterone (male hormones) levels are highest in **BLACKS**. Intermediate in **CAUCASIANS**, and lowest in **ASIANS (JAPANESE)**.

So, why don't we use chemical agents and drugs which depress activity of male hormone, eg. Oestrogens and other hormonal therapy now used for existing Prostate Cancer, for prevention of this disease? These agents would be unsuitable because of the costs, and the side effects, such as sexual dysfunction, osteoporosis, hot flashes, excessive sweating and depression.

Men, you can naturally increase your testosterone so that it is in balance with oestrogen:

1. Increase activity up to moderate exercise.
2. **WEIGHT LOSS** (obesity increases oestrogen & decreases Testosterones)
3. **MORNING SEX** (increases Testosterone on the post-dawn surge)
4. **MAKE NUTS YOUR MID-NIGHT SNACK** – especially cashew, walnuts and macadamia nuts.
5. Get 7-8 hrs of deep, dream sleep which causes increased morning Testosterone.
6. **DON'T SKIP MEALS**. (Your body thinks there is a famine on and shuts down testosterone production. No need to reproduce if you are starving).

NUTRITION

Cells need certain basics things to remain vital and healthy. The first is the **MACRONUTRIENTS**, the big foods you see on your plate. These are protein eg. meat, fish, chicken and legumes for healing, repair and regeneration, carbohydrate eg. flour products, rice and other grains, and sugars for energy, fats eg. saturated fats of animal origin, and mono-unsaturated and polyunsaturated fats from plant, nuts and vegetable sources, fiber for colon health and regularity; and water-8 or more glasses per day.

When these are not in the right amounts and proportion, diseases, such as obesity, hypertension, cardio-vascular diseases, and diabetes mellitus (sugar) and cancers develop. In cancer of the prostate, nutrition is very important and both carbohydrates (sugars) and fats in excess or of the wrong type have been implicated. Research shows that insulin, promotes cell division in both healthy and tumor cells (allow cells to multiply and increase in numbers). It is a growth hormone which is released when starchy and sugary foods in the diet are broken down and absorbed into the blood stream. So Diabetics with poor control of blood sugar may be at risk, as they have high levels of circulating insulin, to which the body is resistant. The cells do not respond by taking

in the excess sugar from the bloodstream. Cancers need high levels of insulin and sugar in the blood stream to survive, and Diabetics are ideal.

When dietary fats are high and of the wrong kinds, there is an increased risk of cancers. Animal origin fats (saturated) cause the highest risk. However, some poly-saturated fats like Omega-6 fatty acids, which produce inflammation and blood clots to prevent us bleeding to death, stimulate Prostate Cancer growth and spread. Others like trans-fats which were poly-unsaturated vegetable oils, and have been chemically changed by a reaction with hydrogen, (eg. cooking oils and margarines) prevent Omega-3 (the good fat) utilization.

LONG CHAIN OMEGA-3 FATTY ACIDS (or fish oils) Restore the normal process of remodeling our bodies by replacing old cells with new. It also lowers tumor necrosis factor which produces inflammation and severe weight loss in cancer patients. Omega-3 prevents the growth of new blood vessels, which is important to a prostate cancer cells as it brings increased nutrients and sugars. Fish oils contain eicosapentanoic acid (**EPA**) & docosahexanoic acid (**DHA**) and should be taken in high doses to be effective. Other foods with these essential fats are linseed and flax seed oil.

MICRONUTRIENTS- MAY PREVENT PROSTATE CANCER!!

These are the multi-vitamins, minerals and trace elements, found in the wide range of fruits and vegetables that are important for good health. Adults need 7-9 servings daily or daily supplementation.

Studies show that fruits and vegetables eg yellow-green legumes (peas and beans), yellow-orange colour foods (papaya, oranges) and cruciferous vegetables like broccoli, sprouts, cauliflower and cabbage are associated with a lower risk of Prostate Cancer.

- **Orange Carotenoids** as in carrots, pumpkin, sweet potatoes and squash, and red lycopenes, as in tomatoes, (best absorbed if cooked), pink grapefruit and watermelon. These have powerful Antioxidant effects which remove free radicals (like the rust from an old iron) and other toxins from the cells, and improve the immune system function of the body. In one study, the reduction of risk of prostate cancer was greater than 30%
- **SOY PRODUCTS** are the only significant sources of the **ISOFLAVONES, GENISTEIN & DIADZEIN**. They are potent Antioxidants, which regulate cell division causing decreased growth, and prevent the invasion of normal tissue by tumour cells. Isoflavones will also prevent new blood vessel formation (angiogenesis). They also prevent certain protein enzyme within the cell from functioning. This slows cancer cell division without affecting normal or reproductive cells.
- **SELENIUM** is an **ESSENTIAL TRACE ELEMENT** which reduces the risk of cancers (inverse relationship). It was found to be lower in cancer cases than in controls in several studies and was most effective for gastro-intestinal and prostate cancer.
- **VITAMIN E** prevents **DNA** production in cancer cells, therefore, prevents prostate cancer cell growth, but does not affect normal cells. In male smokers low Vitamin E was associated with higher risk for prostate cancer. It also triggers cell death (apoptosis) in these cells. Recommended dose is 400IU daily.
- **GREEN TEA** contains antioxidants in the Flavenol group. They are different from the popular black teas which are fermented, thus destroying the biologically active polyphenols. Studies show that in countries where people drink two or more cups of green tea each day, the levels of prostate cancer are greatly reduced.

Recent studies show that JAMAICA has the highest rate of prostate cancer in the world. If our men adopt some of these LIFESTYLE RECOMMENDATIONS, we may be able to reduce this catastrophic situation.

AVOID;

- Cigarettes
- Alcohol
- Obesity
- Environmental Oestrogen Exposure
- Sedentary lifestyle
- Sleep deprivation
- Animal fats, trans fats and Omega-6 fats

RECOMMENDATION IS FOR PERSONS TO ADOPT;

- HEALTHY LIFESTYLE
- RECOMMENDED DAILY SOY INTAKE (at least 7 servings per week of 20gm to 30gm per serving)
- SUPPLEMENTS
 - ✓ Fish Oils, with pharmaceutical grade omega-3 fatty acid.
 - ✓ Natural Vitamin E
 - ✓ Natural Lycopenes
 - ✓ Selenium
 - ✓ Two or more cups green tea daily

An active, stress controlled lifestyle with adequate restful sleep will naturally, keep your MALE HORMONE in balance.