BREAST CANCER! CAN BEAT THE ODDS By: Dr. Michael John Badanek, BS, DC, CNS, DACBN, DCBCN, CTTP, MSGR/CHEV

Male readers may take a look at the headline and dismiss it saying "This does not apply to me".

Not so fast!

It is true that breast cancer is a disease that affects mostly women, but women are also victims. As the American Cancer society notes, breast cancer "occasionally occurs in men. Many people do not realize that men have breast tissue and that they can develop breast cancer.

In 2006, approximately 1,700 men were diagnosed with the disease.

Still, it is considered a female disease – and will get the attention of women more than men.

If you're a male, you may want to share this information with your wife, girlfriend, sister, or other loved one who has a breast cancer risk.

Interestingly, albeit alarmingly, cancers seem to occur commonly in husbands and wives. That is, when the wife has breast cancer, the husband is much more likely to develop prostate cancer and vice versa. The reason is a mystery, but there are several possibilities to explain this anomaly.

The most common explanation is that they eat similar types of foods known to increase the risk of both cancers. It may be that both cancers are caused by the same cancer-causing virus (oncogenic virus), or that both are exposed to a common household toxin or pesticide. Or it may simply be that both cancers increase dramatically with aging. There is a common denominator in dozens of studies: there is a very strong correlation between breast cancer and nutrition. While good nutrition is a powerful ally, bad nutrition not only strongly promotes the development of both cancers; it also determines your chance of survival.

Many people make the mistake of depending on a single nutritional supplement (usually one recently made popular by the media) rather than changing their diet.

If you are in a particularly high-risk group, including having a close relative who had one of these cancers, then it is imperative that you stick to a healthy anticancer diet. If you ignore the benefits of supplements, you do so at your own peril; they add an essential layer of protection to a good diet.

Supplements, in my recommended doses, act to specifically inhibit enzymes or other mechanisms needed by cancer cells either to develop or to grow and invade your body.

I will be tackling the issues of prostate cancer and breast cancer in two separate newsletters. This month, I will address the concerns of breast cancer. Next month, I will be covering prostate cancer.

The Ravages of Breast Cancer

While breast cancer rarely strikes men, the destruction it wreaks on families and friends affects everyone. Breast cancer is the leading type of cancer in women. Of the 180,000 women who developed breast cancer in 1994, sadly, 45,000 died of the disease. This should not have happened. Most doctors will tell you that the best chance for a cure is to detect the disease early, which is basically true. Unfortunately, the method they have chosen to detect breast cancer, the mammogram, also causes breast cancer, especially in women who are at the greatest risk.

Studies have shown that mammograms increase the risk of developing breast cancer from 1 percent to 3 percent a year (depending on the technique used), which means that if you religiously have a mammogram every year for 10 years, you increase your risk 10 percent to 30 percent. Some radiation experts feel the danger is much higher. Radiation experts agree that the breast is one of the areas of the body most sensitive to cancers caused by radiation exposure.

As women age, they are more likely to have cancer cells in their breast. By age 50, the figure reaches 45 percent. This does not mean that 45 percent of 50 year olds will develop breast cancer, because in most women these cancer cells remain dormant. What it does mean is that these women are at high risk of spurring these cancer cells to full activity.

Breast cancers are either estrogen positive or are the most deadly. Most women know that hormone replacement therapy can increase their risk of developing breast cancer, yet few are aware that they type of estrogen matters. Estradiol, the most powerful form, is associated with a significant increased risk, and is the form found in Premarin, the common hormone replacement. In addition, this unnatural form of estrogen has a number of neurological side effects.

Other forms of estrogen, such as estrone and Estriol, which are used in natural hormone therapy, actually reduce breast cancer risk and may reduce its growth. A number of plant flavonoids (chemicals found in fruits and vegetables) have very weak estrogen-like effects, which make them major players in breast cancer prevention and even in treatment. Plant flavonoids block the estrogen receptors on breast ductal tissue, preventing the more powerful (cancer-causing) estrogen from taking action.

Effects of Bad Nutrition

Women who eat seared meats every day increase their risk of breast cancer by over 300 percent. This is because burning meat during cooking (as with cooking over a grill or at a high heat) creates powerful cancer-causing compounds called heterocyclic amines.

Likewise, eating foods containing nitrates (a food –preservative) also increases breast cancer risk. In the stomach, nitrates form carcinogenic compounds called nitrosoamines. Eating a combination of healthful green and yellow vegetables with meals neutralizes these compounds significantly. Women with DNA repair problems (that is those with a strong family history) are also much more susceptible to the cancer-causing effects of bad nutrition as well. This mean, for example, they are even more likely to develop breast cancer should they eat pan cooked or grilled red meats every day or drink alcohol every day.

Studies have shown that a diet high in meats dramatically increases the risk of many types of cancer. There are several reasons for this, besides the carcinogens mentioned above. Iron promotes cancer development as well as the growth and spread of existing cancers. Vegetables, such as spinach and kale, can have high iron levels, but the flavonoids in the vegetables prevent the iron from being absorbed, and may explain why mixing vegetables with meats reduces risk.

Likewise, studies have shown that omega-6 fats strongly promote the growth and spread of tumors. These are oils such as corn, canola, safflower, sunflower, peanut and soybean. Americans generally consume about 50 times more of these oils than are needed for health. Such high levels are strong promoters of cancer.

Deficiencies in a number of nutrients, either alone or in combination, have been shown to dramatically increase the risk of breast cancer in women, especially deficiencies in Vitamin E and selenium. When taken together, studies involving large numbers of women have shown a 60 percent reduction in breast cancer. When they are combined with a proper diet, results are even better.

There is at least theoretical evidence that fluoride can promote breast cancer growth, since studies have shown that fluoride in drinking water promotes the growth of a number of cancers. There is, it should be avoided.

Mercury from dental amalgam fillings, vaccines containing mercury, and air pollution can also promote the growth of cancers and interfere with immunity.

Probiotics and Breast Cancer

There is growing evidence that the friendly bacteria in your colon play an important role in protecting you against breast cancer, as well as other cancers. Estrogen from the blood is extracted by the liver and excreted into the GI tract in bile. Within the bowel, the estrogen is metabolized into one of several compounds.

If you have a good supply of probiotic organisms in your colon, the estrogen is metabolized into a compound called 2-hydroxyestone, which has been shown to inhibit the development of breast cancer. If these important bacteria are in low supply or missing, another compound called 16-alpha-hydroxyestrone is formed instead. This is a powerful promoter of breast cancer and greatly increases risk.

This explains studies that have shown that women who take antibiotics have a significantly higher risk of developing breast cancer. Antibiotics are notorious for killing important, helpful colon bacteria along with the bad.

Studies have shown that these compounds also either promote (as is the case of 16-alpha-hydroxyestrone) or inhibit (as is the case of 2-hydroxyestrone), other types of cancers including cervical, endometrial, prostate, colon, and head and neck cancers. They also increase the growth of viruses known to produce breast cancer in experimental animals and – possibly viruses that cause cancer in humans.

Indole-3 carbinol (from broccoli) has been shown to increase the ratio of 2hydroxyesterone to 16-alpha hydroxyestrone by 16-fold, thus strongly inhibiting the development of breast cancer. Indole-3 carbinol can also be purchased as a supplement.

Genetic Risk of Breast Cancer

A number of mutated genes have been associated with an increased risk of breast cancer. (BRACA-1, BRACA-2, ATM genes). Women who possess these genes have an increased risk of developing breast cancer, have a poorer prognosis, and are more sensitive to breast radiation exposure.

One of the many functions of these genes when normal is to repair damaged DNA. Our DNA is under a constant barrage of free radicals, which are increased by chronic inflammatory diseases (diabetes, autoimmune diseases, heart disease, etc.) heavy metals, (mercury, lead, cadmium, aluminum, fluoride, etc.) and industrial chemicals and pesticides/herbicides.

In most of us, 98 percent of the damage is repaired by DNA repair enzymes. People with mutated repair genes have difficulty performing this vital function, and as a result, they have significantly higher cancer rates. Mutated genes, passed on from generation to generation, explain high-risk cancer families.

The good news is that nutrition not only plays a major role in protecting our genes, but can significantly increase DNA repair as well. Vitamin C, vitamin E, selenium, quercetin, ginkgo biloba, resveratrol, curcumin, glutathione, and alphalipoic acid are all important protectors of DNA.

Folate, vitamin B-12, vitamin B-6, and niamcinamide are also key in repairing DNA. All of these nutrients are known to reduce cancer risk in humans and experimental animals.

Even modest alcohol consumption dramatically increases a woman's risk of developing breast cancer by as much as 292 percent. Folate, at a dose of 800 micrograms a day, significantly reduces this risk.

Exercise is Key

Numerous studies have found a sedentary lifestyle to be a significant risk factor for breast cancer, and that women who exercise regularly have a significantly lower risk. This is also true of other cancers.

Exercise doesn't have to be aerobic; In fact, aerobic or other such extreme exercises are more likely to result in cancer, because they generate high levels of free radicals. Weight lifting, brisk walking or other resistance exercises done for 45 minutes six days a week is sufficient to lower your cancer risk.

A considerable amount of research clearly shows that a plant extract called lignin plays a powerful role in preventing breast cancer. Lignans are found in flaxseed, pumpkins seeds, sesame seeds, broccoli, and extra-virgin oil.

In the colon, the friendly bacteria (probiotics) ferment the lignin to form two powerful anti-cancer compounds called enterolactone and enterodiol. These compounds inhibit the development and growth of a number of cancers including prostate, colon, and breast.

Lignan inhibits cancer by suppressing cancer cell division and blocking estrogen receptors on breast cancer cells. It is an antioxidant and blocks essential blood vessels needed by the cancer. In addition, lignin lowers levels of a powerful cancer growth stimulator called insulin-like growth factor-1 (IGF-1) while having no negative effects on normal cells.

One of the dangers of cow's milk from cows injected with genetically engineered bovine growth hormone (rbGH) is that the milk contains high levels of IGF-1, the powerful cancer growth promoter. Studies have shown that the levels are

anywhere from 71 percent to 360 percent higher than normal. The IGF-1 found in the milk is identical to that in human and studies have shown that it is not destroyed in the stomach. In fact, a protein in the milk (casein) dramatically enhances absorption.

A Finnish study (the Kuppio Breast Cancer Study) compared 194 women with breast cancer to 208 women free of the disease. It found that those with the highest level of enterolactone, both premenopausal and postmenopausal women, had a significantly lower risk of developing breast cancer. In this same study, breast biopsies demonstrated that women with the highest levels of 16-alphahydroxyestrone had the highest incidence of breast cancer.

The best source of lignin is flax fiber not flax oil. A number of companies sell flax lignin concentrate.

Studies are in conflict over the role of obesity and fat intake on breast cancer risk. After reviewing a number of them, I have concluded that the major harmful effects of obesity are from abdominal (visceral obesity) fat – what is commonly referred to a "portbelly:" or "beer gut". As I discussed in a previous newsletter, fat found deep within the abdomen (surrounding the intestines) is different from fat found under the skin (subcutaneous fat).

Visceral fat secretes large amounts of inflammatory chemicals called adipokines, which cause widespread chronic inflammation throughout the body. Chronic inflammation is the leading cause for all cancers, including breast cancer. Some people, while not appearing to be obese, have a lot of visceral fat.

Experimental studies have shown that babies exposed to food containing excitotoxins (such as MSG, soy proteins, hydrolyzed proteins, carrageenan, aspartame, natural flavors, etc) produce excess visceral fat. Women with a lot of visceral fat are also more likely to develop metastasis of their cancers than those with lesser amounts.

Special Fats and Breast Cancer

Unknown to most people as well as many doctors, is the fact that fats can act as powerful pharmacological drugs. We now know that the type of fact that you eat

is more important than the amount of fact you eat. The most dangerous fat of all is omega-6 oils. Omega fats promote chronic inflammation and stimulate the growth, spread and invasion of cancers. Omega-6 fats can actually convert some cancers into very fast growing aggressive cancers.

I have reviewed a number of cancer center diet programs and have found that most encourage their patients to eat food high in these cancer-promoting fats.

Vegetables – For Better Health

Vegetables have been shown to significantly reduce the incidence of breast cancer in both experimental animals and in humans. To a lesser extent, so have fruits. There are a handful of studies that failed to show anti-cancer benefits – but they were poorly done. For example, researchers counted foods such as potatoes as vegetables. While potatoes are technically vegetables, they have little or no anti-cancer effect. Also, many of the participants in these studies ate foods that contained high levels of omega-6 oils, aspartame, MSG, and other cancer-causing food additives.

Studies where the entire diet was controlled and included healthy vegetables and low levels of omega-6 oils and food additives showed dramatic reductions in the risk of breast cancer.

Vegetables contain hundreds of complex chemicals called flavonoids. They are known to prevent cancers and to control the growth of existing cancers, and to do so with greater safety and effectiveness than conventional chemotherapy. Flavonoids work their magic, in part, as powerful and versatile antioxidants, and they are much more effective than the vitamins such Vitamin C, E, and the carotenoids.

Oncologists continue to tell their patients to avoid antioxidants and even to avoid eating vegetables, mistakenly thinking they will interfere with treatment. Studies have confirmed that this is not true. Moreover, they have shown that antioxidants, such as flavonoids and special vitamin mixtures, greatly enhance the effectiveness of conventional treatments. I have observed, over the years, that people who have survived advanced cancers – believed to be terminal – either juiced virtually all their vegetables or ate very large amounts of nutrition-dense vegetables.

New studies have shown that breast cancers are dependent on certain enzymes for their growth, such as tyrosine, kinase, COX-2, LOX, NFkB, and phospholipase A2.

Blocking these enzymes can often either stop cancer growth or make it disappear (through a process called apoptosis). A large number of the vegetable flavonoids, such as quercetin, curcumin, apigenin, curcumin, and luteolin, block these enzymes in cancer cell, but have no effect on normal cells.

One enzyme, called aromatase, plays a major role in the growth and spread of a number of cancers, including breast and prostate cancers. This enzyme allows breast ductal tissue to produce estrogen locally in the ducts at levels 40 times higher than in the blood. Blocking aromatase, which converts testosterone into estrogen, inhibits breast cancer growth.

The flavonoid apigenin (from celery) has been shown to inhibit aromatase enzyme 8.7 times more powerfully than specially designed drugs. Quercetin (found in onions, teas, cranberries, etc) inhibits it 1.5 times better. This enzyme also plays a major role in prostate cancers, and pharmaceutical companies are spending large sums of money to develop a drug that will inhibit this enzyme.

DHA, from algae or fish oils, also inhibits many of these cancer-promoting enzymes and has been shown to significantly inhibit the growth of cancer cells, especially breast cancer. It is interesting to note that soy (genistein) strongly stimulates aromatase activity, which explains the recent finding that soy extracts enhance the growth and spread of breast cancer.

Preventing Cancer Spread

It's been said that to best deal with the enemy, you must know the enemy. That makes good sense. Cancers kill by invading surrounding tissues and spreading throughout the body (metastasis). It is the failure of our body to contain the wayward cancer cells that causes the problem.

One way cancer cells spread is by secreting large amounts of a group of enzymes called metalloproteinase's (MMP-2) and MMP-9) that dissolve protein. Studies have shown that women whose tumors secrete large amounts of these enzymes have very aggressive cancers, the highest recurrence rate and a shorter survival. Inhibiting these enzymes dramatically reduces the spread of cancer and improves the patient's prognosis.

Several flavonoids inhibit these enzymes. For example, luteolin (artichoke extract and celery) inhibits MMP-2 and curcumin inhibits MMP-9.

Why You Should Avoid Sugar and Artificial Sweeteners

Because of cancer cells'unusual metabolism, they are extremely dependent on sugar for their growth and spread. Sugar is a cancer fertilizer. You should eat only complex carbohydrates, such as whole grains, and those only in moderation. Avoid starches like potatoes, since the body utilizes them as sugars.

It is also important to avoid artificial sweeteners, such as aspartame and Splenda. Aspartame has been shown to dramatically increase cancer development in a number of studies. And aspartame is metabolized in the body into formaldehyde, which continues to damage DNA over a very long time.

Most people refuse to drink water because they say it tastes bade, but this is because of the high levels of chlorine that have been added. Drink only filtered or distilled water. To make it even healthier, you can add a small amount of magnesium to each glass – about 20 milligram. Once you drink pure water, you will begin to prefer it.