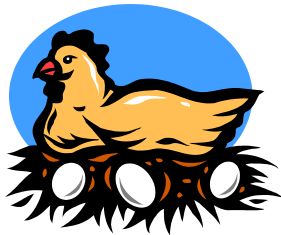


Cancer and Food

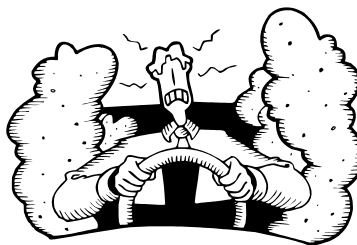
In 2005, cancer became the leading cause of death among Americans for the first time. One sad part of this fact is that most of our cancer incidence can be prevented with dietary changes. Some foods help our bodies fight off cancer before it starts, while other foods can compromise our immune systems, thereby raising our risk of getting cancer and of dying from it. Because we have to eat to survive, it is hard to accept that some very commonly-eaten foods may increase our risk of getting cancer, yet it is our increasingly excessive consumption of these foods that is causing our cancer incidence to rise.

The principal foods that have been found to increase our risk of cancer include animal products like milk, cheese, meat, and fish, and a substance called trans fat, which is found in animal foods and in some processed oils.



If these seem like very commonly consumed foods...well, they are...and of course not everyone who eats these foods dies of cancer... but remember this fact:

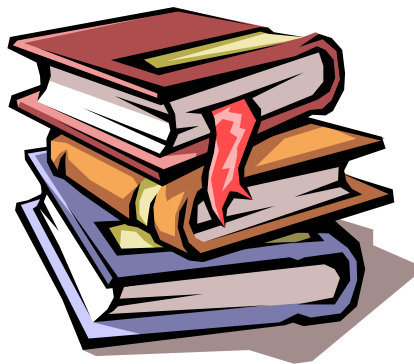
Nearly everyone agrees that smoking increases risk of lung cancer tremendously, yet not everyone who smokes dies from lung cancer.



DOES MILK RAISE CANCER RISK?

Most Americans now eat a whopping 40% of their calories in the form of dairy products. These growth-promoting foods, created from a cow's mammary secretions, are meant to grow a 40-pound calf into a 1,000-pound cow within a year. Milk, including organic milk and skim milk, contain powerful growth hormones that, because human beings don't grow fast, seem to promote the wrong kind of growth in our bodies, namely cancer growth. Many studies, going back as far as 1970, but with several landmark ones published in 2004, have pointed to dairy product intake as a strong risk factor for hormone-related cancers like breast and ovarian cancer in women and prostate and testicular cancer in men.

Three excellent books about these connections are The China Study by Dr. T. Colin Campbell (BenBella Books, 2005) and Your Life in Your Hands, Understanding, Preventing and Overcoming Breast Cancer (originally titled The No-Dairy Breast Cancer Prevention Program) by Dr. Jane A. Plant (Thomas Dunne Books, 2001) and Prostate Cancer, Understand, Prevent and Overcome also by Jane A. Plant (Virgin Publishing, 2004). And an article published in the Journal of Urology in September 2005, by **Dr. Dean Ornish** documented reversal of prostate cancer by eating a whole-foods plant-based diet.



OVARIAN CANCER AND MILK

In 2004, an article entitled "A prospective study of dietary lactose and ovarian cancer" in the International Journal of Cancer (Vol. 110(2): 271-7) by researchers from the Department of Medicine, Brigham and Women's Hospital, Harvard Medical School, observed a 2-fold higher risk of the serous ovarian cancer subtype [the most common, and most deadly form of the disease] among those in the highest category of lactose consumption compared to the lowest.

For each 11-gram increase in lactose consumption (the approximate amount in one glass of milk), they observed a 20% increase in risk of serous cancers. Controlling for fat intake did not change their findings.

Another study, published in 2004 in the American Journal of Clinical Nutrition, followed more than 60,000 women, and found that “drinking more than two glasses of milk a day significantly upped the risk of the most serious form of ovarian cancer.” The article stated that “dairy products have previously been linked to cancers, including those of the breast and prostate, and now it is found that women who consume more than four servings of dairy products a day have twice the risk of serous ovarian cancer than women who have fewer than two servings. They found that Liquid milk has the strongest link with ovarian cancer - **those women who drink two or more glasses a day are at double the risk of those who do not consume it at all, or only in small amounts.**” The reason why milk may increase the risk of ovarian cancer is unclear, but one theory is that lactose, a type of sugar found in milk, may over stimulate production of hormones which encourage tumor growth. Thus low-fat milk and other dairy products (yogurt, etc.) are just as risky because the lactose content is the same. Lactose-reduced products don’t help either because the lactose is just pre-digested and one of the breakdown products (galactose) has the same effect.

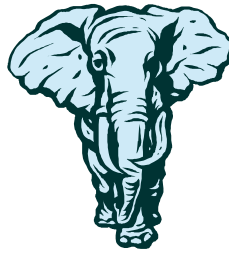


Is Milk Necessary for Strong Bones?

The Nurses’ Health Study, with over 120,000 subjects, found that the consumption of milk does not protect against hip or forearm fractures. Those who drank 3 or more servings of milk a day actually had a slightly higher rate of fractures than women who drank little or no milk. American Journal of Public Health 87 (1997) 992-997.

DO WE NEED TO DRINK MILK?

Consider lessons from nature: No other mammal, even the huge elephant, drinks milk after infancy, and their bones maintain strength throughout life.



The National Dairy Council spends hundreds of millions of dollars each year advertising their products as a necessary part of a healthy diet, needed to prevent bone loss (osteoporosis).



Yet as far back as 1987, a Mayo Clinic study concluded that insufficient dietary calcium **is not** a major cause of bone loss. Worldwide statistics bear this out, dairy products do not correlate with low bone fracture rates.

A powerful case that dairy products may actually contribute to, rather than prevent, bone loss is presented in Understanding, Preventing and Overcoming Osteoporosis by Dr. Jane A. Plant and Gill Tidey (Thomas Dunne Books, 2003). They state that dairy products contribute to *acidifying* the blood, which causes bone to dissolve. Dr. Jane A. Plant is one of Britain's top scientists (head of the British Geological Survey) who developed breast cancer in 1987, had 5 operations and was given just a few months to live by 1993. She researched the subject of diet and breast cancer, stopped eating all animal products, and is still writing books years later. She co-wrote the osteoporosis book in response to all of those who suggested she would ruin her bones if she avoided dairy products.

Men who drink the most milk (top 25%) have been found to have a 70% increased risk of dying from prostate cancer than those who drink the least (bottom 25%), and men who eat the most cheese have a 90% higher risk of testicular cancer than those who eat the least.

The calcium and other minerals people seek from dairy products can be adequately – and more safely – gotten from foods like green



vegetables, nuts, and seeds.

It is interesting that even lung cancer risk is affected by diet. A study published in the Journal of the American Medical Association in September 2005 found that even smokers who ate a diet rich in green vegetables, whole grains, and beans cut their lung cancer risk in half ! Another reason to eat those veggies.

The Protein Worry?

Could a diet containing little or no meat or dairy products put someone at risk of protein deficiency? Not likely, since the protein content in the typical American diet is well above what is required ... actually about twice as high as is recommended according to the RDA's. The excess is not stored ... at least not as protein ... rather it is converted to carbohydrate or fat to be burned as a calorie source; and if too many calories are eaten, it will all be stored as fat. Too much protein, especially of animal origin, can contribute to loss of calcium from bone, and can overwork the kidneys.

The U.S. recommended intake of protein daily is 44 grams for adult women and 56 grams for adult men. These amounts are easily met by consuming plant-based according to the food pyramid guide:

Food Group	Servings Recommended (c.1/2 cup)	Total Protein (grams)
Grains	6-11	18-33
Beans/Legumes	2-3	15-22
Vegetables	5	10
Fruits	4	4
Total protein	-----	48-69

Adequate protein from plant-based beneficial. Animal protein higher cancer risk; vegetable correlated with lower cancer risk.



foods is not only possible...it is consumption is correlated with protein consumption is

CALCIUM AND IRON

Calcium and Iron, considered the two most problematic minerals for Americans, are easily gotten adequately on a plant-based diet. Meat is a very poor source of calcium, and dairy products are poor sources of iron. Trying to achieve a balance usually results in overeating both categories of food. Whole plant foods, in contrast, usually have an appropriate amount of both minerals.

Food	Calories	Calcium content (mg)	Iron Content (mg)
Milk – 1 cup	150	291	0.1
Turkey – 2 oz.	90	4	0.4
Collard greens – 1 cup	62	358	0.4

Thus, from many fewer calories, green vegetables can provide as much or more of these minerals than dairy products or meats.



“Undoubtedly, the best anticancer diet would be completely vegan: strictly vegetarian, with no meat or dairy products.” Dr. Jane A. Plant in Your Life in Your Hands, Understanding, Preventing and Overcoming Breast Cancer pg. 122.

More Quotes, References

---Low death rates from breast cancer occur where dairy product consumption is low, even when intake of **other fats** is high. British Journal of Cancer 24(1970), 633-43.

---There is a link between **animal protein** and cancer, evident in both laboratory and human epidemiological studies. Journal of Surgical Research 59(2) (1995) 225-228.

--- As animal-derived food intake increases from **once a week** to **four times a week**, breast cancer rates increase by 70%. Japanese Journal of Cancer Research 85 (1994) 572-577.

---Studies that have failed to show a relationship between animal product consumption and breast cancer suffer from methodological problems. Journal of the National Cancer Institute 89 (1997) 766-775.

---Men with a family history of **breast cancer** have an increased risk of prostate cancer, and women with a family history of **prostate cancer** have an increased risk of breast cancer. Epidemiology 9 (5) (1998) 525-529.

---A massive international study that contained data from 59 countries showed that men who ate the most meat, poultry and dairy products were the most likely to die from prostate cancer, while those who ate the most unrefined plant foods were the least likely to die from this disease. Journal of the National Cancer Institute 90 (21) (1998) 1637-1647.

Note: *Insulin-like Growth Factor-1 (IGF-1) is a growth hormone produced by all mammals. Levels of it are very high in dairy products and in those beef products (most cheap "hamburger") made from the flesh of dairy cows.*

---Vegan men have serum IGF-1 levels 9% lower than average. British Journal of Cancer 83(1) (2000) 95-97.

---In a study of men with prostate cancer, it was found that on average their serum IGF-1 was 8% higher than matched controls without active prostate cancer. Science 279 (1998), 563-6.

Note: Thus, a vegan diet lowers IGF-1 by 9%, a seemingly minor amount, yet an 8% difference is all that is seen between healthy and cancer-ridden individuals. IGF-1 is apparently a powerful hormone that only needs a slight elevation above normal to cause damage.

---Among women younger than 50, having high IGF-1 levels (top 25%) raises breast cancer risk by seven times. Lancet 351(1998), 1393-96.

---One form of vitamin D (called 1,25) in the body is lowered by diets **rich in animal protein and/or too high in calcium**. When blood levels of this form of vitamin D are depressed, IGF-1 becomes more active. This increases the birth of new cells while simultaneously inhibiting the removal of old cells, both favoring the development of cancer. The result in men studied is a **9.5 times increased risk of advanced stage prostate cancer**. Journal of National Cancer Institute 94 (2002) 1099-1109.

See also books and websites by:

Joel Fuhrman, M.D.

John McDougall, M.D.

Rex Bowlby

Leslie Van Romer, D.C.

George Eisman, R.D.