

# Dairy May Increase Prostate Cancer and Diabetes

Chris Vaughan  
Beloit College, Beloit, WI

## Results:

	Breast Cancer Rates
United States	1 out of every 7 women
China	1 out of every 100, 000

\*Figure 1. Cross-cultural effects. Compiled data from *The Nursing Standard and Breast Cancer.org* (1)

Study	Results	Conclusion
Followed 20,000 men who consume dairy.	According to the study, 20,000 men were enrolled in a study and asked questions pertaining to health 11 years later.	600mg of calcium consumption from skim milk per day may increase the rates of prostate cancer in men by 32%. Of the 20,000 men that were followed, 1,012 were diagnosed with new cases of prostate cancer.

\*Figure 2. Prostate cancer correlation. Compiled from the *IDEA Health and Fitness Source* (3).

Contaminants in Milk	Associated Health Risks	Conclusions
IGF-1	IGF-1 has been linked to an increased rate of Type II diabetes in children. It creates an autoimmune reaction in children against the pancreas. It is associated with increased cancer rates in men and women (5).	In humans it survives the digestion process and creates growth-promoting effects linked to prostate and breast cancer (5).
Calcium	Too much calcium can inhibit bone growth and cause prostate cancer (5).	An overdose of calcium suppresses the synthesis of a form of vitamin D that is known to reduce the risk of prostate cancer (5).
Dioxins	These are a known cancer-causing group of chemicals found through waste incineration and fossil fuel usage (4).	Dioxins increase the risk of cancer (4).
BGH (bovine growth hormone)	BGH increases the levels of IGF-1 in milk (5).	Increasing the levels of BGH increases IGF-1 which is linked to breast and prostate cancer (5).

\*Figure 3. Other Effects from dairy consumption. Compiled from the *Environmental Health Perspective* (4), and *The Townsend Letter for Doctors and Patients* (5).

## Abstract:

The American public consumes dairy and recent evidence has shown that dairy consumption may be linked to prostate cancer and diabetes. This poster explores a probable cause for the correlation. Studies conducted in Asian cultures conclude that rates of dairy consumption are very low and correlate with low incidence of prostate cancer. A similar correlation is found with Type II diabetes. Insulin-like growth factor (IGF1) commonly found in American cow milk has been shown to produce antibodies in young children. IGF1 attacks the pancreas possibly contributing to Type II diabetes. Dioxins, a carcinogen found in the modern industrial environment, have also been discovered in cow's milk that is later ingested by humans who eventually develop prostate cancer. In conclusion, rates of prostate cancer and diabetes correlate with and are likely caused by the consumption of dairy products.

## Introduction:

Cancer occurs when any given cell in the human acquires at least two required mutations so that it divides rapidly and does not stop growing at the appropriate time. Prostate cancer occurs when this uncontrollable growth happens in the prostate gland through which the ureter passes to the bladder. Prostate cancer is the leading kind in men in the U.S. In one study, the frequency was 1,012 cases out of 20,885 men (2). There may be numerous causes for the high incidence of prostate cancer in the U.S. but one of the likely causes is consumption of dairy. I hypothesize that a dairy based diet has increased the incidence of prostate cancer in people in the United States.

To add to the negative effects of dairy on the human population, evidence suggests a correlation between dairy and insulin dependent diabetes. Approximately 30 years ago, a growth hormone was discovered in cow's milk that is also found in humans (5). According to one source, the hormone acts like insulin and makes cells grow and has subsequently been named insulin like growth factor, or IGF-1 (5). IGF-1 aids in the creation of antibodies against milk protein at a young age and later contributes to insulin dependent diabetes due to destruction of the pancreas from the antibodies (5).

## Method:

This poster was created from the information contained within those peer-reviewed, research journals. Some studies focused on the science behind the increased rates of prostate cancer because of the consumption of dairy, while others claimed that cows fed more organic diets produce healthier milk. Information in this poster was compiled from sources such as the *Journal of the American Dietetic Association*, *The American Journal of Clinical Nutrition*, and *The Nursing Standard*.

## Discussion:

The research presented indicates that dairy consumption may promote the development of prostate cancer. Most dairy products in the U.S. are now marketed with the promise of more calcium. As the research states, too much calcium can inhibit bone growth and is linked to prostate cancer. In addition, too much calcium inhibits the synthesis of a form of Vitamin D that has been shown to reduce the risk of prostate cancer. Dioxins produced by waste incineration and fossil fuel usage are known to cause cancer and dioxins passing through the digestive tract and the human body can increase the risk of prostate cancer. The use of hormones in dairy such as BGH (bovine growth hormone) has been shown to aid in producing IGF-1 in milk products. The increase in IGF-1 has also been linked to prostate cancer, breast cancer and diabetes. One study suggests that the "American consciousness has been thoroughly conditioned to believe milk is the perfect food (5)." This may be true considering that prostate cancer is much more common in developed, high dairy consuming countries that have a highly developed dairy industry. (5). Overall, dairy is strongly implicated in the rates of prostate cancer and diabetes in the U.S. and alternatives to dairy should be consumed, made just as available , and

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Photo Reference: <http://www.penn.org/magazine/GAR0Autumn-CPmilkbomb.jpg>

## References:

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6. Breastcancer.org. "Understanding Breast Cancer Risk." [http://www.breastcancer.org/breast\\_cancer\\_risk.htm](http://www.breastcancer.org/breast_cancer_risk.htm) (2006) p1-3.