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## The Food and Cancer Connection

Annemarie Colbin, Ph.D.

Cancer is too vast a problem to expect that there would be a simple solution to all its manifestations. In this article, I want to acknowledge and present an overview of the relationship between cancer and foods that is spoken of in many different voices.

### History

One of the earliest reports that food could help improve cancer was the 1962 book *Has Dr. Max Gerson a True Cancer Cure?* (Haught, 1962). Gerson, a German-born physician, put cancer patients on fresh fruit and vegetable juices, vegetable soups and broths, and foods high in potassium, with apparently excellent results, by numerous anecdotal reports.

Charlotte Gerson, Dr. Gerson's daughter, still lectures on her father's system and runs the successful Gerson Institute in Bonita, California.

Another dietary approach to cancer came through the system known as macrobiotics. According to Michio Kushi, founder of the East-West Foundation dedicated to the teaching of that system, cancer is very easy to understand: it is simply a pile-up of toxic matter in the body. Therefore, the way to handle it is to cleanse the body of the toxic matter through macrobiotic eating, and body processes will take care of themselves.

Macrobiotics was followed, with some success, by small groups of people through word-of-mouth dissemination, until it hit the media in the early eighties through Anthony Sattilaro, MD, then chief executive officer of Philadelphia's Methodist Hospital. Dr Sattilaro had been diagnosed in 1978 with advanced prostatic cancer that had metastasized to his bones and testicles. After conventional medical treatments failed to work, and with only two or three years given to live, he took the advice of a couple of hitchhikers he'd picked up "by chance" and started a macrobiotic regimen of brown rice, miso soup, cooked vegetables, and seaweed. He regained his health, and went on to live another ten years. The first of his two well-received books, *Recalled by Life* (Sattilaro 1982), was tremendously influential. Dr. Sattilaro's story hit all the major media, including LIFE Magazine, and was, in my view, the "Open Sesame" to the subject of food and cancer.

Elaine Nussbaum, a housewife from New Jersey, also wrote a book, *Recovery from Cancer*, on her success through the macrobiotic diet (Nussbaum 1992). This is a deeply moving story of breakdown and healing. It starkly depicts the importance of both inner strength and family support, especially if one is to do something contrary to "common wisdom." In the early 80's, Mrs. Nussbaum was totally riddled with cancer, in constant pain, couldn't even sit down to eat, wore a back brace constantly, and

had been given up as beyond medical help. Disappointed with the results of standard medical treatment, she read Dr. Sattilaro's book and embarked on a macrobiotic regime. As of this writing in 2002, she is in fine health, a grandmother of ten, and after returning to school to get a master's degree in nutrition, she has become a nutritional consultant.

There are numerous other researchers, doctors, scientists, and other interested parties with drug-free systems of cancer prevention and management. Nobel prize winner Linus Pauling argued for years that Vitamin C in large quantities helps the body overcome cancer (Moss, 1996). Virginia Livingston-Wheeler (1984), believing that cancer is caused by a bacterium, has a system of vaccines and an extensive vegetarian dietary system very similar to Max Gerson's. The laetrile therapy advanced by Ernesto Colntreras, Ernst T. Krebs Sr. and Ernst T. Krebs Jr. in the 50's, which was popular until banned by the FDA, also had a strong dietary component: all fresh fruits and vegetables, whole grains, white meat fish, nothing canned or frozen, no commercial foods or sugar, white flour, white rice, fried foods or processed meat products, and very limited amounts of fermented milk products (Moss, 1996).

These or similar dietary approaches are almost universally recommended by "alternative" cancer healers.

### **Contemporary studies**

In the 70's and early 80's, William Donald Kelly, DDS, had advanced a theory of diet that I find most useful, and mentioned in my book, *Food and Healing* (Colbin, 1996). This is the notion that there are wide variations in the ability of human beings to be or not to be vegetarian. Kelly posits that there are ten body types, ranging from the natural, pure vegetarian, who doesn't need any animal food, to the natural meat eater, who cannot do without it. He also developed various nutritional protocols for healing cancer. Nicholas Gonzalez, a physician from New York, after a five-year internship with Dr. Kelly, became convinced of the value of those systems. Dr Gonzalez now prescribes an aggressive supplementation program, with nutrients and pancreatic enzymes, and highly individualized diets, based on sophisticated blood chemistry and hair tests. The diets range from pure vegetarian to meat three times per day. Some of his patients are to eat only cooked foods; others do well with different amounts of raw fruits and vegetables; soy products are generally avoided. A clinical trial of his methods, published in 1999, showed significantly higher one-year survival rates (81% vs 25%) for patients with inoperable end-stage pancreatic cancer (Gonzalez and Isaacs, 1999).

It appears reasonable that if the body is malfunctioning, ill, or diseased, a dietary approach should help it recuperate. This is true in many cases; however, it is not true in others. Perhaps when the immune system has already been damaged beyond a certain point, it cannot muster the strength to recover. The National Cancer Institute and the American Cancer Society are hesitant to acknowledge that cancer can be cured by food. However, as early as 1982 the National Research Council of the National Academy of Sciences had found enough evidence to suggest that diet may help reduce the risk of cancer. Numerous scientific studies have shown that a diet high in fresh vegetables and fruits, at least 5-9 servings daily, reduces a person's statistical likelihood of getting several types of cancers, mainly those of the postmenopausal breast, colon, prostate, pancreas, ovary, and endometrium (Weisburger, 2000).

### **Cancer-preventative foods**

Among the foods that appear most effective in preventing cancer are the sulfur-containing cruciferous vegetables, which include broccoli, cauliflower, cabbage, Brussels sprouts, and kale; the seed vegetables, which include whole cereal grains, beans, nuts and seeds. Soybeans have been found to

contain genisteins, substances that inhibit tumor formation. Antioxidants such as beta carotene, the vegetable precursor to Vitamin A, also have been found to prevent malignancies such as colon cancer (Slattery, et al, 2000) and lung cancer (Michaud, et al, 2000). Fruits and vegetables with deep colors, including all dark yellow and orange vegetables such as carrots, yams, winter squashes; dark leafy greens such as kale, collards, and mustard greens; and fruits such as apricots and blueberries, are all high in cancer-preventive antioxidants. Garlic, that odorific natural antibiotic, also seems to have cancer-fighting abilities (Fleischauer et al, 2000). Fish consumption, even in modest amounts, appears to lower the risk of contracting cancers of the digestive tract (Fernandez, 1999) The Mediterranean diet , consisting of abundant grains and cereal foods, vegetables, fruit, and olive oil, some fish and cheese, and minimal amounts of meats and sweets, has shown possible protective effects (de Lorgeril, et al, 1998). Most interestingly, Lord Boyd Orr's Carnegie survey of family diet and health in Britain (1937-9) showed that lower caloric intakes during childhood were positively associated with a lower incidence of cancer later on in life (Frankel, 1998). Interestingly, Dr Gerson, Dr Gonzalez, the macrobiotic system, and practically all others who use diet to deal with cancer, all strongly recommend that cancer patients consume only foods that are organically grown, without petroleum-derived pesticides, fertilizers, or herbicides, and avoid all chemical additives such as colorings, flavorings, emulsifiers, preservatives, and the like.

Practically any region of the body can develop cancer. However, there is one type of cancer that is of great concern to women in general, and is worth a separate discussion.

### **Breast Cancer**

The statistics usually mentioned say that women have a 1-in-8 lifetime risk of getting breast cancer. To the statistically naive, that appears to mean that one in eight women will be stricken at some point in her life. Scary? Well, it's not that simple. Here is a more accurate description of the statistical chances of contracting breast cancer according to ages:

At age 20: 1 in 2500  
 At age 30: 1 in 233  
 At age 40: 1 in 63  
 At age 50: 1 in 41  
 At age 60: 1 in 28  
 At age 70: 1 in 24  
 At age 80: 1 in 16  
 At age 95: 1 in 8

Looks quite different, doesn't it? The risk increases with age, and 1-in-8 figure applies only if you live to be 95. That gives us some time. As Mark Twain once said, "there are lies, damn lies, and statistics." Spreading the statistics out over time, a recent article in the Washington Post (Okie, 2002) gives a woman's lifetime risk for contracting breast cancer in the US at 12.5%.

Let's now look at some of the less discussed variables that affect breast health. These include: a) number of children; b) breast-feeding; c) environmental causes; d) use of antiperspirants; e) tight and underwire bras; f) use of oral contraceptives; g) milk product intake.

### **Number of children**

Having children is protective against breast cancer; in fact, the more children, the higher the protection. One study found that women who have seven or more children had a 47% lower chance of developing the disease than women who'd had only one child (Layde, et al, 1989). This probably has to do with the fact that with more children a woman has less menstrual periods, thus less up-and-

down estrogen fluctuations.

### ***Breast-feeding***

The exclusive function of a woman's breasts is to secrete milk for her newborn. Pregnancy initiates changes in the breasts, preparing them for lactation. If that process is interrupted or not allowed to proceed, through miscarriage or bottle feeding, the body has to deal with the aftermath of starting a flow yet interrupting it. This situation may, if the residue of unused milk is not cleared out, result in plugged milk ducts. These plugs can result in lumps. While these would start off being generally benign, over time, with other risk factors, they could become cancerous. Short breast-feeding has not shown any protective effect; what counts is the accumulated time of breast-feeding during the whole of a woman's life. In the study mentioned above, women with a lifetime total of 25 or more months of breast-feeding had a 33% lower risk for contracting breast cancer as compared to women with natural children who had never breast-fed. A British epidemiological review study found that the longer women breast feed, the more they are protected against cancer (Collaborative Group, 2002) In addition, it is possible that suppressing lactation with drugs could have serious adverse effects on breast health as well.

### ***Environmental causes***

There are a number of external factors that may affect a woman's hormonal health. The main ones are pesticides, particularly organochlorides, and living near nuclear reactors. Many petroleum-based pesticides are quite similar in form to estrogen, and confuse the body into accepting them into their cells. These chemical substances are sprayed on fruits, vegetables, and animal feed. When these are consumed, the pesticides then are stored in human and animal fat, which, according to Connecticut nutritionist Phyllis Herman, may explain the link between a high animal fat diet and breast cancer. A 1990 study in Israel found a strong link: between 1976 and 1986, the rate of breast cancer declined 20% after a number of organochlorine-type pesticides were banned (Herman, 1995). Industrial countries where breast cancer mortality declined between 1971 and 1986 had no large commercial nuclear reactors operating within or near their borders; the other 12 industrial powers did, and breast cancer rose in all of them. It is thought that low-level radioactive contamination enters the groundwater, affecting produce, and is also carried downwind, affecting both animals and people. These environmental reasons are perhaps why breast cancer mortality rates for Long Island went up 39% between 1970 and 1989.

### ***Use of antiperspirants***

Here is a provocative thought. Kerri Bodner, publisher of the excellent Women's Health Letter, points out that 50% of breast cancer tumors appear on the upper quadrant of the breast closest to the underarm. Antiperspirants are strong chemicals, usually containing aluminum, which prevent sweating. Now sweating is a way for the body to eliminate toxins and unwanted materials with the help of the lymphatic system. Preventing this activity, in Bodner's words, is "like damming up a river." Sweat backs up into the lymphatic ducts, and the toxins become trapped in the under-arm lymphatic area. The fatty breast tissue allows for efficient storage of these unwanted toxins. Breast cancer often involves the lymph nodes. Could there be a connection? I have found no scientific research papers on this question, but it seems worth considering and eventually doing some formal research on it.

### ***Tight and underwire bras***

Sydney Ross Singer and Soma Grismaijer (1995) noted an increased risk of breast cancer for women who used tight bras, particularly if they wore them for more than 12 hours daily. They point out that

tight bras interfere with breathing, which may in turn cause oxygen deprivation in the cells, and can block the free flow of lymphatic fluid. One interesting detail is that breast cancer is practically unknown in societies where there is no bra use. In addition, I believe that underwire bras could cause additional problems: the metal crosses the body's acupuncture meridians, and may block the normal flow of Chi which in turn can cause stagnation and disease.

### ***The use of oral contraceptives***

Numerous studies have shown the direct correlation between hormone-based drugs and female cancers. One study is published in *The Lancet*, the prestigious British medical journal, on the effects of The Pill on 150,000 women. It found that all users face an increased risk, even 10 years after stopping. Women on the Pill had a 25% higher risk of contracting breast cancer (Collaborative group, 1996). A Dutch study in 1994 had found that women who started on the Pill before the age of 20 had a 3 times higher risk, while 97% of the women who got cancer before the age of 36 had used birth control pills at one time or another of their lives (Rookus and van Leeuwen, 1994). (Note that this does NOT mean that 97% of the women who took birth control pills got cancer.)

### ***Diet***

Fat is suspect, but studies give conflicting results and the issue is not conclusive. It is often mentioned that Japanese women eating their traditional low-fat diets have little if any breast cancer, which is also frequently ascribed to their use of soy products (Wu, et al, 1998). I maintain that rather than fat or soy, the studies should look at the use of milk products, which are by nature associated with hormone production. The traditional Japanese diet included no milk products, but now that Japan is picking up "Western" dietary habits and the use of these products is going up, so is their breast cancer. The highest rates of the disease are in Northern Europe (Finland, Sweden, Holland), the UK, the US, and Canada - all countries where cow's milk is a major food. Frequent consumption of whole milk has been found to be a risk factor in cancers of the lung, bladder, breast, and cervix (Mettin, et al, 1990). Even more interesting, breast cancer patients have been found to have twice as high a consumption of Vitamin D (usually added to milk) as cancer-free controls (Simard, et al, 1991).

### **Summary**

Obviously, there are multiple variables that trigger breast cancer, so all of these studies and reports show just part of the picture. Cancer is not a simple entity, but a complex personal journey. Even the most successful natural regimes have had their failures; certainly the standard medical treatment has its failures as well. Yet for those who prefer drug-free medicine, there are numerous systems among which one can choose. The persecution of unproven therapies and diets has diminished. The possibility of being able to choose from among all the different therapies now available makes these times we are living in truly rich with possibilities for healing.

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Contact:

**Annemarie Colbin, PhD**

<http://www.foodandhealing.com/> .

Website for school

<http://www.naturalgourmetschool.com/>

(212) 756-5170



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