A Cure for Cancer?

By Kathy Freston, Huffington Post, Posted: September 24, 2009 08:34 AM

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I have been working closely recently with a few extraordinary nutritional researchers, and I find that the information they have compiled is quite eye opening. Interestingly, what these highly esteemed doctors are saying is just beginning to be understood and accepted, perhaps because what they are saying does not conveniently fit in with or support the multi-billion dollar food industries that profit from our "not knowing". One thing is for sure: we are getting sicker and more obese than our health care system can handle, and the conventional methods of dealing with disease often have harmful side effects and are ineffective for some patients.

As it is now, one out of every two of us will get cancer or heart disease and die from it - an ugly and painful death as anyone who has witnessed it can attest. And starting in the year 2000, one out of every three children who are born after that year will develop diabetes -- a disease that for most sufferers (those with Type 2 diabetes) is largely preventable with lifestyle changes. This is a rapidly emerging crisis, the seriousness of which I'm not sure we have yet recognized. The good news is, the means to prevent and heal disease seems to be right in front of us; it's in our food. Quite frankly, our food choices can either kill us - which mounting studies say that they are, or they can lift us right out of the disease process and into soaring health.

In the next few months, I will share a series of interviews I've conducted with the preeminent doctors and nutritional researchers in the fields of their respective expertise. And here it is straight out: they are all saying the same thing in different ways and through multiple and varying studies: animal protein seems to greatly contribute to diseases of nearly every type; and a plant-based diet is not only good for our health, but it's also curative of the very serious diseases we face.

Cancer

On the subject of cancer, I've asked Dr. T. Colin Campbell, Professor Emeritus of Cornell University and author of the groundbreaking The China Study to explain how cancer happens and what we can do to prevent and reverse it. Dr. Campbell's work is regarded by many as the definitive epidemiological examination of the relationship between diet and disease. He has received more than 70 grant years of peer-reviewed research funding, much of which was funded by the U.S. National Institutes of Health (NIH), and he has authored more than 300 research papers. He grew up on a dairy farm believing in the great health value of animal protein in the American diet and set out in his career to investigate how to produce more and better animal protein. Troublesome to his preconceived hypothesis of the goodness of dairy, Dr. Campbell kept running up against results that consistently proved an emerging and comprehensive truth: that animal protein is disastrous to human health.
Through a variety of experimental study designs, epidemiological evidence, along with observation of real life conditions which had rational biological explanation, Dr. Campbell has made a direct and powerful correlation between cancer (and other diseases and illnesses) and animal protein. Following is a conversation I had with him so that I could better understand the association.

**KF:** What happens in the body when cancer develops? What is the actual process?

**TCC:** Cancer generally develops over a long period of time, divided into 3 stages, initiation, promotion and progression.

**Initiation** occurs when chemicals or other agents attack the genes of normal cells to produce genetically modified cells capable of eventually causing cancer. The body generally repairs most such damage but if the cell reproduces itself before it is repaired, its new (daughter) cell retains this genetic damage. This process may occur within minutes and, to some extent, is thought to be occurring most of the time in most of our tissues.

**Promotion** occurs when the initiated cells continue to replicate themselves and grow into cell masses that eventually will be diagnosed. This is a long growth phase occurring over months or years and is known to be reversible.

**Progression** occurs when the growing cancer masses invade neighboring tissues and/or break away from the tissue of origin (metastasis) and travel to distant tissues when they are capable of growing independently at which point they are considered to be malignant.

**KF:** Why do some people get cancer, and other don't? What percentage is genetic, and what percentage has to do with diet?

**TCC:** Although the initiated cells are not considered to be reversible, the cells growing through the promotion stage are usually considered to be reversible, a very exciting concept. This is the stage that especially responds to nutritional factors. For example, the nutrients from animal based foods, especially the protein, promote the development of the cancer whereas the nutrients from plant-based foods, especially the antioxidants, reverse the promotion stage. This is a very promising observation because cancer proceeds forward or backward as a function of the balance of promoting and anti-promoting factors found in the diet, thus consuming anti-promoting plant-based foods tend to keep the cancer from going forward, perhaps even reversing the promotion. The difference between individuals is almost entirely related to their diet and lifestyle practices.

Although all cancer and other diseases begin with genes, this is not the reason whether or not the disease actually appears. If people do the right thing during the promotion stage, perhaps even during the progression stage, cancer will not appear and if it does, might even be resolved. Most estimates suggest that not more than 2-3 percent of cancers are due entirely to genes; almost all the rest is due to diet and lifestyle factors. Consuming plant based foods offers the best hope of avoiding cancer, perhaps even reversing cancer once it is diagnosed. Believing that cancer is
attributed to genes is a fatalistic idea but believing that cancer can be controlled by nutrition is a far more hopeful idea.

KF: You said that initially something attacks the genes, chemicals or other agents; like what?

TCC: Cancer, like every other biological event--good or bad--begins with genes. In the case of cancer, gene(s) that give rise to cancer either may be present when we are born or, during our lifetimes, normal genes may be converted into cancer genes by certain highly reactive chemicals (i.e., carcinogens).

Consider 'cancer genes' as seeds that grow into tumor masses only if they are 'fed'. The 'feeding' comes from wrongful nutrition. It's like growing a lawn. We plant seeds but they don't grow into grass (or weeds) unless they are provided water, sunlight and nutrients. So it is with cancer. In reality, we are planting seeds all of our lifetime although some may be present at birth, not only for cancer but also for other events as well. But this mostly does not matter unless we 'nourish' their growth.

The chemicals that create these cancer genes are called 'carcinogens'. Most carcinogens of years past have been those that attack normal genes to give cancer genes. These are initiating carcinogens, or initiators. But more recently, carcinogens also may be those that promote cancer growth. They are promoting carcinogens, or promoters.

Our work showed that casein is the most relevant cancer promoter ever discovered.

Aside from chemicals initiating or promoting cancer, other agents such as cosmic rays (energetic particles) from the sun or from the outer reaches of space may impact our genes to cause them to change (i.e., mutate) so that they could give rise to cancer 'seeds'. The most important point to consider is that we cannot do much about preventing initiation but we can do a lot about preventing promotion. The initiating idea is fatalistic and outside of our control but the promotion idea is hopeful because we can change our exposure to promoting agents and reverse the cancer process, thus is within our control.

KF: What exactly is so bad about animal protein?

TCC: I don't choose the word "exactly" because it suggests something very specific. Rather, casein causes a broad spectrum of adverse effects.

Among other fundamental effects, it makes the body more acidic, alters the mix of hormones and modifies important enzyme activities, each of which can cause a broad array of more specific effects. One of these effects is its ability to promote cancer growth (by operating on key enzyme systems, by increasing hormone growth factors and by modifying the tissue acidity). Another is its ability to increase blood cholesterol (by modifying enzyme activities) and to enhance atherogenesis, which is the early stage of cardiovascular disease.
And finally, although these are casein-specific effects, it should be noted that other animal-based proteins are likely to have the same effect as casein.

**KF:** Ok, so I am clear that it's wise to avoid casein, which is intrinsic in dairy (milk and cheese), but how is other animal protein, such as chicken, steak, or pork, implicated in the cause and growth of cancer?

**TCC:** I would first say that casein is not just "intrinsic" but IS THE MAIN PROTEIN OF COW MILK, REPRESENTING ABOUT 87% OF THE MILK PROTEIN.

The biochemical systems which underlie the adverse effects of casein are also common to other animal-based proteins. Also, the amino acid composition of casein, which is the characteristic primarily responsible for its property, is similar to most other animal-based proteins. They all have what we call high 'biological value', in comparison, for example, with plant-based proteins, which is why animal protein promotes cancer growth and plant protein doesn't.

**KF:** Isn't anything in moderation ok, as long as we don't overdo it?

**TCC:** I rather like the expression told by my friend, Caldwell Esselstyn, Jr., MD, the Cleveland Clinic surgeon who reversed heart disease and who says, "Moderation kills!" I prefer to go the whole way, not because we have fool-proof evidence showing that 100% is better than, say, 95% for every single person for every single condition but that it is easier to avoid straying off on an excursion that too often becomes a slippery slope back to our old ways. Moreover, going the whole way allows us to adapt to new unrealized tastes and to rid ourselves of some old addictions. And finally, moderation often means very different things for different people.

**KF:** Are you saying that if one changes their diet from animal based protein to plant-based protein that the disease process of cancer can be halted and reversed?

**TCC:** Yes, this is what our experimental research shows. I also have become aware of many anecdotal claims by people who have said that their switch to a plant-based diet stopped even reversed (cured?) their disease. One study on melanoma has been published in the peer-reviewed literature that shows convincing evidence that cancer progression is substantially halted with this diet.

**KF:** How long does it take to see changes?

**TCC:** It is not clear because carefully designed research in humans has not been done. However, we demonstrated and published findings showing that experimental progression of disease is at least suspended, even reversed, when tumors are clearly present.
KF: Consider a person who has been eating poorly his whole life; is there still hope that a dietary change can make a big difference? Or is everything already in motion?

TCC: Yes, a variety of evidence shows that cancers and non-cancers alike can be stopped even after consuming a poor diet earlier in life. This effect is equivalent to treatment, a very exciting concept.

KF: This is sounding like it's a cure for cancer; is that the case?

TCC: Yes. The problem in this area of medicine is that traditional doctors are so focused on the use of targeted therapies (chemo, surgery, radiation) that they refuse to even acknowledge the use of therapies like nutrition and are loathe to even want to do proper research in this area. So, in spite of the considerable evidence--theoretical and practical--to support a beneficial nutritional effect, every effort will be made to discredit it. It's a self-serving motive.

KF: What else do you recommend one does to avoid, stop, or reverse cancer?

TCC: A good diet, when coupled with other health promoting activities like exercise, adequate fresh air and sunlight, good water and sleep, will be more beneficial. The whole is greater than the sum of its parts.

For more information about diet and cancer, visit tcolincampbell.org.