

## A Quest

“I have cancer. Don’t you understand? I---have---cancer.” With angst that was palpable, each word came a little louder and more forcefully as my brother sat facing me. What a way to greet retirement! I reflected back some 21 years earlier with the death of my mother, who had emigrated from Denmark in 1926. Diagnosed with cancer in 1968, a private and stoic individual, Mom was slow to let us children know. She had bowel cancer that was temporarily interrupted with a resection and a colostomy, followed by chemotherapy. Suffering often from embarrassment because of her colostomy, at a few months shy of five years it came back as metastases to the spine. In agony and unable to stay at home she was admitted to hospital. Pain control was not well understood in 1973, only a few milligrams of morphine were prescribed. With an intensity that seemed to increase every hour, the meager prescription was no match for the pain and she was soon crying “Jeg kan ikke, Jeg kan ikke mere” (*I can’t, I can’t anymore*). Repeating this mantra, she died.

This ending for mom set me, an engineer with an interest in alternatives, on a path to see if a less debilitating and agonizing treatment for cancer could be found. I felt certain almost any approach would be better than what I had just witnessed. I read everything I could get my hands on, including mainstream medical outcasts like Weston Price, whose epidemiological studies showed wide variances in cancer rates related to nutrition. I searched libraries, magazines and bought books, the number of which I soon lost count. A subscription to Prevention magazine enticed me to The Foundation For Alternative Cancer Therapies conventions. In the late 1970’s my wife and I investigated the Kelly program that seemed to be one of the better alternative protocols for cancer. So we enrolled for a week-long program in Texas, the first of many ventures. While playing a promising role in some cases of cancer remission, Dr. Kelly’s program was no panacea. When asked as to what biochemical mechanisms accounted for the results the answer was ‘we don’t know’. In discussing this with one of Kelly’s PhD employees, I was encouraged to go back to university to get a better scientific understanding. This I took as a personal challenge, and immediately enrolled in a Biochemistry course at Concordia University upon return to Montreal. It was fascinating.

Three years later with a BSc that had concentrations in cell biology and biochemistry, I was accepted into graduate studies at McGill. There my research in the Department of Physiology related to investigating nutritional influences on cancer. Glaringly absent at this time were peers with a similar interest in nutrition and this was a handicap. To suggest that nutrition might have some bearing on cancer was often met with skepticism and I suspect that my being older than some of my professors kept potentially ridiculing comments at bay. The importance of sodium and potassium ions and their interplay in the progression of cancer was the basis of my thesis proposal, which was challenged and ultimately rejected. I was discouraged, yes: surprised, not really. While I was offered to

write up my results towards a Master's degree, funding sources that hinged on approval of the thesis evaporated. I then left and found engineering related employment. This was a welcome financial reversal, having cashed in my RRSPs and re-mortgaged our house to get this far.

My experience at McGill stimulated my resolve to continue the cancer chase and even the heavy demands of my new engineering position did not deter me. One recurring theme in my research that seemed ludicrous at first was that certain vitamins and supplement combinations were actually drivers of the cancer process! It was on the basis of these observations and testimony from other practitioners that I started to look deeper into the biochemistry of "apoptosis" or "natural cell death". I spent countless hours searching the National Institutes of Health (NIH) Index Medicus® for research related to nutrition, cancer and apoptosis. These accumulating references now number more than 24,000.

Lately, still focusing on apoptosis, my research has gravitated towards words that are not yet a part of our common vocabulary, such as epigenesis, nutrigenomics and metabolomics. The new information published in these studies meshes perfectly with the understanding that *all cells come into being, live, differentiate (mature) and die in the context of their internal and external environments*. If we visualize our cellular environments as lakes becoming polluted from various chemicals, a large part coming from the digested byproducts of poor food choices, it may help us understand how our cells become challenged beyond their capacity to cope. Our DNA responds to this pollution by causing cells to grow abnormally: the expression of cancer is therefore driven by an evolutionary conditioned cellular response. Consequently, cancer is not 200 or more different diseases, but a normal response to an abnormal environment expressed differently by each cell type in our bodies. If we eliminate the pollution and supply the missing factors, the cells are less likely to have this abnormal response: ergo, this research provides strong evidence that cancers are both preventable and reversible! Despite the more than forty year war on cancer and the avalanche of the compelling information supporting this perspective, it appears that few researchers realize the significance.

Food and nutrition are components critical to the nourishment of the human body, and are unmistakable friends in some cancer interventions. However, many wholesome diets can be deadly foes that feed the cancer rather than support the host. Rationalizing the do's and don'ts regarding food and nutrition has made me realize that the use of a clinical setting may be the only means to truly evaluate a metabolic approach. I recognize this will receive scant support from most practitioners in our healthcare systems. Despite strong evidence, they do not see the good and bad roles of nutrition and continue with a devastating reliance on chemotherapy and other treatments. Yet, I am hopeful that progress will be made as healthcare professionals and researchers brave the cynicism of their peers and persist in promoting their understanding that nutrition is a fundamental driver of the cancer

process. It could only take one elected public figure's realization of a potential monumental reduction in public purse expenditures, or funding by a passionate philanthropist, to overcome the disconnect between current cancer treatment and the underlying fundamental nature of cancer.

I currently anchor a monthly 'Complementary and Alternative Medicine (CAM) Support Group' at no charge for friends and acquaintances that are battling various expressions of cancer, some of whom have chosen to pursue conventional therapies. Aware of the debilitating effects of their treatments, they come for research based nutritional information but more importantly, for mutual support. During these meetings I seek to provide information through open communication, so that they on this deeply personal cancer journey may make informed decisions. One of this group who has sought my input for more than 23 years, returned after developing new breast tumours and bone metastases. With no improvement after six months on the latest chemo, an abrupt change to an antioxidant deficient diet, coupled with a few supplements produced observable results. **In less than three months, her blood profile normalized and some tumours essentially cleared. At the present, only the bone lesions persist, unchanged after two years.** My brother, mentioned earlier, initially chose 'watchful waiting' and a number of suggested supplements. While his PSA varied little over seven years he finally chose conventional therapy and remains without symptoms after ten years with minimal additional supplementation. There is no question that these experiences and those of working with more than 100 other individuals have been a terrific stimulus to continue this quest.

Recently, I stood in emergency beside the gurney of my brother-in-law, sometime massaging his neck, back, arms or feet, sharing little comments of support as he lay with a body ravaged by lung cancer now metastasized to the liver, evidenced by ascites, confusion and involuntary twitching. After a few hours, the doctors, having completed their consultation, tests and discussions came to tell his wife and us that the end could be expected within ten days, maybe even today. Having expressed their regrets, they left. We cried and hugged.

So my quest continues with tears in my eyes, reinvigorated by appreciating yet again the futility of surgery and chemotherapy witnessed in his fight. The brave fight put up by those who have already succumbed to this disease is something we can both admire and abhor. However, society's resignation to accept more of these brave, but often futile fights should be challenged. In light of my research, it is questionable whether significant advances against cancer will be found without recognition that our abnormal cellular environments drive this disease. Its verification through refocused research is essential. Towards this end, I run.

Flemming H Rasmussen **31 Jan 2012**