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As We See It

The Hidden Cancer Epidemic

William Faloon

Just a few years ago, the government released an optimistic report stating that the rate of cancer was leveling off or declining. In 2002, the National Cancer Institute disclosed that the data used to prepare this report was seriously flawed.1,2 According to the National Cancer Institute, the incidences for some of the most deadly cancers are sharply increasing.

The American Cancer Association responded to these stunning statistics by urging that more research be devoted to ascertain why prevention programs are failing.

What has become strikingly apparent is that the most respected cancer institutions are clueless to explain why more Americans than ever before are contracting cancer.

Regrettably, most cancer cases occur needlessly. Thousands of published scientific findings provide a clear roadmap as to what one can do to reduce their cancer risk. The problem is that consumers are overwhelmed by the volume of cancer prevention data and have largely failed to take the necessary steps to protect themselves.

One mission of The Life Extension Foundation is to catalog research findings and translate them into easy-to-follow protocols. This enables members to take advantage of all the published knowledge about how to prevent cancer and other diseases.

In this month's issue, we discuss fundamental reasons for why so many people are contracting cancer. We then suggest relatively simple lifestyle changes that can help keep normal cells from transforming into malignant ones.

The medical establishment admits its failures

Despite enormous research dollars committed to finding a cure for cancer, very little improvement in survival has occurred over the past 50 years against most cancers.

It is well known that chemotherapy drugs have a high rate of failure. This was brought out in the January 10, 2002 issue of the New England Journal of Medicine,3 where it was noted that 20 years of clinical trials using chemotherapy on advanced lung cancer have yielded survival improvement of only two months. This editorial pointed out that while new chemotherapy regimens appear to be improving survival, when these same regimens are tested on a wider range of cancer patients, the results have been disappointing. In other words, oncologists at a single institution may obtain a 40% to 50% response rate in a tightly controlled study, but when these same chemotherapy drugs are administered in the real world setting, response rates decline to only 17% to 27%.

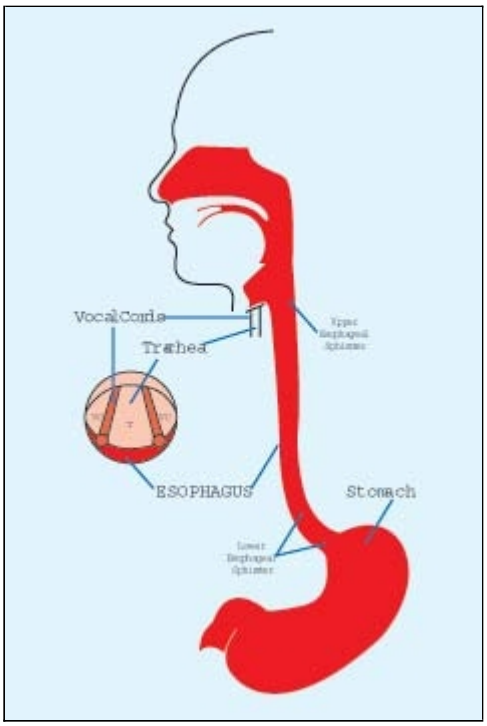
In fairness, we should point out that certain types of cancer are responding better now to chemotherapy compared to 30 years ago. These include lymphomas (Hodgkins, non-Hodgkin's and Burkitt's), multiple myeloma, hairy cell leukemia, chronic lymphocytic and certain other types of leukemia. Depending on the timing of treatment, some institutions are also seeing better results with breast and early-stage lung cancer.

While there have been successes against particular cancers, for many other types, the prognosis has not changed much since 1950. This fact was brought out in a study published in the June 14, 2000 issue of the Journal of the American Medical Association.4 According to this study, the five-year survival rate for most forms of cancer was the same in 1995 as they were in 1950. The title of this study was "Are Increasing 5-Year Survival Rates Evidence of Success Against Cancer?" The answer was no! This study showed that the only reason more cancer patients are living longer than five-years is because of earlier diagnosis. The authors of this study stated that the ability of medicine to effectively treat most cancers was no better than it was in 1950. Previous observers and commentators conveyed the same disappointing data.5,7

The fastest growing type of cancer

Over the past 25 years, the incidence of esophageal cancer (of the adenocarcinoma type) has increased 350%, faster than any other malignancy in the western world.8 One study showed that esophageal adenocarcinoma cases are increasing 5% to 10% each year in developed countries. Another study showed that the rate of esophageal adenocarcinoma increased eight-fold over a 20-year period in Denmark.9

These increased rates are strongly related to gastroesophageal reflux disease (GERD). One study looked at possible risk factors and concluded that severe reflux symptoms (heartburn), male sex and obesity, may identify patients with gastroesophageal reflux disease who are at the greatest risk for the development of esophageal adenocarcinoma.10



The two common forms of esophageal cancer are squamous cell carcinoma and adenocarcinoma. Risk factors for the squamous cell type of esophageal cancer include use of tobacco, moderate to heavy alcohol ingestion and infrequent consumption of raw fruits and vegetables.9 The primary risk factor for the more difficult-to-treat adenocarcinoma directly relates to those who suffer heartburn (gastroesophageal reflux). It is the adenocarcinoma type of esophageal cancer that is exponentially increasing in prevalence.

These grim statistics have motivated The Life Extension Foundation to develop specific strategies to protect against esophageal adenocarcinoma. Until the formal protocol is published, members are advised to follow lifestyle changes that keep bile, acids, enzymes and food in the stomach and out of the esophagus. Some of these approaches involve eating several small meals throughout the day instead of one big meal, elevating the head end of the bed six to nine inches, losing weight and avoiding eating four hours before bedtime. The long-term use of stomach acid suppressing drugs is not recommended. An updated Esophageal Reflux Protocol will be available within the next few months.

In the meantime, there is some encouraging news. Two very recent studies indicate that common vitamin supplements lower esophageal adenocarcinoma risk. The first study looked at a group of German esophageal cancer cases and compared them to age-matched healthy controls. The findings showed that vitamin E, vitamin C, folic acid, beta-carotene supplements significantly reduced the risk of both adenocarcinoma and squamous cell esophageal cancers. In this study, the use of a vitamin C supplement was associated with a 66% reduction, whereas vitamin E supplementation reduced esophageal cancer risk by an astounding 87%! 11

The second study evaluated a group of esophageal cancer cases residing in Nebraska and compared them to a control group. The findings revealed a 50% reduction in esophageal adenocarcinoma incidence in those who consumed the highest levels of vitamin A, folic acid, zinc, vitamin B2 and other nutrients.12

While these studies are encouraging to vitamin supplement users, they should not be used as an excuse to ignore the lifestyle changes needed to mitigate the effects of gastroesophageal reflux (GERD). The most significant risk factor for developing adenocarcinoma of the esophagus is GERD, and The Life Extension Foundation is designing the world's most comprehensive program to protect those suffering with chronic GERD (heartburn) from developing esophageal cancer.

What causes cancer

All cancers are caused by gene mutations.13 This simple fact is obscured by the publicity given to specific agents like cigarette smoke that cause cancer by inflicting mutations to genes. Cigarette smoke mutates genes, which can later manifest as cancer in some people. Those who quit smoking have higher rates of lung cancer later in life because the body is not always able to repair the initial gene mutation inflicted by the cigarette smoke.

There are many factors involved in gene mutation including exposure to sunlight, medical x-rays and dietary carcinogens. The aging process itself results in gene mutation, which helps explain why the risk of cancer increases as we grow older.

Most people have a difficult time grasping the complexities of genes and their relationship to cancer. The following one-sentence definition explains this in the simplest of terms:

> **"Cancer results from the accumulation of mutations in genes that regulate cellular proliferation."**
> *The New England Journal of Medicine, November 23, 2000, "Roads Leading to Breast Cancer."14*

Genes regulate cell proliferation. When genes become mutated, normal cell regulatory processes are disrupted. If too many genes involved in regulating cell proliferation become mutated, the cells lose control over their own growth rate. Cancer is a disease characterized by rapidly propagating cells that expand locally by invasion and systemically by metastasis.

Once one understands this basic concept, it becomes apparent that if we are to prevent cancer from developing in our bodies, every practical step must be taken to maintain gene integrity. Gene mutations can turn healthy cells into malignant cells. As gene mutations accumulate, the risk of cancer sharply increases.

Preventing gene mutations

It is not possible to prevent all gene mutations. Fortunately, cells possess repair mechanisms that protect against most cancer-causing gene mutations.15,16
There is a limit, however, to the number of gene mutations that can be repaired. That is why avoiding second-hand cigarette smoke, unnecessary x-rays, excess ethanol and known dietary carcinogens is so important.

The most prevalent cause of environmental genetic mutation is the food we eat everyday. Life Extension has reported extensively on particularly dangerous foods such as over-cooked meats and fish that are loaded with gene-mutating heterocyclic amines. Unfortunately, the list of gene-mutating foods keeps growing, as scientists expose the fact that processed foods (designed for taste and convenience) are incredibly dangerous.

As noted earlier in this article, the prevalence of cancer continues to increase at a frightening pace. Smoking rates, however, have declined drastically since the 1950s. The increased rate of cancer points to other sources of gene mutation, with the increased consumption of the wrong kinds of foods being a prime suspect.

Over the past 12 months, The National Cancer Institute has issued an exceptionally large number of press releases urging Americans to consume at least five servings of fresh fruits and vegetables each day.17,18 The evidence that consumption of different types and colors of fruits-vegetables reduces cancer risk is irrefutable. Scientists have identified dozens of cancer-preventing constituents in plants including indole-3-carbinol, folic acid, bioflavonoids, lycopene, sulforaphane and lutein. The most effective anti-mutagenic agent identified to date is chlorophyll, which is found in green vegetables.

It is difficult for most people to consume the variety and quantity of fruits-vegetables recommended by the National Cancer Institute. Dietary supplements that contain standardized potencies of these cancer-preventing plant extracts have become extremely popular amongst Life Extension members.

A number of dietary carcinogens inflict their gene mutating effects by causing excessive free radical generation. Antioxidants help protect against gene mutation by neutralizing free radicals. It is more important, however, to inactivate gene-mutating carcinogens before they form free radicals. This is why supplements like chlorophyll (chlorophyllin) are so promising as cancer prevention agents.

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Why anti-cancer drugs so often fail

Cancer cells survive conventional therapies because they are able to quickly adapt to toxic environments, readily alter themselves to assure their continued survival and utilize complex biologic mechanisms to promote cellular immortality. All of these factors make cancer an extremely difficult disease to treat.

Chemotherapy drugs have a high rate of failure because they usually kill only specific types of cancer cells within a tumor, or the cancer cells mutate and become resistant to the chemotherapy.

This coming December, it will be 32 years since the War on Cancer was declared. It was back in 1971 that President Richard Nixon signed bipartisan legislation into law after the U.S. Congress overwhelmingly passed it. Since then, approximately $2 trillion has been spent on conventional cancer treatment and research. One would think that, after almost a third of a century and such an astronomical investment, it would be easy to determine if significant progress has been made in combating the nation's number two cause of death. This has not been the case.

Cancer statistics have turned into an obscure and politicized arena. Over the decades, the government and the private sector have worked closely to put a positive face on cancer survival rates. The latest statistics, however, show more Americans dying from common cancers than ever before. For the past 23 years, The Life Extension Foundation has been a virtual lone voice in challenging the party line and warning of the growing cancer epidemic.

Today's enormous cancer "establishment" includes federal agencies, private charities, academia and drug companies, all who have an interest in pretending that progress is being made. The grim realities paint an opposite picture and mandate that individuals take aggressive steps to personally reduce their risk of contracting cancer.

Pharmaceutical companies are investing billions of dollars to develop drugs that are proven to interfere with cancer cell growth. Unfortunately, these drugs have failed to extend survival in late-stage cancer patients. In some of these clinical studies, tumor shrinkage is observed, but the patients still die. Experts remain convinced that these drugs will eventually play a role in the treatment of cancer, but the unacceptable fact is that they are failing cancer patients today.

One reason these drugs are not working is that they usually only suppress one growth factor. Scientists now know of more than 20 growth factors used by tumors. Late stage breast cancer cells, for example, may express as many as six different growth factors that induce angiogenesis. Cancer cells emit these growth factors to draw new blood vessels into tumors (angiogenesis) and/or to over-express cell receptors sites that bind to normally occurring growth factors in the body (such as the epidermal growth factor used for skin maintenance).

The FDA has restricted human studies of promising new drugs to late-stage patients, whose cancer cells have mutated and become highly resistant. The FDA also mandates that new cancer drugs be tested on patients who have failed all other "proven" therapies. The problem is that when cancer cells are exposed to "proven" therapies such as chemotherapy or radiation, the cells that survive have mutated to a form that becomes virtually invulnerable to any other therapy. If promising anti-cancer drugs were tested earlier in the disease process, some doctors believe they would work better.

We know that cancer cells mutate each time they are exposed to a new therapy. By testing promising cancer drugs only on patients who have failed previous therapy, a tremendous burden of efficacy is being placed on these new compounds, i.e., these drugs are expected to kill cancer cells in their most aggressive stages.

Some experts think that successful treatment of cancer may ultimately depend on the use of a multi-drug cocktail, one that would block all known growth factors used by cancer cells. That would parallel the success in treating AIDS, where several anti-viral drugs that work by different mechanisms are combined into cocktails that have turned the condition into a manageable disease for some people.

Based on current knowledge, it would appear logical to simultaneously test a wide range of cell growth inhibitors on early stage cancer patients. Such testing might be considered at the time that other cytotoxic therapies are administered, or shortly thereafter.

Regrettably, the FDA does not permit the type of multi-modality approaches that could lead to the development of effective cancer drug "cocktails." What that means is that if you are diagnosed with pancreatic cancer and given six months to live, you do not have the option of trying an aggressive multi-drug approach.

The FDA says it is "protecting" cancer patients by banning access to anything that is "unproven," even though for many cancers, the so-called "proven" therapies are absolutely

"proven" to fail.

Cancer research falls behind other technologies

Most people join The Life Extension Foundation in reasonably good health and expect us to keep them that way. There are others, however, who have reached advanced stages of cancer and are desperately seeking some glimmer of hope. Regrettably, there is little we can do for people whose cancer cells have become resistant to virtually any conceivable therapy.

What has begun to happen, however, is that some of these cancer patients are hooking up laptop computers in their hospital rooms and sending us e-mails reporting about their deteriorating condition and asking our opinion about experimental therapies they have just found on the Internet. They also provide us with cell phone and fax numbers in case we cannot get through to them via the hospital system. These terminally ill individuals may only have weeks or days to live; yet they are communicating as if they are working out of an office.

What is so surreal about all of this is that in 1971, President Richard Nixon declared "war on cancer" and committed enormous resources to find a cure for the disease. Back in 1971, there was not even a conception of laptop computers, email, Internet searches or cell phones and certainly no decree by the government to develop this technology. Yet somehow in the unregulated marketplace, these technological miracles emerged and became affordable to just about everyone.

Now here were are in the year 2003, and advanced cancer patients have no better chance of recovery than they would have back in 1971,5-7, 19 despite untold billions of tax dollars squandered. It costs a lot more for cancer treatment in 2003 compared to 1971, but these higher prices buy no substantive improvement in survival rate.

Could it be that the current over-regulated healthcare system is horribly flawed? The answer is obvious. In the unregulated free marketplace, exponential advances in computer and communication technologies provide the consumer with superior product at much lower prices.

On the flip side, today's corrupt, inefficient and quasi-socialistic system of government-controlled research and healthcare regulation results in prices that increase faster than any other sector of the economy. Research funded by the government, non-profit groups and drug companies has not resulted in improved survival rates against most cancers, but the cost of obtaining these ineffective therapies has skyrocketed.

High prices combined with poor quality are characteristic of the inefficient socialistic systems that cause many countries to remain in perpetual states of economic distress. When it comes to cancer treatment in the United States, consumer healthcare costs are staggeringly high and government budgets to support cancer research are bloated. Yet during this 32-year "war on cancer," virtually no progress has been made in curing the disease. The government in essence, has spent a lot of research monies, and issued hundreds of thousands of pages of regulations, to accomplish nothing.

Prices have plummeted for personal computers, Internet access, cell phones, fax machines, etc. while the quality vastly improves. Doesn't it make sense to remove the regulatory barriers that have stifled the introduction of novel cancer therapies? This would enable the full creativity of the free market to be unleashed to develop novel solutions that are egregiously overlooked by those in the cancer establishment?

The Life Extension Foundation is on the verge of publishing a myriad of new cancer treatment protocols that will uncover the huge number of currently available cancer therapies that are overlooked by practicing oncologists. Not to raise any false hopes, these new protocols are designed primarily for early-stage cancers, and not those that have already failed multiple conventional approaches.

Oncologists fail to prescribe the best drugs

Billions of dollars are spent on cancer research every year, yet even when a breakthrough discovery is made, it is seldom incorporated into clinical oncology practice.

An example of this neglect can be seen in a year 2002 study showing that a drug called cimetidine dramatically improved 10-year survival rates in those with an aggressive form of colon cancer. We dedicated the July 2002 issue of Life Extension magazine to informing colon cancer patients exactly how they could duplicate this landmark study. Despite the proven anti-cancer benefits of cimetidine, virtually no oncologists are recommending it.

Few people understand how physicians can overlook such obvious findings. The Life Extension Foundation recently learned first hand how the oncology business operates. Conventional oncologists are so overburdened with patients, that they lack the time to provide the type of comprehensive individualized treatment that is required to effectively treat a disease as aggressive as cancer.

Physician apathy is partially to blame for the stagnation that exists in cancer treatment, but a large problem also lays with managed health care, where oncologists are sometimes forced to see 40 patients a day. We've spoken with oncologists who complain of working from 7:00 am to 10:00 pm every workday. These oncologists candidly admit that they do not have the time to spend with each patient to incorporate the many novel treatment approaches developed by The Life Extension Foundation.

Another area where the socialistic nature of health care rears its ugly head is in the area of compensation. Oncologists do not have an economic incentive to cure cancer patients. If they spend the extra time to heroically treat a patient with more effective multi-modality therapies, they lose money because they see fewer patients that day.

Today's flawed system places cancer patients on an assembly line. What is especially appalling is that large cancer centers are taking advantage of this managed care system by offering oncologists chemotherapy "bonuses," since this is what insurance companies unquestionably reimburse for. Insurance companies balk at paying for life-saving drugs like Procrit to treat anemia, even though mortality rates are 65% higher in cancer patients who are anemic.
There are many existing drugs denied to cancer patients that cause them to needlessly die. The Life Extension Foundation will have revised cancer treatment protocols available soon so that the early-stage cancer patient can take full advantage of the wealth of life-saving information that is being ignored by the cancer establishment.

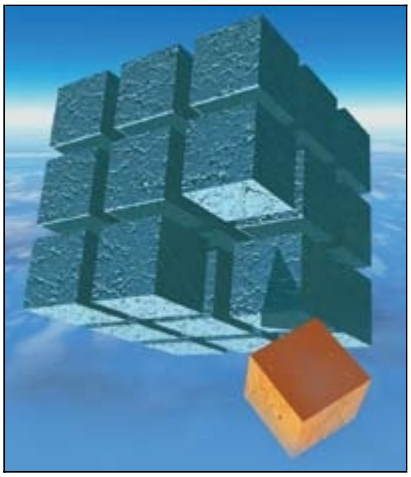
Promising cancer drugs are suppressed

Scientists have identified many ways of controlling cancer cell propagation, but little of this new technology is being used in the clinical practice of medicine. When a scientific discovery is made, drug companies spend years seeking a patent and then more years carrying it through the bureaucratic approval process. Drug companies are only interested in patented molecules that can reap huge profits. Potentially effective drugs that can't be patented are ignored altogether.

When clinical trials finally begin, the FDA mandates that a low potency of the promising drug be used only on advanced cancer patients who have already failed conventional therapy. These obstacles virtually guarantee that the promising drug will fail.

Record-breaking numbers of cancer patients are dying needlessly because of this antiquated regulatory system that causes potential therapies to be delayed and suppressed altogether.

Tearing down today's cancer bureaucracy



The institutions that we have counted on to find a cure (National Cancer Institute, American Cancer Society, drug companies, etc.) have failed. This is not an allegation, but an admission made by the National Cancer Institute itself.

The system needs to be changed if we are to make a realistic attempt to save the 1500 American cancer patients who perish each day.

Life Extension's long-standing proposal has been to change the law so that anyone can "opt-out" of the FDA's so-called umbrella of "protection." This approach would enable companies to sell novel products with a label clearly stating that they were "Not Approved By The FDA."

Consumers who trusted the government could stay with FDA-approved drugs only, while those willing to take a risk would be allowed to try whatever they choose. Companies that made fraudulent claims for products could be prosecuted under the laws that exist today.

This free market initiative would result in a renaissance in the practice of medicine, analogous to the computer/communications technology revolution that has occurred over the past two decades. In this liberated environment, many inexpensive cures would be found for lethal diseases. Greater competition would help eliminate today's health care cost crisis. Under this free-choice system, when you hear about a medical breakthrough on the news, you would not have to wait years before the therapy might become available.

Today's over-regulated system results in terminally ill people learning about scientific discoveries that could cure their disease, but are quickly advised that the therapy is years away from FDA approval. Terminally ill people should be able to make up their own minds about what drugs they are willing to try.
Millions of cancer patients today face probable death in the near future. If you add up family members and friends, there are tens of millions of Americans who should be outraged by an outdated regulatory system that blocks access to potentially life-saving therapies.

The first step to changing today's outmoded system is to organize those who understand the magnitude of this problem into a group that will make an impact on Congressional leaders. The reason the FDA can continue to suppress innovative therapies is that cancer patients have failed to coordinate their efforts for the purpose of abolishing the FDA's arbitrary authority.

The Life Extension Foundation is determined to break through the bureaucratic quagmire that is denying cancer patients the best that science has to offer. We are on the verge of publishing over 500 pages of updated protocols that expose in step-by-step detail, what oncologists are not doing to save the lives of their patients. These protocols will uncover therapies that have demonstrated efficacy in published scientific studies, but are overlooked by most practicing oncologists.

By exposing the inadequacies about how cancer patients are treated in meticulous detail, we will force the establishment to face the irrefutable fact that cancer patients are being grossly neglected. The primary purpose of these cancer protocols, however, is to enable Life Extension members to access the most scientifically comprehensive cancer therapies that science has to offer.

What year 2003 has to offer

In recent years, The Life Extension Foundation has committed enormous resources to discovering scientific methods of slowing aging, reversing degenerative disease and extending the healthy human life span. This research has been painstakingly slow, but we expect to announce more original findings in year 2003 than any previous period in our 23-year history.

Life Extension funds research at its own laboratories and via grants to Universities throughout the United States. The only financial support we receive is through annual membership dues and supplement purchases.

Foundation members have been incredibly supportive of our efforts to stave off disease and aging. Every time a member purchases a product from us, they directly support unique research programs aimed at dramatically extending the human life span.

To find out more about The Life Extension Foundation, click here.

For longer life,

William Faloon

Note: Those who want to participate in future political campaigns to reform today's inadequate system of cancer research and clinical care can register their names and addresses at the website www.cancervictor.org. If you don't have a computer, send your name and address to Cancer Patient Advocates, PO Box 1067 Hollywood, FL 33022.

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