Cancer Cell

Nobel Laureate, Dr. Otto Warburg, discovered that when he lowered the oxygen levels of tissues by 35 % for 48 hours normal cells were converted into irreversible cancer cells. Cancer patients have low levels of oxygen in their blood usually around 60 compared to normal values of about 100 by pulse oximetry.

The common therapies used to treat cancer (chemotherapy and radiation) both cause drastic falls in the body's oxygen levels. Tissues that are acidotic contain low levels of oxygen whereas tissues that are alkalotic have high levels of oxygen.

In a normal cell, glucose and oxygen easily enter the cell and waste products are promptly eliminated from the cell. The cell ph remains in the normal range of 7.35. When the outer lining membranes of the cell are chronically irritated by toxic substances (exposure to carcinogens) this membrane functions abnormally by *failing to permit oxygen to enter the cell while glucose is still able to enter the cell.*

Cancer cells are known to be anaerobic, meaning they ferment oxygen rather than burn oxygen. When the level of oxygen that gets into a normal cell becomes too low, or the ATP molecule count gets too low, a normal cell will convert into becoming anaerobic. When oxygen fails to enter the cell the cell's ability to control its ph is lost and the cell becomes quite acidic.

A normal cell undergoes an adverse change when it can no longer take up oxygen to convert glucose into energy by oxidation. In the absence of oxygen the cell reverts to a primitive nutritional program to sustain itself, converting glucose, by fermentation. The lactic acid produced by fermentation lowers the cell pH (acid/alkaline balance) and destroys the ability of DNA and RNA to control cell division… the cancer cells begin to multiply unchecked. The lactic acid simultaneously causes intense local pain and destroys cell enzymes. Therefore, cancer appears as a rapidly growing outer cell mass with a

core of dead cells."

In the absence of oxygen, glucose undergoes fermentation to create lactic acid. This causes the cell pH to drop from between 7.3 to 7.2 down to 7 and later to 6.5; in more advanced stages of cancer and in metastases the pH may drop to 6.0 and even 5.7. This is the true nature of cancer cells. They are acidic. They cannot survive in any other state -- they die.

Potassium ions are responsible for the ability of glucose to enter the cell. Potassium enters cancer cells in a normal manner so glucose still enters the cancer cell. Cancer cells have only 1% of the calcium content found in normal healthy cells. The calcium, magnesium and sodium ions, which are responsible for the intake of oxygen into the cell, can not enter the cancer cell but the potassium ion still enters these cells. Thus we have cancer cells containing glucose but no oxygen.

This is caused by the appearance of abnormal metabolism (anerobic glycolysis) in which glucose is converted (fermentation) into two particles of lactic acid. This production of lactic acid promptly lowers the ph within the cell to 6.5 or lower. The lactic acid damages the template for proper DNA formation. Messenger RNA is also changed so the ability of the cell to control its growth is lacking. Rapid and uncontrolled cancer cell growth and division occurs.

Why the current Cancer surveillance and therapy programs have failed

During our lives we all kill millions of cancer cells unless our immune systems become injured or impaired. When a clinician is able to diagnose a cancer of the lung by chest x-ray, breast cancer by mammogram, or colon cancer by colonoscopy etc. it has already been in the body for 6 to 8 years and *has had ample time to spread to other parts of the body*. This is the reason that the massive program to get annual mammograms in women is a complete failure. The survival rate from breast cancer is the *same for women who have never had a mammogram as for*

those who obtain annual mammograms (large population studies from Canada and Denmark discovered this).

Cancer treatment programs are based on the false concept that chemotherapy will kill more tumor cells than healthy cells and thus lead to recovery. The very cells (bone marrow) that enable a human to recover from cancer are damaged by chemotherapy. How could a therapy known to cause cancer (radiation) be able to improve long term survival for very many cancer victims? The statistics show that no more people are surviving now than 25 years ago. Both chemotherapy and radiation *injure the immune system which is vital for surviving cancer*.

The cancer cartel has no interest in curing cancer because chemotherapy drugs are an enormously profitable product for the pharmaceutical industry. An important clue proving that there is no sincere interest in curing cancer is provided by the fact that only 0.5% of the dollars spent on cancer research is spent on research directed at stopping the spread of cancer (metastases). When a cancer fails to spread the patient can live many comfortable years in an uneventful manner.

Factors influencing the development of malignant diseases

All persons are normally killing millions of cancer cells unless their immune system becomes injured. There are at least 6 things that can injure the immune system:

- *Nutritional Deficiencies* (examples) Inadequate reserves of vitamin C and E can increase the morbidity experienced in surgical ICUs after massive trauma. Lack of selenium increases the risk of developing malignancies, infections and heart disease.
- *Infection* Serious infections can deplete phagocytes, cause coagulation problems, nutritional deficiencies, impaired circulation etc.

- *Exposure to Radiation* Injury to DNA and bone marrow may follow radiation leading to malignant changes in cells and greater opportunity for infections to occur.
- *Toxins* Exposure to unhealthy dietary trans fats, heavy metals, pesticides, herbicides, chemicals, fluoride etc. injures the immune system's ability to mobilize a prompt effective response. The lack of dietary essential omega 3 fatty acids is an important cause for immune injury.
- *Stress* When prolonged stress occurs the body steadily releases cortisone that causes suppression of the immune system, death of nerve cells, failure to kill abnormal cells, and risk of infection may increase...
- *Aging* There is diminished ability to activate the immune system as we age. This contributes to the occurrence of malignancies and infections in the elderly.

Cancer cells contain a fibrin meshwork 13 to 15 times thicker than the fibrin meshwork surrounding normal cells. This fibrin mesh surrounding cancer cells is believed to play a key role in the ability of cancer cells to escape destruction by making it quite difficult for the killer lymphocytes, phagocytes and cytokines of the immune system to contact and destroy cancer cells.

Enzymatic digestion of this fibrin mesh is an important part of cancer therapy. The processing of dead cancer cells is also expedited by the digestion of tissue fragments caused by enzyme therapy. As we age our ability to manufacture enzymes steadily diminishes. The key enzyme component in an effective enzyme preparation is chymotrypsin or serrapeptase both of which increase the body's ability to produce more enzymes. Vitamin C and zinc are able to enhance the uptake of cesium, rubidium, and potassium into cancer cells.