

## **THE SCARY BIG C – CANCER :**

The world is gripping with the fear of Cancer. Currently it is estimated that 1 in 3 person run the risk of getting this most feared disease. It is estimated that 1200 new cases are dismissed every day in the USA. This translates into about 21000 new cases per day around the world. This is an alarming figure. The rate has been ever increasing in spite of the all the advancements both in the diagnosis and treatments. The success in conquering the established Cancer has been very dismal. Where have gone wrong? Why aren't we swallowing the bitter pill of truth that the current management is not effective and we need to reevaluate the treatment strategies? Why aren't we asking the pertinent question as to why are we not thinking outside the conventional box? For any treatment to be successful, first the underlying cause(s) must be identified and controlled. Then the treatment should be holistic addressing the whole body and the needs of the body in terms of vitamins, minerals, essential fatty acids, amino acids etc. Conventional treatment sadly misses out these essential healing essences.

A study done by the Canary Cancer Institute showed that with early diagnosis the successful outcome can be seen in 9 out of 10 cancer patients whereas with late diagnosis it turns down to 1 in 10. The outcome can only be improved if we address 2 very critical issues.

### **THE UNDERLYING CAUSES:**

There are many reasons for Cancer to grow and metastasize in our body. Some of the important causes are diet with high sugar (Glucose & Fructose) , an over acidic body , environmental toxins( pesticides , chemicals , GMO& GM FOODS ) , Stress etc. Among these the most important and sensible target to focus will be to cut the food supply chain for the cancer cells. It was clearly explained as early as 1931 by one of the best brains in biochemistry of the 20 th century, Otto Warburg. He demonstrated that Cancer cells live on Glucose. However Cancer cells use Glucose differently from healthy cells. In healthy cells, Glucose is burned for energy in the Mitochondria using Oxygen (Oxidative Phosphorylation). This is a very efficient way of energy generation (32 calories per gram of Glucose). Unfortunately there is always “Smoke” (Free Radicals) from this metabolism of Glucose. Hence the more Glucose is burned for energy (OVERCONSUMPTION OF CARBS & GLUCOSE) the more smoke you get and this directly damages the Mitochondria, the very energy units of the cell. This results in Mitochondrial DNA damage, Dysfunction, Decay and a Reduction in the number of Mitochondria. This primary damage that occurred in the Mitochondrial DNA results in Mutations in the Nuclear DNA, **SETTING THE STAGE FOR CANCEROUS TRANSFORMATION OF A HEALTHY CELL.** Hence DNA mutations are a secondary effect of mitochondrial damage by Free Radicals and this is by and large by Glucose consumption especially in excess. Cancer cells adapt to these changes in energy crisis within the cells by hijacking the energy production for the Mitochondria to the Cytoplasm and without using Oxygen. This then becomes a fermentation process resulting in the production of Lactic Acid inside the cells. After all we still possess our rudimentary evolutionary Cytoplasmic Metabolism of Glucose via Fermentation where there is either no need or very little need for glucose.

Every way you look at, the effective way to prevent & treat cancer will be to STOP FEEDING CANCER CELLS - GLUCOSE. This is where the Ketogenic Diet paves the way to win the battle WHICH WE ARE NOT ACHIEVING WITH THE CURRENT & ADVANCED CONVENTIONAL TREATMENTS! A Ketogenic consists of No Glucose (Simple Sugars) such as Table sugar, Rice and rice based foods, all Gluten and Non Gluten Grains , Honey, Fruits ) , 70-80% Good Fats ( Virgin Coconut Oil , Eggs , Organic Butter, Avocados , Nuts ) , some Proteins 10-20% and the small amount of carbs 12% as Complex Carbs from Green Leafy Vegetables , Broccoli, Cauliflower, Cucumber etc. It is good to avoid vegetables rich in sugar such as Carrots, Beetroot, and Potatoes.

## 2. EARLY DIAGNOSIS:

The cure rate of Cancer is 9 out of 10 with early diagnosis but this figure drops to 1 out of 10 with a late diagnosis. The current way of assessing the risks of Cancer by Tumor Markers, PET scan, CT scan, MRI, Scopes etc. are not without value. However the diagnosis is often late, a stage 3 or 4 Cancer. CIRCULATING TUMOR CELLS (CTC) as a way of early diagnosis has been available for some time now and is a hot topic in most of the Oncology conferences. While the earliest diagnosis with the current conventional diagnosis is a tumor of 0.7 cm or bigger , CTC can detect as small as 0.1 cm tumors that have shed their cells in the peripheral circulation . These circulating cells are also the CANCER STEM CELLS which are the cells that can metastasize and grow into secondary tumors. Sadly most of the deaths from Cancer is due the secondary tumors. CTCs can also be used as warning sign of the potential of tumor growth. It also offers the big benefit HELPING TO CHOOSE THE TYPE OF CHEMOTHERAPY &/ or NATURAL THERAPIES WITH SENSITIVITY TESTS ON THESE CIRCULATING CANCER CELLS. This then establishes the response to a particular Chemotherapy ( if this is the intended treatment ) and choosing one or more drugs that will actually work instead of the current methods of treating first and assessing the response later , somewhat like taking a blind shot at the cancer !

I have always been very passionate in teaching Doctors and the public to recognize the underlying cause of a disease. This is only way to win the war against both Non Communicable and Communicable Diseases. Cancer is a good example of this. We can discuss the preventive and nutritional treatment options in the next article.

BE WELL.