Cancer Simplified

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Part 1: What Is Cancer and How Does It Develop?

The traditional view has been that cancer is a **bump** or a **lump** which has developed in the body over a period of time due to cells going out of control. Upon this understanding, it is conventionally treated by **cutting** (surgery), **poisoning** (chemo) or **burning** (radiotherapy) or a combination thereof. In most cases, the cancer growth returns, usually more aggressively because these treatments act very harshly upon an already immunocompromised body which is what allowed the cancer to develop in the first place. In the short term, these methods remove the cancerous growth and appear as cures. But in the long term, they put the body in a much more compromised and precarious state.

The first thing to understand that the body has an **in-built healing mechanism** which involves the replacement of old or damaged cells. When damage occurs signals are sent out which

trigger mechanisms to grow new cells. Once the new cells have grown and repairing is complete a signal is sent to say that the job has been completed. In the disease of cancer, something affects this signalling system and the cells continue to grow.[1] This out-of-control 'healing' process continues over a period of time (this can be many years) until a 'lump' or 'bump' develops and this is described as 'cancer'. In reality, the lump is only a symptom of the cancer. Getting to the reality of what cancer is involves asking the questions: **What caused the problems in the signals? Or what caused the cells to spiral out of control? Or what damaged the regulatory mechanism?** We will come to answer these questions in due course.

Coming back to this cancer process, there are a number of stages. In the **first stage**, the cells grow at a much higher rate than normal. There may be nothing wrong with these cells, they can be normal, their DNA can be normal, but they grow and multiply faster than normal. These cells will tend to clump together and what is happening here is referred to as '**hyperplasia**' when tissue is being enlarged due to rapid cell growth. After a period, this clump will move to the **second stage** which is when it turns '**neoplastic**', that is when it starts to form a mass and is on its way to eventually becoming cancer. As these processes take place, the way the cancer cells stay alive also changes. Because the cells in the tumuorous mass become starved of oxygen, their cell biochemistry changes and they come to rely on sugar (glucose) to stay alive and grow. [Sugar is a huge cancer feeder]. The tumour will seek to stay alive by sending signals for capillaries to develop

[1] This is one theory or explanation of cancer and there are others, however for the purposes of this article, we will adhere to this explanation.

in its direction. Over time, it will become like an organ in itself, soak up the body's nutrition and energy and slowly cause it to waste, leading to death.

Cancer cells grow in all bodies but because of the robustness of the immune system in a healthy body, they are quickly identified and disposed of. As a result, hyperplasia and therefore neoplasticity never develop as intermediate stages before the cancer. In **an immunocompromised body**, a body whose ability to clean up these cells is weakened, the cells will continue to grow, become neoplastic, turn cancerous and eventually develop their own supply which is siphoned away from the bodies healthy cells and organs. This process can take many years and goes undetected until an unusual 'lump' or 'bump' is discovered.

There are dozens of factors involved in the causation of cancer, each of which weaken the immune system and they come under two broad categories at the cellular level: **Insufficient nutrition** and **poisoning through toxicity**. Examples could include pollution, pesticides, carcinogens in food, air and water, tobacco smoke, consuming junk food or nutritionally-empty food, electromagnetic radiation, conventional drugs, toxic metals, parasites, x-rays, toxic emotions and so on. When tumour masses are analysed by toxicologists, they often find carcinogenic chemicals. In many cases, sustained toxic emotions or a huge emotional trauma could be the trigger. In reality, the causes of cancer in each person vary a great deal and involve a combination of factors.

From the above, one should immediately realise that the conventional **cut, poison and burn** treatment system is severely

limited and does not really cure the cancer but simply rids the body of the symptom (the lump, bump, clump) whilst leaving the true underlying causes completely untouched. A true and real cure has to involve a lot more than just destroying the tumour [which conventional cures are primarily focused upon]. Thus a broader, more sophisticated approach has to be taken in order to reverse this disease from its foundations.

Part 2: An Analogy for Different Perceptions About Treatment of Cancer

In Part 1, we outlined the process through which cancer develops in the body in a simplistic, generalized way and this will be expanded upon in future parts. We can emphasize the main lesson from the first part by giving a simple analogy which demonstrates different approaches towards the disease of cancer.

Most modern cars have computerized systems which alert the driver or owner of some underlying systemic problem. Usually this is communicated through the dashboard or on-board computer system. If the oil is running low for example, a flashing red light may appear. This is a warning sign that the engine is not running efficiently and unless the problem is fixed, greater harm will result and the vehicle may be severely damaged in the long term if the situation is left unaddressed. From here there are two perceptions. The first perception is that the flashing light is the primary or actual problem. With this perception, the solution would be to stop the light (by smashing it with a hammer for example) or removing it (cutting it out with an electric saw) or burning it (with a blow torch). The second perception is that the light is a signal towards something else, and that the light will not stop doing what it is doing until the underlying problem is addressed as a matter of urgency.

Though the analogy is not a perfect match from every angle, it is useful in a broad sense for our purpose. It illustrates the issue well with respect to cancer. The tumour which develops (through the series of steps outlined in part one) is really a signal which is

saying that there is something fundamentally wrong, the body has lost its ability to identify and eliminate irregular cells (this is the actual disease). It is compromised, or more specifically immunocompromised. Thus, the lump and bump is a flashing red light and indicates that something has been wrong in the body for a while. Getting rid of the lump itself (though desirable and part of the cure) is not going to solve the real problem as the body will still remain in the same condition which allowed the lump to appear in the first place. Just like in the car analogy, removing the flashing light won't solve the problem that gave rise to it. This is why cancer always comes back in the vast majority of people who are treated on the basis of that limited, narrow-minded, first perception. The lump and bump was 'treated' [annihilated through chemical warfare or effectively burned with a 'blow-torch'] with the body as a mere bystander inflicted with 'collateral damage'. The body remains unable to prevent any remaining or newly-developing out of control cells from turning into more lumps and bumps. This time the bumps and lumps come back with greater ease as the body has been hammered and put through traumatic stress with those harsh treatments. Hence, secondary tumours appear in other parts of the body and grow aggressively. This occurs routinely with cancer patients and often, within months sometimes, less than a year or perhaps a little longer, many cancer patients die as a result of the treatment and its effects, rather than the cancer itself.

So as not to be misunderstood, because the body is a very complex system, it can become compromised in many different ways which is why cancers appear in many different forms and in many different areas of the body. So when we are speaking of

cancer, we are speaking in a very broad sense, we are speaking about broad principles that apply generally to most instances of the disease. However, there are situations where for example [for whatever reason] the tumour has become so large that it poses a great danger upon a nearby organ. Hence, surgery would be necessary to prevent an immediate life-threatening situation. This is a unique situation. Or it may be a very rare type of cancer and require an unusual and specialized approach. It is important to understand that we are speaking generally and not about any specific cases or types of cancer. When we understand general principles about this disease and its true nature, it will make us better equipped in making educated, well-informed, optimal choices about the course of treatment.

Coming back to our analogy with the car. Because of the way things just are and because of the way medicine has progressed in developed countries and because of financial and political reasons [Pharma-medicine is big business], the choices available to people in the treatment of cancer through conventional means are based on the first perception above: That the annoying flashing light is the actual cancer. In other words, the lump and bump is the culprit, not the underlying unique combination of factors [for each person] that were behind its appearance. Thus, the war is on the lump and bump [cut, poison, burn] and not on the factors that gave rise to it, and the body is just a bystander. It is further asserted that nothing else can cure this disease and nothing else is evidence based except this approach of cut, burn and poison.

For smart, thinking people, its a no-brainer, and you do not need degrees, doctorates or a formal education to understand this: Addressing the true underlying cancer-causing factors with a view to dramatically reducing disease occurrence or eliminating it outright is a profit-killer. It does not make sense for the powerful pharmaceutical companies who are recycling WWI mustard-gas and its derivatives as chemotherapy drugs to treat only the bumps and lumps. Long term cures are undesirable. A constant supply of cancer patients are required in order for drug companies to generate profits for their shareholders.

So what is the point from this discussion so far? Basically, there is much more to cancer than the narrow-minded, deficient cut, poison, burn paradigm. Anyone making the claim that there is no 'cure' besides cutting, burning and poisoning the body is ignorant of the reality of medicine. [That is not to say that cutting, burning and poisoning can never be useful ever. Yes, in some limited cases, these processes may be utilised. However, this is only in a very specialised, targeted way that is not available to the general public, only in advanced private clinics for the very wealthy]. In order to ensure chances of survival and a genuine cure for the disease a holistic approach has to be taken that addresses the underlying precipitating and facilitating factors for the cancer as well as the lump and bump. This will include general, broad principles applicable to every case of cancer and then matters which are unique to each case. In short, the message from this part in the series is that if you end up being a cancer patient or have one in the family, the onus is upon you to learn about this disease and to know that the limited choices you are given for treatment (cut, poison, burn) are based upon a limited, narrow-

minded perception and that there is much more to the story and numerous others options. You will most-likely not be told that story and hence it is upon you to find out for yourself. Cancer is a curable disease and the first step to treating it (or preventing it) is removing ignorance from yourself regarding it and to take greater responsibility for your own health. This will dramatically affect the chances of cure and survival and will put you in a much better position to make informed choices about treatment options.

In the next few parts in the series we will discuss the primary risk factor for cancer [which is to do with the immune system] and outline around twenty or so precipitating or facilitating factors which lead to the development of cancer in the human body.

Part 3: Cancer Is Simply a Failure of the "Immune System"[2]

Continuing from Part 1 and Part 2 we will now develop the cancer development process in a bit more depth.

It is pretty much clear that there is no one particular cause for cancer, just as the cure for it does not lie in any one particular thing. Rather, there are many **inter-related** and **inter-dependent** factors which contribute to the development of cancer and these factors vary from person to person. It may be the case that two people have the exact same type of cancer yet the causative factors or facilitating processes behind it are different in both cases. This leads to the inevitable conclusion that the cure does not lie in any one particular thing and that for each person, the most efficient cure will depend on identifying and addressing the original factors.

The body is said to be made up of 30 trillion cells and each day, a healthy body will create 300 or so cancer cells provided it has not been exposed to '**carcinogens**' (we will define this word more fully a little later). This is not an unusual process, it is normal and the body recognizes these cells and destroys them quickly. When multiple, cumulative stresses are put upon the body in the form of

[2] The notion of an "immune system" arises from the germ theory model of disease and is integral to it. A broader and more accurate description would be to speak instead of a homeostatic correction system, which is the body's in built, pre-programmed ability to self-repair and self-heal. Chronic illnesses such as cancer arise when—due to multiple combined causes (involving diet, lifestyle, habits, environment, exposures, stress, emotional trauma etc.)—this corrective ability of the body is compromised.

many carcinogens or carcinogenic processes, the body's ability is weakened or compromised and the cancer cells have an opportunity to live longer and multiply further. So long as body remains in that stressed, immunocompromised state and is unable to carry out the normal process of removing those cells, the out of control cells will have the opportunity to go through the hyperplasia and neoplastic phases that lead to cancer (see Part 1). This can take place over many long years and the appearance of a lump or bump is simply a signal that this has been happening for quite a while in the body.

When we use the word '**carcinogen**' it is a reference to any stress factor that weakens the immune system. Technically it refers to chemicals or radiation that have cancer causing properties, but this definition is limited and wanting. In fact the meaning of word 'carcinogenic' is 'to start cancer'. Thus, a faulty, deficient diet, toxic emotions, emotional trauma and many other affairs besides chemicals and radiation are also 'carcinogenic' because they can initiate or facilitate processes which lead to cancer.

From the above, we can come to our main point which is that: **Cancer is in reality is a failure of the immune system**. This is the actual disease, not the appearance of the lump or bump. The lump or bump is merely the attempt of a mass of cells trying to stay alive whilst starved of oxygen, and their primary requirement is glucose. It is a symptom of the disease, not the disease itself. The disease is that the immune system has been compromised to a degree where it cannot rapidly and efficiently process and remove the abnormal cells.

Having abnormal cells in the body is not the crucial factor in the development of cancer. The majority of people are subjected to carcinogens to some degree or another and the immune system recognises abnormal cells them and destroys them. **Cancer is a threat primarily because of the inability of the body to eliminate the abnormal cells when they are few in number.** This inability of the body is now believed to be a result of an imbalance or breakdown in the immune system response. It may produce too much or too little of a particular substance leading to an irregular or insufficient response which only has a diminished ability to eliminate the cancer cells.

Harnessing the body's immune system itself to combat cancer is recognised [and this is the foundational principle of 'non-conventional', 'alternative' treatments] and this is why we see classes of drugs known as **immunotherapy drugs** being researched and developed upon the same concept. However, one must not lose sight of the fact that these drugs are being developed upon **the first perception of cancer** we spoke of in Part 2 of this series. Meaning, that these drugs are used to destroy the lump and the bump which in and of itself is considered the disease and its removal considered to be the cure.

As for the wider issue of what is causing the cancer in any given patient and how to address those **causative, precipitating, facilitating factors** then this is ignored. In any case, the fact that the principle of harnessing the body's own immune system to attack cancer cells is recognized and is being used to develop classes of drugs is a validation of treatments which operate on the

very principle of restoring the immune system to its normal operation so it can attack and eliminate the cancer.

It is known in 'conventional' medicine that the existence of "**spontaneous remission**" [where cancer 'suddenly' disappears from a patient] is evidence of the body's inherent ability to heal itself without any intervention. How and why this occurs is not understood by them, but hormonal and immune mechanisms amongst others are suggested by them to be involved in the process. Yet studies of such cases on a large scale indicate that most patients undergoing were actively doing something to facilitate healing. This healing ultimately came about through restoration of the immune response to its proper capacity allowing it to efficiently rid the body of its tumours in a short time. All of this reinforces what we mentioned at the beginning, that because of the very nature of this disease (immune system impairment) and its multifactorial nature, cure does not lie in any one particular thing.

The basic message from this article then is that you should understand that cancer is simply a failure of the immune system, its causes are multi-factorial and interrelated and that conventional medicine will only offer you **the cut, burn, poison treatment paradigm** of cancer. This may work for you if you happen to be one of those rare people with an extremely resilient body that can undergo sustained abuse and still come out on top. This treatment paradigm works against your entire body, not with it or in support of it, because its mechanism is to poison the entire body after calculating what amount of poison will kill the tumour without killing the patient. Given that

the central, key element all along in this disease is **the efficiency and functionality of the immune system**, this realization will put you in a better position to take measures that will give you a much better chance of cure and survival.

In the next part in this series we will take a basic look at the body's immune response, how it works and how it is mobilised.

Part 4 - The Body's In-Built Anti-Cancer Mechanism

Continuing from Part 3, wherein we explained that every body develops cancer cells and that a healthy "immune system" efficiently removes those cells: In fact, microscopic tumours may develop in many people but then disappear without even being detected at all because the immune system managed to dispose of them. Thus, individual cancer cells may be eliminated straight away or may develop into microscopic tumours which are eventually eliminated but are never significant enough to be detected or impact a person's health. It is clear from this and also from "spontaneous regression" [where cancer suddenly disappears from a patient] that **certain components of the immune system** stop cancer. It is the presence of these components and the efficiency with which they are mobilised and with which they function that affect a cancer patient's cure and survival.

The immune system is able to detect whether normal cells have turned into cancer cells. White blood cells known as **T-Lymphocytes** play this role. These cells travel in the body scouting for abnormal cells and any foreign proteins that may have been secreted by tumour cells. Lymphocytes make up around a quarter to a third of the total white blood cell count and they increase when the body suffers from certain infections. They are made in the bone-marrow and come in two forms: The **T-cells** and the **B-cells**.

The T-cells mature in the thymus gland which is behind the breastbone and they play numerous roles in the immune response. The B-cells are the ones that produce **antibodies** to neutralize foreign bodies that have found their way in the blood and tissues. The B-Lymphocytes produce specific antibodies to foreign materials, this is how they work. Certain types of T-Lymphocytes alert other white blood cells in the immune system that cancer cells have been detected, so they act by providing signals. When alerted, certain lymphocytes produce anti-cancer chemicals in response to the signal. These chemicals are known as **cytokines**, and they include tumour necrosis factor (TNF), just another way of saying a chemical that induces death in a tumour cell, interleukin and interferon. Basically, this is the body's natural way of killing the cancer cells, it is a kind of 'chemotherapy' so to speak, except that it does not target any healthy cells, only the abnormal cells. [This contrasts with the conventional chemotherapy treatment where toxic poison is administered to the entire body, it is not specific or targeted. In the process this destroys the immune system and makes a person prone to other potentially fatal secondary ailments such as infections].

Another special form of lymphocyte which provides an immediate and powerful means of protection against cancer is what is referred to as **natural killer (NK) cells**. They can migrate to the site of the cancer and destroy the abnormal (malignant) cells before they can divide and multiply. In a healthy and normal immune system, these NK cells descend rapidly on any microscopic tumour and destroy it. Thus, many tumours never get past the microscopic stage and would never manifest any

symptoms. NK cells are effective in preventing spread of cancer cells to other parts of the body where they would otherwise seed new tumour growths.

Finally, **macrophages**, which are large cells supporting the detoxification process. They scavenge debris and store wastes and they are a major part of the body's first line of defence. They destroy cancer cells by splitting them apart and swallowing (ingesting) them. They have other roles too, regulating cell reproduction and the activities of other immune cells. The functionality of macrophages is significant in that it can determine whether tumour cells will continue to thrive or die. Increased macrophage activity is associated with decreased tumour growth.

From the above we understand that the immune system has various types of lymphocytes that perform different functions. They can signal the production of other chemicals such as TNF, interleukin and inteferon. There are NK cells and also macrophages. All of these are part and parcel of **the body's inherent ability to destroy cancer cells**, to break down microscopic tumours, devour them, break them down and eliminate them as waste. It is clear then that cancer is simply a result of **the immune system's breakdown or inability** to carry out this process efficiently and rapidly enough to prevent microscopic tumours from growing much bigger.

A critical stage is reached when - after having gone through the phases of **hyperplasia**, then **neoplasticity**, then a **tumour** - the tumour cells start signalling for capillaries to extend in its direction. This is what the tumour's ultimate goal is, to ensure a supply of nutrition for itself to stay alive and its

primary nutrition is glucose. It will establish a capillary network extending into itself for this purpose. Once this stage has been reached, it will grow quickly. When things get to this level [and often it is around this stage when tumours are detected and cancer is diagnosed] it is a clear indication of the breakdown of the immune system. Something went wrong somewhere: The signals were not sent, there were not enough lymphocytes, the right cells were not being activated in the right amounts and so on. And why did this happen? Because of a sustained period of stress and trauma on the immune system arising due to a combination of factors.

Further, and to make matters worse, cancer has the ability to send signals to affect the functioning of the immune system, it essentially fights against it to ensure its own survival. Tumour cells secrete enzymes to disable activation of immune system cells that have the ability to eliminate them.

To summarise, the key thing to take from this article then is that immune system already has an in-built anti-cancer, self-healing mechanism. This mechanism has broken down or has been unable to operate efficiently, leading to opportune cancer cells - over a particular period of time - to develop into their own mass, competing with the vital organs of the body to acquire nutrition. Eventually, the cancer makes attempts to inhibit the immune response for its own growth and survival. Any genuine cure for cancer must involve restoring the immune system to its healthy condition and identifying the factors that compromised it and treating them accordingly and appropriately. Treatments which ignore this crucial aspect are not really cures but only attempts to do away with the signal of

thedisease ((the lump or bump) and not the actual disease itself - refer to the car and warning light analogy in Part 2.

Now, whether we are looking at cancer from the angle of prevention or from the angle of treatment and cure, it is important to look at these factors that stress the immune system. In the next part we will look twenty or so factors that contribute to cancer.

Part 5: The Initiators and Promoters of Cancer

This part in the series is lengthy due to the nature of the subject being discussed. It will be very educational and greatly rewarding if you take the time to read through it all with deliberation.

As we have already learned that cancer is really a breakdown of the immune system's ability to routinely eliminate abnormal cells, it is important that we look at all causes and factors that trigger off processes which facilitate the development of cancer.

In an earlier part in this series we spoke about the word '**carcinogen**' which is usually used to refer to chemicals or radiation. This is a limited definition, since there a variety of other things that are cancer-causing or cancer-facilitating. Hence, all of the things that we are going to mention further below are considered to be carcinogenic, meaning causing, starting or facilitating cancer.

It is useful to divide 'carcinogen' with this broad definition into **initiators** and **promoters**.

Initiators act as triggers which lead to a cell becoming abnormal. This involves damage to the cell DNA or genes. Thus, ionizing radiation for example, leads to DNA damage and this would be an initiator or a trigger. It creates the abnormal cells in the first place. These cells then multiply, creating more abnormal cells.

Promoters are things that do not damage genetic material but they facilitate or support the growth of the abnormal cells in any

of the three stages (*hyperplasia*, *neoplastic* or *cancerous*). So when the cancer process has been triggered by an initiator or more, it will lie undetected because it is only very small at this stage. However, cancer promoters will facilitate and enhance the growth of this small number of abnormal cells and favour them over the normal cells. Now exactly where the tumour begins to grow and develop will depend on numerous factors, but the cancer promoting processes can sometimes have an influence on which location in the body the cancer cells lodge and grow due to favoured circumstances. Thus, cancer cells can migrate to other sites in the body, away from where they were initially triggered.

From the above we should understand that the development of cancer will depend on the level of exposure to cancer initiating 'carcinogens' and 'cancer promoting' processes which involve weakening of the immune system. If and when a person develops cancer is subject to these two affairs, triggers and promoters, and the extent to which a person is exposed to them in his or her lifestyle.

Now lets look at the list of initiators, promotors, facilitators (in no particular order):

1. **Chronic (long-term) EMF Exposure**: Electromagnetic fields are invisible energy flows created by electricity that turn into magnetic fields. They can affect the balance of the biochemistry of the human body and in turn contribute to development of disease. Man-made EMF emitting devices and installations are more harmful than naturally occurring EMFs. Modern homes tend to be surrounded with EMF producers that stress the body over the long

term. Electrical wiring, computers, terminals, microwaves, lighting, fridges and so on all emit these fields. These types of device emit higher frequencies, way above those of the human body, and can lead too disturbing the brain's natural frequencies. This in turn can lead to cellular fatigue and contribute to the overall compromise of the immune system.

2. **Sunlight:** Solar radiation, ultraviolet-B and ultraviolet-C radiation is a carcinogen and affects those with fair skin. One of the highest rates of skin cancer is in Australia. Long exposure to this radiation triggers abnormal skin cells by damaging DNA. Skin cancer takes three forms depending on which type of skin cell is affected: Melanoma, squamous and basal.
3. **Ionizing Radiation:** These are high-energy rays which can disturb matter and cause genetic damage, leading to abnormal cells and ultimately to cancer. [This type of radiation is found in X-ray technology]. Refer to this report [Biological Effects of Ionizing Radiation] from Washington University. It should be noted that diagnostic and therapeutic procedures often involved X-rays and may be contributing factors to cases of cancer. The general rule is that the greater and more sustained the exposure the greater the risk of developing cancer.
4. **Nuclear Radiation:** Living near nuclear power plants increases the risk of developing cancer in case of leaks and accidents where radioactive gases are released. A person may also consume foods which have been tainted by radioactive releases without knowing it. Cancer rates

increase rapidly in places of high-level exposure such as nuclear bombs and nuclear disasters (Chernobyl).

5. **Pesticides and Herbicides:** This is a particularly huge problem. The use of pesticides in agriculture has grown to a staggering level. Through this route many toxic chemicals enter the human body causing both damage to cells and also suppressing the body's biochemistry in its immune function. Despite regulations being used to limit use, these pesticides are very durable and remain in the environment for very long times. Studies have been performed which look at foreign chemicals found in the human body and they reveal that exposure begins right in the womb. In other words, due to the proliferation of these pesticides, the average person is likely to have them circulating in his or her body, potentially from before birth. When tumour masses are examined, they are often found to have unusually high-rates of toxic chemical residues. Pesticides can lead to very low T-cell and B-cell counts indicating that they are "promoters" of cancer in that they make it easier for abnormal cells to grow and proliferate by suppressing the immune system.
6. **Industrial Toxins:** A large number of toxic chemicals used in industrial processes find their way into the human body. Heavy metals such as aluminium, lead, arsenic, mercury, nickel, cadmium can accumulate in fat cells, the nervous system, bones, brain, glands and can have negative health effects. Higher rates of cancer are found in places close to toxic waste dump sites. Many of these chemicals can mimic the effect of estrogen once they get inside the body. Whilst on their own, the effect is

minimal, when the number of these chemicals increase, the effect is magnified. Many breast cancers are caused due to these types of toxins. An example is bisphenol A (an endocrine disrupter used in plastics). In women, breast tissue can serve as a dump site for toxic chemicals in the body. Cancer tissue in the breast will routinely contain pesticides, industrial chemicals and other toxins. In men, the prostate is also a dump site for toxic chemicals in the body. Certain types of professions are at increased risk of cancer because of exposure to industrial toxins. Those exposed to asbestos in the building and demolition industries, those who spray insecticides or pesticides, those who work in tanning or any process that makes use of chemicals toxic to the body have an increased risk of cancer.

7. **Polluted Water:** Both tap and ground water may contain toxic chemicals including metals, pesticides, synthetic organic chemicals, solvents and even radioactive chemicals if there has been a leak around a nuclear plant which has found its way into the water supply.
8. **Chlorinated Water:** Adding chlorine to water kills harmful bacteria. Due to the logistics of getting water into households across the terrain of the earth, the risk of contamination of the water is very high. Hence water companies add chlorine to the water. Whilst this serves an objective, the chlorine itself can form cancer-causing compounds. During summer, the amount of chlorine added tends to increase because warm weather favours the growth of bacteria. These cancer causing chlorinated compounds elevate the risk of colon and rectal cancers.

When toxic chlorine reacts with organic molecules in water, trihalomethanes can be formed (such as chloroform and trichloroethylene), which promote cancer in the body. A particularly toxic mutagen is known as MX - and it shows up in every single chlorinated water source. That this compound (and others) is produced in chlorinated water is known to the authorities and they have commissioned studies on it to try and measure its impact. Refer to this UK government report for example to get a glimpse on the subject. In short, chlorine in water that is not free of organic materials is a recipe for carcinogenic compounds being created and you would be drinking them, or bathing in them. This would simply count as one of numerous stresses on the human body whose combined effect facilitate the appearance and growth of cancer.

9. **Tobacco and Cigarette Smoke:** Obviously you do not have to be a smoker, if you are exposed to smoke from tobacco and cigarettes you will be breathing the most potent carcinogens. This is known as ‘passive smoking’. Smoking (including passive) has been linked to a wide variety of cancers involving the various major organs of the body: mouth, throat, vocal cords, lungs, stomach, kidney, cervix, pancreas, lips, tongue and so on. Hundreds of toxic chemicals are released through the smoke including carbon monoxide which limits the amount of oxygen going to vital organs such as the brain. Smoking has two main effects. First, it produces harmful free radicals that induce cell damage. Second, it has adverse effects on the immune system. Hence, it is a potent cancer initiator and promoter.

10. **Immune System Suppressing Drugs:** A significant number of conventional drugs and antibiotics have serious suppressive effects upon the immune system. These drugs decrease antibody production and suppress the vitality of the immune system. This also includes chemotherapy drugs which often lead to secondary tumours (see further below).
11. **Food Additives:** A very large number of chemical additives are put into the food supply. These additives have not been sufficiently tested on humans to determine adverse health effects over long periods of time. These additives can include artificial sweeteners, preservatives, anti-fungals, dyes amongst others. Steroids and antibiotics also find their way into the food supply and increase cancer risk.
12. **Mercury Toxicity:** The most common form of mercury exposure in people comes from mercury amalgams in tooth fillings. Recognising this danger, numerous European governments (Denmark, Sweden, Norway for example) have banned the use of silver amalgam fillings, making them illegal. Other countries (Germany, Austria) have banned them for use on children, pregnant women and those with certain health conditions. mercury is a carcinogen and impairs the body's immune system. Exposure leads to a huge increase in free radicals that cause cellular DNA damage, thereby creating cancer cells. When inhaled in the body, it forms into methylmercury which is a 100 times greater in toxicity in elemental mercury.

13. **Diet and Nutritional Deficiencies:** Both what we eat and what we do not eat can contribute to the initiation of cancer by creating a nutritionally deficient and starved system. There are certain factors related to food such as quality, nutritional value, how it is grown, how it has been processed, how it is cooked, all of these play an important role how the body is benefited or harmed through the intake of food. Nutritional imbalances and deficiencies can act as promoters of cancer once it has set in through other factors. Whilst this is a topic in itself, a few notable things can be mentioned: Excessive animal meat intake, contaminated fish, hydrogenated vegetable fats, refined carbohydrates and sugar, excessive caffeine are just some dietary factors involved in the facilitation of cancer.
14. **Chronic Stress:** The mind plays a large role in disease and emotional stress is a contibuting factor to the cancer development process. This is because the immune and nervous system are linked through a network of nerve endings in the bone-marrow, spleen, lymph nodes and thymus gland (a major source of T-Lymphocyte cells). Also, chemical messengers (hormones) can be found on the surface of white blood cells [catecholamines, prostaglandins, thyroid hormone, serotonin, endorphins and so on]. This indicates that the immune, hormone and nervous system are all linked. Thus, the mind and emotional states can have an effect on cancer (and other states of disease or health). This knowledge helps us to appreciate that cures can be effected by numerous means and are not limited to what is commonly known and

practiced. This is why spiritual healings [which are coupled with emotions such as hope, anticipation, optimism and so on which promote and aid healing] are only dismissed by those who are ignorant of the ways and means and ignorant of the reality of medicine. Chronic stress upsets the immune system and it is a promoter of the cancerous process.

15. **Emotional Trauma and toxic Emotions:** toxic emotions which are deep and remain for long periods of time generate symptoms which keep underlying illnesses in place. There are connections between emotions and biochemical events in the body. Emotions can be viewed as toxins, since toxins can be chemicals, affecting the body and they can also be thoughts, ideas and wrong harmful beliefs. The presence or absence of these emotions and stresses can determine the difference between cure/survival and greater illness/death.
16. **Air Pollution:** Due to the industrial processes, automobiles and other affairs, the air is becoming increasingly polluted. Chemicals entering the body through pollution can affect the hormonal and other biochemical systems, thereby affecting the immune system. Sustained exposure to air pollution can be a facilitator, a promoter of cancer growth, once cancer cells have been created by other factors.
17. **Depressed Thyroid:** Low thyroid activity (hypothyroidism) is being identified as a condition in the presence of which cancer growth is facilitated. The things that cause low thyroid activity are some of the other factors listed here. In women, pollution seems to be a particular

problem. Often women who move to places where there is a lot of air pollution [due to heavy traffic, industrial processes, construction and so on], they develop thyroid problems. Medication would not really solve the problem because the underlying cause will remain unless they move from this harmful environment.

18. **Intestinal Toxicity and Digestive Impairment:** The intestines are over 25 feet long when stretched out and can harbour the seeds of diseases when they become clogged and toxic on account of what is eaten and how poorly waste material is eliminated. Due to poor dietary habits and intake the gut flora (good bacteria) presence can be overcome by opportune, disease causing bacteria and parasites. Numerous cancers, allergies, infections, skin diseases, asthma and other conditions initially start out in the intestines. A toxic bowel leads to toxicity in the rest of the body and impacts the immune system significantly. Toxins leech out of the intestinal wall and accumulate in lymph vessels. Bad dietary habits can lead to damage to the stomach lining, a lining in the intestines that prevents absorption, weakening of gut flora, undigested proteins (due to excessive meat intake) acted upon by bacteria to create nitrosamines which are cancer-causing, increased inflammation and other negative effects. Combined, these adversely affect the immune system making this a major cancer promoter.
19. **Parasites:** These tend to reside in the intestines but can migrate to the blood, lymph, liver, pancreas and other organs. They produce numerous symptoms such as diarrhoea, gas, bloating, irritable bowel syndrome, joint

aches, muscle aches, disturbed sleep, fatigue and gradual immune impairment. Parasites can also release toxins that damage cells and create inflammation.

20. **Blocked Detox Pathways:** In a healthy body, its detoxification systems, chief of which is the liver, are able to eliminate toxins and prevent illnesses. However, these systems can be functionally blocked by a combination of the other factors mentioned and this leads to the major players in the immune system, such as lymphocytes, macrophages, natural killer cells and others being unable to efficiently detect and eliminate abnormal cells. The following types of system overload can overwhelm and block the body's inherent anticancer defences: a)Metabolic Overload. This is when a person is exposed persistently to high doses of toxins such as drugs, smoke, alcohol, chemicals, metals and so on. This will overwhelm the metabolic system and make a person prone to developing tumours. b) Endocrine Overload. Hormones can stimulate abnormal growth of cells. Growth hormones added to cows for example end up in dairy products, and estrogen mimicking chemicals which enter the body as environmental pollutants and toxins act upon susceptible cells (such as breast cells) to seed tumours. Pollutants such as DDT, DDE and PCBs (poly-chlorinated biphenyls) and BPA (bisphenol-A) are implicated as causes of Breast cancer. c) Free-Radical Overload. Free radicals will be discussed separately below, but they have capacity to attack and destroy the membranes of cells, making them vulnerable to cancer initiators. These free radicals may also interact with cellular DNA leading

to cancer formation. d) Immune Overload. It is possible for the immune system to be too overloaded in dealing with other things (such as food allergies for example) to be able to divert resources (such as macrophages) do destroy and devour cancer cells. This means that cancer cells are able to multiply freely. Often those who develop cancer have some other underlying condition that is causing an overload and preventing their immune system from neutralising the cancer cells from the very beginning. An example of what preoccupies the immune system is chronic tonsillitis (inflammation of the tonsils) or whatever is similar.

21. **Free Radicals:** free radicals are unstable molecules which steal electrons from other molecules thereby inducing damage and harmful effects. They are produced when molecules in cells react with oxygen (oxidize) as part of a normal metabolic process. If they are not controlled, they can break down cells, damage enzymes, cell membranes, lipoproteins, DNA and chromosomes. They can be produced by external influences too such as radiation, pollution as well as metabolism and immune system action. When free radicals production goes on uncontrolled, this plays a major role in the development of a very large number of degenerative conditions including cancer, heart disease and premature aging. Things that increase free radical production include pollution, smoking, stress, certain types of food, excessive exercise, inflammation amongst others. Anti-oxidants are natural biochemical substances that protect living cells from harmful free radical. They

include vitamins A, C, E, Beta-carotene, selenium, co-enzyme Q10, L-Glutathione, bioflavonoids amongst others. Garlic and Gingko Bilboa are plant antioxidants. The amount of anti-oxidants in the system determines the normal functioning of the immune system. Thus, exposure to things which increase free radical creation and lack of anti-oxidants can lead to cancer-creation process being set triggered because cells are being damaged and becoming abnormal faster than they can be protected or destroyed.

22. **Lack of Cellular Oxygen** When cells are starved of oxygen they transform into cancerous cells according to two-time Nobel-prize winning Biochemist, Dr. Otto Warburg. When deprived of oxygen, cells turn to a “primitive” state of existence and rely on glucose reactions for survival. This is a very inefficient method and takes up a lot of energy. It also produces lactic acid which puts a strain on the body and creates imbalances inpH levels. Over time, as acidity increase, cells find it more and more difficult to use oxygen normally. Cancerous tumours can contain ten times more lactic acid than normal healthy tissues. Some of the ways that cells can become oxygen deficient include exposure to pollution, devitalized foods (overcooked, processed, preserved with chemicals), lack of exercising, shallow breathing.
23. **Genetic Predisposition and Oncogenes** A large amount of cancer research today focuses on genetic causes and origins of cancer. Oncogenes (meaning the genes that start a tumour mass) have been described and they are said to transform normal cells into cancer cells. Hence, they are initiators. Conventional cancer research tends to treat the

oncogene as the primary causal unit in cancer. However, this is not correct. Environmental factors constitute around 80% of the cause of cancer. Genes may predispose a person to develop cancer, but only in the right circumstances. If the bodies repair mechanisms are not functioning optimally [due to factors we have already mentioned above] then any cancer cells produced through oncogenes will be able to multiply for longer, eventually leading to a tumour mass. It is important to note about the gene-causation theory that we are dealing with susceptibility to the disease and not a guarantee that inherited genes guarantee a person will get cancer. Environmental factors are the greatest influence.

It is important to add a few more things to this list although separately. They are carcinogens used to treat a person who has cancer. The following information is from the American Cancer Society.[3] Quotes are from this document.

25. **Chemotherapy:** ”Some types of chemotherapy (chemo) drugs have been linked with different kinds of cancer... The chemo drugs cisplatin and carboplatin...seem to increase the risk of leukemia... The risk of leukemia rises as the amount of drug used gets higher. The risk of developing leukemia increases even more if radiation is given along with cisplatin or carboplatin... The class of chemo drugs called topoisomerase II inhibitors stop cells from being able to repair DNA. These drugs can also cause leukemia,

[3] The original document is here: http://www.cancer.org/acs/groups/cid/documents/webcontent/002043-pdf.pdf

mainly AML... Some drugs used to treat cancer are called targeted therapy drugs because they were designed to fight cancer by targeting certain genes or proteins... People taking these drugs have a higher risk of squamous cell carcinomas of the skin."

26. **Radiotherapy:** "Radiation therapy was recognized as a potential cause of cancer many years ago... In contrast, other cancers, which are mostly solid tumors, have been shown to take much longer to develop. Most of these cancers are not seen for at least 10 years after radiation therapy, and some are diagnosed even more than 15 years later... In general, the risk of developing a solid tumor after radiation treatment goes up as the dose of radiation increases. Some cancers require larger doses of radiation than others, and certain treatment techniques use more radiation."
27. **Stem Cell Transplants:** "Stem cell transplants involve treatment with high doses of chemotherapy, sometimes with radiation, followed by an infusion of blood stem cells to restore the bone marrow... Any kind of stem cell transplant is linked to an increased risk of second cancers from the chemotherapy and radiationused."

From everything that has preceded: We can see that the root causes of cancer are multifactorial and they all center around two fundamental things: a) environmental influences that trigger the cancer process and b) factors which impair the immune system from doing its job of eliminating cancer cells as a matter of routine. Different factors are at play for different people and different types of cancer will develop on the way these factors

influence and interact with the human body. In light of this, any cure has to be *empirical*. Meaning that treatment must be based entirely around each individual patient and his unique circumstances. This type of holistic treatment is never available in conventional medicine and nor is it even considered legitimate.

One should note that the first perception of cancer we looked at through our analogy in Part 2 of this series does not really concern itself much with most of what has been discussed in this article and is concerned only with annihilation of the tumour through the routes of cutting (surgery), poisoning (chemotherapy) and burning (radiotherapy) even at the expense of setting the person up for secondary cancers which can sometimes not even show up till many years later (thus it can be easily denied that the treatment caused more cancer). Most of the factors discussed above which are the initiators and promoters of cancer in a person will be completely ignored. It is here that we enter the world of "Cancer Politics" where surgery, radiotherapy and chemotherapy have been made the law of the land with an iron fist. As we have said repeatedly in this series, this is a narrow-minded, deficient approach - as is clear to any intelligent, reasonable, thinking person - and to understand why things have turned this way requires a few history lessons on how the modern cancer industry got established which is outside the scope of this series.

Now we have one more thing left in this article to make it more complete and of greater benefit and this is an exercise for the reader. Invent a few scenarios around a few imaginary people. Let's take four people: Bilal, Ahmed, John and Sarah. And give them all a particular lifestyle and environment. Using the information from above about the initiators and promoters

of cancer, try to formulate a story for each person as to how they may develop cancer and how it could have been avoided. Whatever stories you come up with will actually exist in real life, in someone's life, because this is exactly how the disease of cancer develops - it is overwhelmingly an environmental, lifestyle disease.

To conclude this article, we have looked at **precipitators (initiators)** and **facilitators (promoters)** of cancer, and the important lesson to take from it is that cancer is multifactorial, it is caused by a combination of factors working together unique to a person's lifestyle and environment (genetic factors play a role in creating susceptibility but are far outweighed by lifestyle and environment). Looking at things like this and looking at each case like this means that a non-standard, unique, specifically crafted form of treatment for each patient is what is demanded in reality - but in practice this never takes place, because it is too costly and unprofitable. Thus, the patient is subjected to a limited choice of treatments which are in themselves carcinogenic and in cases this may even be legally enforced, especially where children are involved and well-informed parents wish to pursue a holistic treatment program.