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A Change in Lifestyle- Could Cause Cancer

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Abstract:
Objective:
To assess the epidemiological evidence on diet and cancer and make Public health recommendations.
Conclusions and recommendations: It has been estimated that 30–40 percent of all cancers can be prevented by lifestyle and dietary measures alone.
Cancer is a common condition and a serious health problem. More than one in three people will develop some form of cancer during their lifetime. In our day to day life, we are exposing to chemicals in different ways. This could include**:** In dietary products, in cosmetics, Plastics.
A diet that is rich in vegetables, fruit, poultry, fish, and low-fat dairy products has also been linked with a lower risk of breast cancer in some studies. But it is not clear if specific vegetables, fruits, or other foods can lower risk or increase. Many studies have found that fruits loaded with chemicals increase the risk of stomach cancer. Chemicals that are commonly used for ripening of fruits and vegetables like Calcium carbide, ethylene glycol and ethanol are known to cause cancer and also cause food poisoning, gastric irritation and mouth ulcers and with ethylene gas, fruits look 'unnatural'. And farmers are using oxytocin to inject vegetables and it is a Schedule-H drug, which is banned in the country for use on animals. Polyphenols present in vegetables leads to bowel cancer. Organic foods are preferred as a life saver to prevent cancer.

Toxic foods, preservatives and additives that cause cancer are clearly discussed and due to which causes obesity.

Consumption of processed foods should be moderate. A healthy diet may help in lowering the risk of cancer and other diseases.
Exposure of different chemicals in cosmetics that should be avoided to use as these leads to various skin infections, breast cancer, liver, stomach, bladder and esophagus cancers. A detail description on effects of plastics and risk of cancer was reviewed.

1. Introduction:

Day to day lifestyle looks for convenience and busy schedules often says "I'm too busy to cook" line was more popular among people with college degrees than people with less education. And young adults were less likely than older adults to say they ate fast food because it offered many nutritious choices. So they opt for faster, easier options. Whole foods such as vegetables and meat take time and kitchen equipment to cook properly, while fast food hamburgers are usually served within minutes of ordering. Over time, that convenience becomes a habit and eventually a perceived necessity to keep up with such a fast-paced society. Disrupting that routine requires an investment of time, and most people prefer to stick with the faster option. People often prefer fruits as an easy time saving and to be healthy. But this healthy food itself is enriched with lots of chemicals.

But the pesticides used on fruits and vegetables 'may be putting young children at risk of cancer'. Researchers suggest that varying a child's diet could help reduce exposure.

Risk factors in day to day environment

Cancer is a common condition and a serious health problem. More than one in three people will develop some form of cancer during their lifetime, due to environmental causes which may lead to cancer. In our day to day life, we are exposing to chemicals in different ways. This could include

- In dietary products
- In cosmetics
- Plastics

Different chemicals that we are daily exposed don't alone contribute for the cause of cancer but also lack of exercise and prolonged exposure to sunlight may also lead to cancer. Some of these are avoidable and some aren't. This article is helpful to give information regarding how conscious a person should be, while choosing a dietary product or any other products that may come across in our day to day life, which may ultimately lead to cancer.

As all these changes in our lifestyle are leading to cancer, let us know about cancer.

Cancer is a general term used to refer to a condition where the body's cells begin to grow and reproduce in an uncontrollable way. These cells can then invade and destroy healthy tissue, including organs. Such cells from lumps or masses of tissue called tumors (except in the case of leukemia where cancer prohibits normal blood function by abnormal cell division in the blood stream). Tumors can grow and interfere with the digestive, nervous and circulatory systems and they can release hormones that alter body function. Tumors that stay in one spot and demonstrate limited growth are generally considered to be benign.

More dangerous or malignant tumors form when two things occur:

- A cancerous cell manages to move throughout the body using the blood or lymph systems, destroying healthy tissue in a process called invasion
- That cell manages to divide and grow, making new blood vessels to feed itself in a process called angiogenesis.

When a tumor successfully spreads to other parts of the body and grows, invading and destroying other healthy tissues, it is said to have metastasized. This process itself is called metastasis, and the result is a serious condition that is very difficult to treat.

2. Chemicals In Dietary Products

Diet plays an important role in health and disease. The foods we choose can help in the prevention of many illnesses, thus increasing the quality of life. Vegetables, fruits, and whole grains should form the central part of a person's diet, regardless of whether they are grown conventionally or organically. In the local supermarket or health food store, there are more food choices than ever before. This can often lead to confusion in determining what food choices are the healthiest. Many cancer cases are linked to lifestyle factors such as smoking, alcohol, diet, or being overweight. Many of us eat too much red and processed meat and not enough fresh fruit and vegetables. This type of diet is known to increase the risk of cancer. Drinking alcohol can also increase the risk of developing some types of cancer.

2.1. Fruits and Vegetables

Fruits and vegetables are rich in vitamins and minerals which keep the body healthy. They also contain chemicals called antioxidants, such as beta-carotene and vitamin C. These are thought to

protect against damaging chemicals that get into the body. However, the exact way in which they prevent disease is not fully understood. Fruit and vegetables also contain fiber. This can help to control cholesterol levels and keep blood sugar levels steady. Eating fruit and vegetables can help to replace other foods that are high in fat, salt and sugar, which further helps to reduce our risk of these diet-related diseases. Having a low intake of fruit and vegetables is estimated to cause about 19% of cancers of the digestive system.

Health promotion campaigns often refer to 'Five a Day'. So, why are we encouraged to eat at least five portions of fruit and vegetables each day? The World Health Organization collected evidence together. It was found that a minimum of 400 g (about five 80 g portions) were needed to:

- Allow us to meet our nutritional requiremements.
- Protect us from diseases such as stroke, heart disease, some cancers, type 2 diabetes and obesity.

Fruits and vegetables are highly perishable due to their low shelf life. It is said green vegetables are the best balanced diet and health consultants highly recommend fruits and salads in their prescriptions and we take the best advantage of the availability of the range of variety in the markets. But now that does not seem to work as recent research has reported that it contains toxic chemicals in vegetables and fruits which are on sales. Pesticides are used in many commercially grown fruit, vegetable, and grain crops to protect them from insects, weeds, fungi, diseases, mice and other animals, bacteria, viruses, and mold and by getting rid of disease sources, pesticides and antibiotics help increase food production, reduce food loss. The promise of higher yield in a shorter period of time is the selling point of these chemicals. But heavy reliance on chemicals is starting to take its toll on the vast farmlands and on the people's health. If they are a source of harmful chemicals, then are we heading towards fitness or otherwise cancer?

According to the research conducted by Central Agricultural Department, the concentration of pesticides used for cultivation of fruits and vegetables exceeds the normal concentration by about ten times for example: brinjal contains heptachloro eighty times more than the normal concentration, cabbage and ladiesfinger contains cypermetrine ten times more than ten times more than the normal concentration, banana contains chlorodin twenty times more than the normal concentration, apple contains dichlorons forty times more than the normal concentration.


Fresh colorful fruits and vegetables are a beautiful sight, commonly seen in every season of the year

2.1.1 Effect of calcium salts on fruits

Calcium salts maintain organoleptic properties (like skin color, skin shriveling, aroma, pulp color, flavor and taste) of the fruits for long duration as compared with control ripening. Therefore, different concentrations of various calcium salts were used to ascertain their effects on delaying the ripening and eating quality of fruits. The calcium carbide is one of the most commonly used ripening agent for fruits while other calcium salts like calcium ammonium nitrate, calcium chloride and calcium sulphate are used to delay fruit ripening agents for local fruit industries. Calcium carbide is known to cause cancer and also causes food poisoning, gastric irritation and mouth ulcers.

2.1.2 Effect of ethylene on fruits and vegetables

Ethylene has an important role in many plant development processes, including seed germination, vegetative growth, leaf abscission, flowering, senescence and fruit ripening. . The idiom '*one bad apple spoils the barrel*' is based upon the effect of one apple ripening (or rotting) and emitting ethylene which accelerates the ripening and senescence of apples stored with it. Concerns are periodically raised in mass media about fruit being 'gassed', implying that this confers some residual food safety risk from the ethylene gas and that the fruit has been somehow rendered 'unnatural'. The commercial use of ethylene for fruit ripening is at a low concentration and simply initiates the respiratory climacteric. The ethylene used commercially has the same molecular structure. By the time the ethylene-treated fruit reaches the consumer the climacteric may have started, there is no trace of applied ethylene gas, any ethylene emitted by the fruit is generated by the fruit itself and is of a much greater concentration. There are no food safety issues associated with the consumption of climacteric fruit.

2.1.3 Effect of Ethylene glycol and Ethanol on fruits and vegetables

Ethylene glycol and ethanol are the agents used for ripening of fruits and vegetables. The ethylene glycol, when diluted with water, can ripen various fruits faster than the regular ripening rate of the fruits, in particular colder climatic conditions. Water does not take away the effects of ethylene glycol in the ripening of fruits. Ethanol can potentially be used to localize ripe fruit, and consumption of low-concentration ethanol within fruit may act as a feeding stimulant. Externally applied ethylene can also initiate the ripening process. These agents cause food poisoning, gastric irritation and mouth ulcers.

2.1.4 Effect of Oxytocin on Vegetables

Farmers are using oxytocin as a common practice by injecting vegetables such as pumpkin, watermelon, brinjal, gourd and cucumber for perfect look and for fast growth of fruits and vegetables. Oxytocin is a hormone that also acts as a neurotransmitter to the brain. It is used clinically to induce labour, control bleeding after delivery and stimulate secretion of breast milk. Use of oxytocin may lead to nervous breakdowns, sterility and neurotic complications and this oxytocin is a Schedule-H drug, which is banned in the country for use on animals.

2.2 Fruits could cause cancer

Fruits loaded with vitamins, may also result in one rushing to the doctor because of carcinogenic chemicals. Be it spraying of wax on apples and pears and using of calcium carbide to ripen fruits like mango, banana and papaya, all this takes place. Most of hawkers and wholesalers of fruits start using

calcium carbide to ripen the raw fruits to earn fast bucks. The low price of calcium carbide, 250 gm for Rs 15, results in its indiscriminate use, around 100 gm of carbide is used per 50kg of fruit. When asked how to identify the fruit which has been ripen by carbide.

Talking of the ill-effect of calcium carbide, once dissolved in water, it produces acetylene gas. This gas may affect the neurological system, cause headache, dizziness, mood disturbances, sleepiness, mental confusion, memory loss, cerebral edema and seizures. When mixed with oxygen, calcium carbide acts as a sedative and used in anesthesia. The use of artificial ripening agent can be fatal. Excessive consumption of calcium carbide-laced fruit can cause intoxication. Regular intakes of the chemical may cause irritation of digestive system, diarrhea, jaundice and liver failure, free radicals from carbide play a major role in the ageing process as well as in the onset of cancer, heart disease, stroke, arthritis and allergies.

Some compounds in colorful fruit and vegetables such as tomatoes, onions and berries gather and build up in the large bowel. These compounds are called polyphenols. They are broken down by bacteria in the gut into smaller compounds that may protect the gut and leads to bowel cancer.

A diet that is rich in vegetables, fruit, poultry, fish, and low-fat dairy products has also been linked with a lower risk of breast cancer in some studies. But it is not clear if specific vegetables, fruits, or other foods can lower risk.

Many studies have found that fruits loaded with chemicals increase the risk of stomach cancer.

According to Joan Salge Blake, a registered dietitian and spokeswoman for the American Dietetic Association, "I don't want people being afraid of eating Mother Nature's finest," she said. "Fruits and vegetables can help reduce the risk of so many diseases and fight obesity."

To avoid the risk of high concentration of pesticides entering into our body, get them as clean as you can.

2.3 Processesed Food

Processed foods aren't just microwave meals and other ready meals. The term 'processed food' applies to any food that has been altered from its natural state in some way, either for safety reasons or convenience. This means you may be eating more processed food than you realize.

Processed foods aren't necessarily unhealthy, but anything that's been processed may contain added salt, sugar and fat. Processed food also includes junk food items, nowadays on what we are depending more.

So, food processing may also alter foods in ways that might affect cancer risk. An example is the refining of grains, which greatly lowers the amount of fiber and other compounds that may reduce cancer risk. The following are some of the toxic foods, preservatives and additives that may cause cancer.

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Eating junk food regularly is linked to obesity and chronic health conditions such as cancer, high blood pressure, but many people still choose junk food sources over their healthy, nutritious whole food counterparts. Junk food is typically cheap, processed and prepackaged, making it easily available, but there are several psychological motivators that predispose people to choosing it as a meal or snack.

According to the survey done on junk food marketing, the annual profit only in India was found to be Rp.20,00,00,00,00,00 in Indian currency. And with 30-40% increase in the respective junk food market which lead to cancer in children up to 10-12% till 2014 year.
Finally the survey done by AIIMS (ALL INDIA INSTITUTE OF MEDICAL SCIENCES) concluded that 20% of Indian children are affected by obesity only due to high intake of junk foods.

2.3.1 Toxic foods, preservatives and additives that may cause cancer:

1. Partially Hydrogenated Vegetable Oils: Partially Hydrogenated Vegetable Oil is made by reacting vegetable oil with hydrogen. When this happens, the level of polyunsaturated oils (good fat) is reduced and Trans fats are created. Also BHA/BHT or simply fried oil and Brominated vegetable oil are cancer causing oils.

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3. Preservatives like Sodium Nitrate and Nitrite that exists in hot dogs, processed meat and bacon, doughnuts, chips, crackers, cookies and French fries.

4. Toxic additives like high fructose corn syrup that exists in almost every processed food**, natural sweeteners like aspartame and saccharine**.

5. MSG(monosodium glutamate), which is hidden under 50 different names, exists in almost everything including infant formula, low fat milk, candy, chewing gum, drinks, over-the-counter medications (especially children's), fruit yogurts, prescription drugs, IV fluids given in hospitals, and in the chicken pox vaccine.

6. Refined white sugar which is in EVRYTHING and kills more people even more than all the drugs combined.

7. Pesticide ridden foods, canned foods and processed foods, and bottom line, almost anything and everything that is man-made inside a factory.

8. GMOs: There have been many independent studies that have related Monsanto's best selling pesticide called "Roundup" used for killing bugs and weeds in GMO crops to cancer and many other health problem including infertility and autism. Most of those who follow @OrganicLiveFood remember the giant tumors in rats in two-year Seralini study.

9. Overcooking or deep frying foods kill and destroy all the nutrients inside your food and your food will turn into free radicals and cancer causing agents. Tell that to cooking classes advertised on TV that promote deep frying foods with olive oil that should not be heated under any circumstances.

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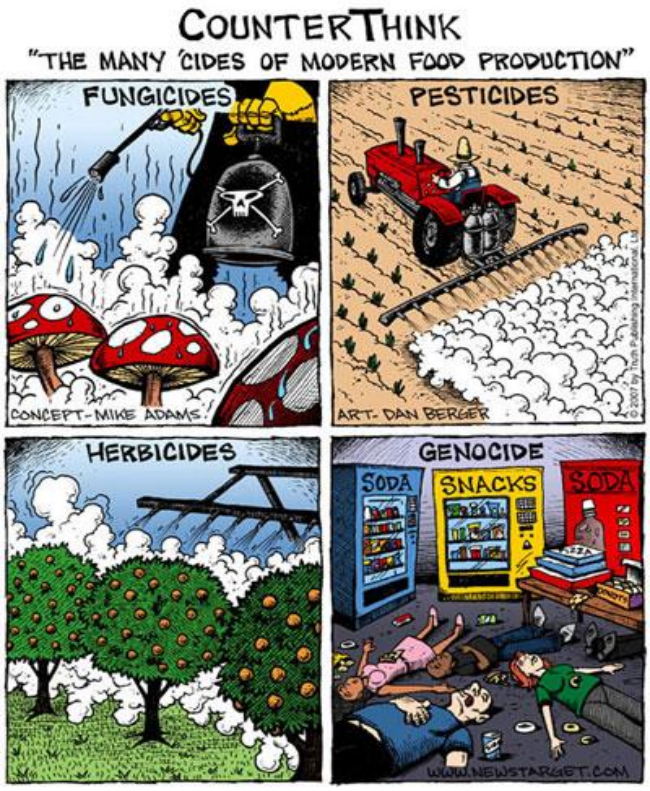
10. Cooking in Teflon and other non-stick products that are made with chemical C8 (PFOA) can cause autoimmune disorder, thyroid and high cholesterol level.

11. Microwave foods: Microwaving your food is one of the best ways to destroy and nuke all the nutrients in your foods and turn them into cancer causing agent and free radicals.



12. Refined white flour: According to a study published in Cancer Epidemiology and Prevention, consumption of refined carbohydrates increases the chances of breast cancer by 220 percent. Yet, white bread, white pasta, high gluten wheat and GM wheat are all regulated and considered safe by giant agribusiness.

13. Conventional fruits and vegetables: Thanks to biotech and chemical companies one would never think that eating conventional apples, strawberries or blueberries can give you cancer. However according to Environmental Working Group (EWG) 98% of all conventional products are contaminated with cancer-causing agents. Find out why you should avoid pesticide ridden foods.

14. Farmed fish: Most farmed fish have high levels of toxic contaminates including carcinogenic chemicals, PCBs (polychlorinated biphenyls), flame retardants, pesticides, and antibiotics.

15. Hormones and antibiotics in meat, poultry and dairy products: Despite countless number of studies that have linked rBGH and rBST hormones produced by Monsanto to breast cancer in women and

prostate cancer in men, hormone injected meat and dairy filled with 50 other toxic chemicals are regulated safe by giant meat and big dairy industry.

16. Soy products and soy milk: The food industry has been manipulating women for far too long labeling soy as healthy. As a matter of fact, vegans who consume soy beans or tofu instead of meat or dairy products are at a higher risk of mineral and vitamin B12 deficiencies. Soy beans also have goitrogens substances that can suppress and effect thyroid function and cause breast cancer in women.

17. Bisphenol A (BPA) and phthalates: Both bisphenol A (BPA) and phthalates are hormone-disruptive chemicals that are widely spread in environment and our food. Plastic containers and canned foods are contaminated with BPA. Hormone-disruptive chemicals are linked to infertility in men and BPA to neurological problems, cancer, obesity, hyperactivity, stress and diabetes.

2.4 Organic Food - The Life Saver

Organic foods are defined as those foods that are grown without the use of synthetic fertilizers or pesticides. Pesticides are chemical or control agents made to kill insects, weeds and fungal pests that damage crops. In large amounts these have been found to cause different illnesses including cancer. It's also used for meat, poultry, eggs, and dairy products that come from animals that are not given antibiotics or growth hormones. Organic foods do not necessarily mean toxin-free, as plants produce their own natural toxins and these can contaminate organic products. Also, farmers can use natural pesticides, such as sulfur, nicotine and copper, which can also be found on the foods.

The use of the term organic on food labels is controlled by the US Department of Agriculture.
It's commonly thought that organic foods may be better for you because they reduce exposure to certain chemicals. It has also been suggested that their nutrient makeup may be better than non-organic foods.

3. Chemicals in Cosmetics:

According to the US Food and Drug Administration (FDA), the law defines cosmetics as "articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body... for cleansing, beautifying, promoting attractiveness, or altering the appearance." This includes skin moisturizers, perfumes, lipsticks, fingernail polishes, eye and facial makeup, shampoos, permanent waves, hair colors, toothpastes, and deodorants, as well as any component of a cosmetic product. It does not include products used solely as soaps.

Cosmetics are different from drugs, which are defined as "articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease" and "articles (other than food) intended to affect the structure or any function of the body of man or other animals."

Since the past few years, we have let chemicals encroach freely in our life. As a result of this chemical intrusion, most of our cosmetics are contaminated with harmful substances as they form the basis of our modern production techniques. Many companies add ingredients such as diethanolamine (DEA), cocamide

DEA, and triethanolamine (TEA), which are known for causing cancer. Olefin sulfonate, cocamidopropyl betaine, sodium myreth sulfate, and paraben preservatives are also added in these products.

Like organic food, many people are now looking towards organic cosmetics. But lack of appropriate standards for organic cosmetics has enabled many manufacturers to take advantage of the situation and mislead the consumers. As a cautious consumer, you always take a look at the contents apart from the organic label. If you observe closely, most of the 70% organic manufacturers list the organic contents first and the harmful chemicals are listed in the end. Floral waters, and water extracts and infusions from botanical products, are listed as the prime organic contents in most of these claimed organic cosmetics. But, on the contrary, they hardly have anything in them. Actually a cosmetic which is said to be organic contains about 70% organic product while the remaining 30% of that product can consist of strong chemicals. Thus many cosmetics, in which the active ingredients are strong chemicals can be labeled as organic with minor modifications in the less active ingredients, or adding them with mild organic agents.

Some labels print wrong information. They add words like 'derived from ...' to give the impression that the product is made from natural substances. Example is 'cocamide DEA derived from coconut oil'. It might not be necessary that the cocamide DEA mentioned in the product is obtained from coconut oil only. Again lack of proper standards makes it feasible for the manufacturers to do such fraud labeling. When you purchase organic cosmetics, you intend to buy the cosmetic products which have ingredients made from organic means without the use of any chemicals.

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OP 10 CHEMICALS TO AVOID

Following is a list of 10 toxic chemicals contained in many cosmetic ingredients that we should avoid to prevent various health hazards including cancer.

Urea

Examples: diazolindyl urea, imidazolindyl urea.

Common preservatives that release formaldehyde, a known carcinogen, that is irritating to the mucous membranes and known to cause contact dermatitis, headaches and internal bleeding.

Parabens

Examples: butylparaben, ethylparaben, isobutylparaben, isopropylparaben, methylparaben, propylparaben Common preservatives that are linked to breast cancer.

Phthalates

Examples: di-butyl-phthalate, di-ethylhexyl-phthalate

Commonly used as a plasticizer in everything from skincare, cosmetics, nail polish, perfume to hair products and deodorants. Known to cause damage to the liver, kidneys, lungs and reproductive system. Suspected of causing birth defects, lowering sperm counts and a breast cancer risk.

Petroleum By-products

Examples: mineral oil, petrolatum, paraffin, dipropylene, glycol, butylene glycol, disodium EDTA, tetrasodium EDTA, trisodium EDTA, polybutene, triclosan, polyethylene Petroleum by-products interfere with the skin's natural functions, clog the pores, exacerbates acne, and are highly likely to be contaminated with carcinogens that are linked to breast cancer.

Propylene glycol and polyethylene glycol (PEG)

Made from the same chemical that is used to create anti-freeze, this chemical easily penetrates the skin and is linked to damage of the liver, kidneys and brain.

Sodium Laurel/Laureth Sulfate

Commonly used foaming agent that is considered a skin irritant and carcinogen, and is known to cause skin rashes and allergic reactions. SLS is absorbed into the body via skin application and mimics the activity of estrogen. This has a variety of health implications ranging from PMS, decreased fertility in men as well as an increase in cancers such as breast cancer in women. It is often disguised in "natural" products with the term "derived from coconut". It is particularly irritating to the eyes. SLS is often contaminated with dioxane, a known carcinogen.

Diethanolamine(DEA) and Triethanolamine (TEA)

These chemicals can react with other ingredients in the cosmetic product to form potent carcinogenic chemicals called nitrosamines, that are linked with liver, stomach, bladder and esophagus cancers.

Formaldehyde

Commonly found in nail products, this chemical is a known carcinogen, allergen and irritant. Commonly used synthetic preservatives, such as diazolindyl and imidazolindyl urea, break down to release formaldehyde.

Synthetic Fragrances

Examples: parfum, vanillyl butyl ether

The simple term "fragrance" on an ingredient list can refer to a combination of any of the thousand separate ingredients used to make up the "fragrance", many of which are phthalates (i.e. toxic carcinogens and hormone disruptors). Fragrances are considered to be one of the top 5 known allergens and are known to cause asthma and trigger asthma attacks.

Synthetic Colors

Examples: FD&C Yellow 5, FD&C Red 40, FD&C Blue 1

Labeled FD&C or D&C followed by a number, they are known to cause skin irritation and sensitivity. Many are also believed to be carcinogenic.

Nanoparticles

Minerals like zinc oxide and titanium dioxide, commonly used in sunscreen lotions, foundation and other liquid types of lotions are harmless in their normal size. They simply sit on the skin since they are too large to penetrate its protective barrier. However, when these ingredients are broken down into nanoparticles (i.e. very small), they are easily absorbed into the skin. The tiny size gives these particles the ability to travel throughout the body and is what enhances their toxicity. There is research showing that nanoparticles of zinc oxide and other ingredients like aluminum collect in parts of the brain and cause cell death. Furthermore, these particles are so easily absorbed that they are detectable in all areas of the body, including vital organs.

Other known nasties that do not biodegrade too well include cyclomethicone, cyclopentasiloxane, dimethicone Copolyol, dimethicone, methicone, phenyl trimethicone, polyquaternium-7, disodium EDTA, EDTA, tetrasodium EDTA, trisodium EDTA, silicones.

How can products be tested for safety?

The ingredients in cosmetics are routinely tested for short-term health problems such as skin and eye irritation and allergic reactions.

Testing new ingredients or products on people is not possible. Therefore, scientists must resort to other types of tests – typically at much higher doses and through different routes of exposure than people would normally have – to try to determine the potential of a chemical to cause cancer.

Virtually all substances known to cause cancer in humans also cause cancer in lab animals. But the reverse is not always true – not every substance that causes cancer in lab animal's cause's cancer in people. Most lab studies of potential carcinogens (cancer-causing substances) expose animals to doses that are much higher than common human exposures. For example, taking a couple of aspirin may help with your headache, but taking a whole bottle could put you in serious trouble. It's not always clear that the effects seen with very high doses of a substance would also be seen with much lower doses.

4. Effects of Plastic

Depending on where we live and work, we're likely to be exposed to many plastic products every day. Food and beverage containers, some disposable plates, and toiletry bottles are all plastic and all are made from chemicals. Research suggests that all plastics may leach chemicals if they're scratched or heated. Research also strongly suggests that at certain exposure levels, some of the chemicals in these products, such as bisphenol A (BPA), may cause cancer in people.

There has been quite a lot of talk about the safety of plastics in recent years with people worried about the cancer risk linked with:

• freezing water in plastic water bottles

- re-using plastic water bottles
- leaving plastic water bottles exposed to heat or the sun (for example in a car)
- The plasticisers in plastic food wrap getting into food
- microwaving foods in plastic containers or covered with food wrap
- BPA being used in food packaging and babies bottles
- Plastic bottles and food containers containing dioxin.

Plastic drink bottles

Plastic drink bottles, particularly water bottles, are generally made of polyethylene terephthalate (PET).Two of the chemicals used in making this kind of plastic, di-ethylexyl adipate (DEHA) and di-ethylhexyl phthalate (DEHP) have been rumoured to cause cancer but neither are classed as being carcinogenic (cancer causing). There is no evidence that they have other harmful effects on humans. Freezing water in plastic bottles is not a risk because cold temperatures lower the chance of chemicals being released from the plastic. Water bottles can be safely re-used but should be well

Washed in hot soapy water often to make sure they do not pick up germs. If bottles become damaged or begin to deteriorate (break down) use a new one. Only use plastics labelled as safe to use in microwaves because at high temperatures other plastic may release chemicals which could be harmful. However, plastic will not get hot enough to release these chemicals if left in the car or in the sun.

Plastic food wrap and containers

Plastic food wrap and flexible plastic food containers are, generally, made from polyvinyl chloride (PVC).Research has found DHEA, one of the plasticizer chemicals contained in PVC to make it flexible, can be released and absorbed by fatty foods, such as meat and cheese, when they are wrapped or microwaved/heated in these plastics.The International Agency for Research on Cancer says there is not enough evidence to suggest DHEA causes cancer. Most research shows the level of plasticisers consumed as a result of using plastic wrap is well below levels which show poisonous effects in animal studies. Some researchers also suggest animal studies are not a reliable way to judge the risk to humans. However, because not enough is known about the risks it's wise to reduce unnecessary exposure (cut down on any contact);

Harmful chemicals of plastics

BPA – Bisphenol A

Polycarbonate is a type of plastic that is clear, lightweight, heat resistant, and shatter resistant. This makes it useful for food and drink packaging (for example water and infant bottles and plastic tableware). Bisphenol A (BPA) is found in polycarbonate plastics. Plastics labelled with the number 7 are likely to contain BPA. BPA is a weak synthetic estrogen found in many rigid plastic products, food and formula can linings, dental sealants, and on the shiny side of paper cashier receipts (to stabilize the ink). Its estrogen-like activity makes it a hormone disruptor, like many other chemicals in plastics. Hormone disruptors can

affect how estrogen and other hormones act in the body, by blocking them or mimicking them, which throws off the body's hormonal balance. Because estrogen can make hormone-receptor-positive breast cancer develop and grow, many women choose to limit their exposure to these chemicals that can act like estrogen.

Precautions to avoid the effects of plastics

- do not use plastic wrap in the microwave unless it is labelled as microwave safe
- do not use plastic containers not meant for cooking or heating food (for example ice cream or yoghurt containers) to heat/microwave foods
- do not use plastic containers not meant for food to store food (for example cosmetics or household chemical containers)
- Use heat-proof glass, ceramic or stainless steel containers for hot food or liquids and especially for heating, cooking or microwaving. Do not use stainless steel in the microwave.

5. Remedies to Prevent Cancer by Altering Our Lifestyle

According to Britain Health Select Committee Report: The marketing industry is coming under renewed pressure to change its tactics as a report by the Commons Health Select committee recommends the Government tackle the UK's obesity crisis by banning the advertising of junk food during family TV shows and suggests a 20% tax on sugary drinks and sweets.

The most statistically significant substance that correlated with getting cancer was the consumption of animal proteins. The higher the consumption of animal proteins the higher the chance of getting cancer. So, for preventing cancer eat meat and other animal proteins sparingly.

If we eat a lot of junk foods, especially a lot of processed foods, these kinds of foods are generally highly acidic. Thus, by changing our diet from a highly acidic diet to a more alkaline diet we can help prevent getting cancer.

Fruit and vegetables contain a wide variety of nutrients and are high in fibre. Hence eating plenty of fruit and vegetables can protect against cancer.

The Food and Drug Administration offers several tips for cleaning both fresh and organic produce, including:

- Wash fruits and vegetables under running water just before eating or cooking.
- Use a brush to scrub produce with hard surfaces, such as melons and cucumbers.
- Cut away any damaged or bruised areas on fruits and vegetables before preparing or eating.

Certain types of fat, such as saturated fats, may increase cancer risk. other types of fat, such as monounsaturated fats, omega-3 fatty acids, and other polyunsaturated fats reduce cancer risk. In one study, high saturated fat intake reduced survival from prostate cancer. In another study, monounsaturated fat intake lowered the risk of death from prostate cancer.

Excess saturated fat intake is a known risk factor for heart disease, a major cause of death in all populations, including cancer survivors. So eating less fat lowers the risk of cancer coming back or improves survival.

Obese means being more than about 25% overweight. Overweight or obese people have an increased risk of bowel cancer and pancreatic cancer, Oesophageal cancer, kidney cancer and gallbladder cancer, Breast or uterine (womb) cancer. So, regular physical exercise (atleast thirty minutes daily) maintains our body weight and also reduces the risk of cancer.

Nowadays, children are facing more obese problems and the main cause is due to junk foods. Chocolates, biscuits and junk food selling companies are using attractive packaging's to motivate public for their profit, but it's leading to obese and carcinogenic diseases.

A healthy diet may help in lowering the risk of cancer and other diseases. To eat healthily

- Eat less meat and animal fats (butter, cream, cheese)
- Eat five portions of raw or lightly cooked fruit and vegetables every day
- Eat more fibre
- Eat more oily fish (eg. salmon, trout, mackerel)
- Eat less salt and salty foods
- Eat less sugar and sugary foods
- Eat more cereals, bread, pasta and rice
- Don't fry foods and if you use fats in cooking, choose vegetable oils or olive oil not lard or butter
- Drink less alcohol

Examples of a portion of fruit or vegetable include an apple, pear, orange or banana, about 5cm of cucumber, a medium tomato, a handful of grapes or strawberries, 3 tablespoons of vegetables, or a heaped tablespoon of dried fruit.

Conclusion:

By considering all the reviewed factors, we conclude that avoid using excessive chemicals in food processing and cosmetics. It's better to check the labels before use. Junk foods are avoided to prevent the risk of obese and cancer. Usage of plastics should be banned by which it leads to carcinogenic diseases and even global warming.

By altering our lifestyle and diet intake as reviewed above, reductions of 60 percent in breast cancer rates have already been seen in human diet studies and a 71 percent reduction in colon cancer for men without the known modifiable risk factors. Certainly cancer prevention can be possible and was confirmed through this review. It has been estimated that 30–40 percent of all cancers can be prevented by lifestyle and dietary measures alone.

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