
Carcinogen and their adverse effects on human body which are produced on the table come from kitchen and then consumed in human body in a form of arsenic compounds due to the consumption of GMO.

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Abstract

Genetically modified Organism (GMO), as in chickens carrying the human erythropoietin (hEpo) gene have been developed to produce recombinant hEpo protein in eggs. However, such animals have not been good food sources and even not advised to serve on the dining table. There is a method for detecting the hEpo gene in chicken meat reacts with plastics of kitchen and produces carcinogen in human body causes cancer by using a real-time polymerase chain reaction (real-time PCR). The hEpo gene was clearly detected in genomic DNA extracted from magnum and heart of a chimeric chicken containing the hEpo gene. A plasmid containing the hEpo gene was used as a standard reference molecule as well. The results clearly showed that our method is capable of detecting the arsenic compound - a carcinogen contained in the served GMO chicken in the presence of genomic DNA extracted from a raw chicken meat sample. We successfully used this method to test the samples of raw chicken meat and the samples of GMO chicken meat in plastic dish processed foods. This method will be useful for monitoring GMO chicken meat especially in plastic packets or trays that might have originated hEpo gene resulting origination of carcinogen in human in a form of arsenic compounds, cause's high figure of cancer patients in society to assure food safety.

Introduction:--

In a recent study it is noticed that women using processed food packed in plastic for serving GMO chickens or similar products containing facilities in a kitchen for cooking and eatables have a 5 times greater cancer rate than those women who don't work with plastic to serve such artificially or genetically modified products. According to the survey done by the senior doctors, experts and researchers of Mahaveer Hospital, Jaipur why and which areas are more affected with the cancer, In accordance of them the family members of the patients are the good consumer of plastics and GMO chickens. In jaipur maximum patients are from the belt connecting areas like Adarsh Nagar, Ramganj, Subhash Chowk, Eidgaah, Ramgarh Mode, Jaisingh Nagar Khor and so on, Almost a number of five patients are found among 100 persons and if we ignore this problem and won't take it seriously and will not change our food habit style then it is not false to say that in every ten members of family there will be one patient of cancer.

Materials & Methods:--

Plastic is everywhere and even in our food and a very small amounts of these chemicals found in plastic are required to put your health at risk. Plastics contains **Toxins, Endocrine Disruptors and Carcinogens** migrate from the molecules of different plastic containers to their Contents.

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Plastic could also makes you fatty:-- Endocrine Disrupting Chemicals (EDCs) found in Plastic. These chemicals closely mimic estrogens hormones in our body; These EDCs instruct your body to store weight, as if there was a famine. Our body is given a signal that you are in a starvation period, so it will store all the calories that it gets by slowing down your metabolism.

The chemicals found in plastics are released into your food (like GMO's products) more than fifty times faster by exposure to heat. We drink hot liquid from plastic cups or paper cups lined with plastic, boil water in a plastic kettle, making coffee in a plastic coffee machine, and many more. We use plastic utensils, cutlery, trays, micro-wave safe containers, plastic lunch containers, canned food, milk and other paper containers that are lined with a thin plastic film.

The plastic continues to release chemicals into our food. And it releases these chemicals even faster in the case of acidic foods such as tomatoes, fruit, beans, and juice when used to prepare GMO's chicken etc.

Plastic coffee mugs and water bottles leach out BPA(Bisphenol A) into your water especially when it is hot, you must have noticed it when you drop your bottle in hot car and drank the water it taste like plastic. In your infant's milk bottles, if you wash their feeding bottles in the dishwasher they will release chemicals into your babies milk/water much faster.

In addition, plastic has a huge and detrimental effect on our environment too. Like use of plastic bags is banned now as it releases methane which is 20% times of CO₂ and pollute the environment.

Toxic metals which are hidden in our kitchen products like:

1. **Lead:--** Lead is a highly toxic metal(used in paint, glaze on some ceramic dinnerware and pottery) it can leach into drinking water through plumbing materials.

Lead accumulates and stays in the body and causes learning disabilities in children, developmental delays and lower IQ scores. In adults, symptoms include high blood pressure, headaches, memory loss, muscular weakness and abdominal pain.

2. **BPA(Bisphenol A):--** Bisphenol-A (BPA) is a synthetic estrogens found in thousands of products including reusable polycarbonate (#7 plastic) food and beverage containers; the lining of canned goods; PVC (#3 plastic); and on receipts and money.

BPA can leach into food and beverages. Exposure to trace amounts of BPA have been shown to disrupt the endocrine system and have been linked to a wide range of disorders including breast cancer, reproductive system damage, heart disease and obesity. BPA poses the highest risk to developing foetuses and babies.

3. **Aluminium:--** Al-has been linked to neurological problems and has been found to disrupt the central nervous system. Excess aluminium can accumulate in various tissues in the body and may weaken bones by depleting the body of calcium.

4. **Triclosan:--** Is is an antibacterial chemical found in many kitchen products including

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cutting boards, countertops, dish towels, plastic food storage containers, sponges and liquid hand soap. Triclosan accumulates in our bodies and is linked to skin and eye irritation, liver toxicity and hormone disruption

Genetically modified organisms (GMO) were first approved by the Food and Drug Administration in 1982, when insulin produced by genetically engineered E. coli bacteria was introduced to the market. These days, much of the food that exists on store shelves contains an ingredient that has been genetically modified. These food products also include chicken. Use of them causes health dangers, chickens that are fed with GMO ingredients. One of the dangers of genetically modified chickens is the hormones that are pumped into them in order to make them plumper and bigger and grow at a more accelerated rate. They are fed with multiple antibiotics and growth hormones in large amount of doses. The heart and lungs cannot keep up with the accelerated growth of the rest of the chicken's body so and many chickens die from heart failure. The hEpo gene was clearly detected in genomic DNA extracted from magnum and heart of a chimerical chicken containing the hEpo gene. A plasmid containing the hEpo gene was used as a standard reference molecule as well. The results clearly showed that our method is capable of detecting the arsenic compound - a carcinogen contained in the served GMO chicken in the presence of genomic DNA extracted from a raw chicken meat sample. These growth hormones are a big risk to people's health Arsenic in chicken feed in plastics, Arsenic is a cancer-causing substance that has also found its way into the chickens that we eat. According to Global Research, "the FDA says its own research shows that the arsenic added to the chicken feed ends up in the chicken meat where it is consumed by humans ("FDA Finally Admits Chicken Meat Contains Cancer-Causing Arsenic"). This means that for the last sixty years, consumers who eat conventional chicken have also been eating arsenic which causes cancer.

Discussion:--

Serving these GMO's product with plastics like lead containing potteries, BPA containing soup bowls, Triclosan containers continuously releases toxics, GMO chicken meat especially in plastic packets or trays that might have originated hEpo gene resulting origination of carcinogen as a compound of arsenic, resulting toxic substance in human cause's high figure of cancer patients in society.

Arsenic is intentionally added to the feed of [chickens](#) raised for human consumption. Organic arsenic compounds are less toxic than pure arsenic, and promote the growth of chickens. Under some conditions, the arsenic in [chicken feed](#) is converted to the toxic inorganic form which when served in a plastic potteries are the results of carcinogen.

Go Carcinogen free by minimising the use of toxics release materials including GMO products:--

From the earlier researches it is concluded to use safer type of plastics or we can say key

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resources for living with less plastics and healthy food habits: --

Plastics are categorised with different types like Type-1, Type-2 etc. The sev



Used to make soft drink, water, sports drink, ketchup, and salad dressing bottles, and peanut butter, pickle, jelly and jam jars.

GOOD: Not known to leach any chemicals that are suspected of causing cancer or disrupting hormones.



2. High density polyethylene (HDPE)

Used in Milk, water, and juice bottles, yogurt and margarine tubs, cereal box liners, and grocery, trash, and retail bags.

GOOD: Not known to leach any chemicals that are suspected of causing cancer or disrupting hormones.

3. Polyvinyl chloride (V or PVC)



Most cling-wrapped meats, cheeses, and other foods sold in delicatessens and groceries are wrapped in PVC.

BAD: To soften into its flexible form, manufacturers add “plasticizers” during production. Traces of these chemicals can leach out of PVC when in contact with foods. According to the National Institutes of Health, di-2-ethylhexyl phthalate (DEHP), commonly found in PVC, is a suspected human carcinogen.

4. Low-density polyethylene (LDPE)



Some bread and frozen food bags and squeezable bottles.

OK: Not known to leach any chemicals that are suspected of causing cancer or disrupting hormones, but not as widely recycled as #1 or #2.

5. Polypropylene (PP)



Some ketchup bottles and yogurt and margarine tubs.

OK: Hazardous during production, but not known to leach any chemicals that are suspected of causing cancer or disrupting hormones. Not as widely recycled as #1 and #2.

6. Polystyrene (PS)



Foam insulation and also for hard applications (e.g. cups, some toys)

BAD: Benzene (material used in production) is a known human carcinogen. Butadiene and styrene (the basic building block of the plastic) are suspected carcinogens. Energy intensive and poor recycling.

7. Other (usually polycarbonate)



Baby bottles, microwave ovenware, eating utensils, plastic coating for metal cans

BAD: Made with biphenyl-A, a chemical invented in the 1930s in search for synthetic estrogens. A hormone disruptor stimulates the action of estrogens when tested in human breast cancer studies. It can leach into food as product ages.

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Pledge to push toward GMO & plastic free food, some farmers and companies go for carcinogen free i.e. free from antibiotics, hormones and genetically modified organisms in our food products.

There are farmers who will only feed their poultry and livestock with GMO-free feed. There are also companies who sell only GMO-free feed. One of these companies is the Buxton Feed Company, which has developed a strategy for marketing healthy feed that is free of genetically modified organisms. GMO-free food is becoming extremely popular in consumers' choices these days. This is why there should be more companies such as the Buxton Feed Company that are committed to the health and well-being of their consumers. There should also be more farmers who stand up for using feed that is free of genetically modified organisms and avoid injecting their chickens with hormones and antibiotics. GMO-free chicken and other foods will hopefully be the food of the future.

General awareness programme should be organised to make free society from these harmful products especially to women who played an important role for the health of their family members.

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