

Scrutinizing the Awareness about the Role of Diet in Cancer Development and Cure

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Abstract: *Cancer is most leading critical disease which affects individuals psychological, economical and physical state. The studies shows that in year 2022 about 14,61,427 cancer cases are found in India. Our daily diet affects increasing or decreasing risk of developing cancerous tumours or lumps. Some food materials like microwave popcorn, refined sugar, soda, smoked food, tobacco and alcohol are considered as cause of cancer because they content some amount of carcinogenic substances. As per the research of National Cancer Institute when fishes and meats are smoked at high temperature, the harmful chemicals entre into food via flames and smoke. Some food sources has cancer fighting properties which includes fruits like melon and strawberries containing folic acid and vitamin B, Tomatoes contains lycopene which has anticancer properties, Sulforophane found in broccoli. Almost every individual is aware about cancer but 70- 80% population is unaware about cancer causing foods they are consuming on daily basis should be replaced with cancer fighting foods for healthy life.*

Keywords: cancer, diet, carcinogenic food , healthy diet, cancer fighting foods.

I. INTRODUCTION

As we all know cancer is most leading life threatening disorder cancer cases are increasing due to the lifestyle we are living. The uncontrolled growth of cell causes cancer, these cancer cells are capable of replicating frequently although there is limitation of space and nutrients. The posture of cell differs from normal / healthy cells. The functioning of cancer cells in the body is inappropriate and are capable of spreading all over the body. They replicates quickly as compared to healthy cells. The regulation of healthy cell the regulation of cell development doesn't occurs the bulgy appearance called as tumour occurs in abnormal development of tissue are forming clusters of cell that are capable of developing and replicating uncontrollably. Consuming the accurate food from diet two get sufficient minerals and nutrients for body is favourable for human health. The food we consume in our daily diet has ability to increase or decrease chances of developing certain kinds of cancer. The food materials that increases risk of developing cancer includes processed meat, potatochips, microwave popcorn, refined sugar, soft drink and smoked meat or fish. The processed meat like sausages and hot dog contents added chemicals and preservatives. These preservatives are added to enhance their service life but these preservatives contains carcinogenic compounds[1]. Almost every potato chips accessible in market consist of artificial preservatives and dyes when chips are fried at excessive temperature results in formation of acrylamide which is a carcinogen that also found in cigarettes[2]. Microwave popcorn bags are internally lined by certain chemicals known as perfluorooctanoic acid (PFAO).Which boost the risk of developing liver kidney bladder and testicular cancer PFAO Can also lead to infertility in women[3].In 1931 some researchers discovered that tumours growth depends on sugar to increase cancer cell size and number.A refined sugar has fructose corn syrupwhich can boost cancer cell growth[4]. The American research journal found that soft drinks consumer have higher chances of developing cancer than non consumers as soft drink contains artificial colouring and carcinogenic chemicals[5]. Smoked meat our fish are mouthwatering but loaded with lots of carcinogens, during smoking meat absorbs the tar from smoke and after consuming these tar loaded meat star is absorbed by our body[6]. Tar is a leading carcinogenic compound.The carcinogenic food should be switch to healthyand natural cancer fighting food like broccoli, carrots, cinnamon, turmeric, tomatoes and garlic. Sulphoraphane founding broccoli which is a plant compound with anti cancer properties. Study shows that consuming veggies like broccoli lowers the risk of colon cancer[7]. Analysis of five

studies concludes that consuming carrots reduces the risk of stomach cancer by 26%[8]. Another study discovered that higher carrot intake lowers the chances of developing prostate cancer by 18%[9]. Test tube study done on cinnamon extract found that it was able to reduce spread of cancer cell growth and accelerate their death[10]. The research done on turmeric shows that it has ability to reduce spread of colon cancer by targeting a certain enzymes which induces cancer growth[11]. Lycopene Which is responsible for red colour of tomatoes has anti cancer properties. The study done among 47,365 people found that high intake of tomato sauce was associated with reduced risk of prostate cancer[12]. Allicin is active component of garlic which is capable of killing cancer cells[13]. study of 471 males found that higher consumption of garlic in diet is linked to lower cancer risk[14].

II. METHODOLOGY

Diet plays important role in boosting immunity to certain diseases. Sadly, people are gaining imperfectly researched and untrustworthy information from online articles which are misguiding people about their daily diet.

Primary data:

To spread awareness about the role of diet in cancer development and cure I did survey via google form with questions based on above topic. The random sample size of 100 people from Ghatkopar(w), Mumbai-400084, India.

Do you know about cancer ?	Yes / No
Are you aware of foods which causes Cancer ?	Yes / No / others..
Which foods you consume/eat ..	Processed meat/ Potato chips/ Soft drinks/ Refined sugar/ Microwave popcorn/ Smoked meat
Do you know foods mentioned above can cause cancer ?	Yes / no
Which of the following food you consume?	Broccoli / Turmeric/Cinnamon Carrot/Tomatoes /Garlic
Do you know foods mentioned above can fight the cancer ?	Yes/ no
Do you know any other foods which can cause cancer or fight cancer please drop here....	

Table no.1 Questionnaire

Secondary data :

Secondary data is collected and studied via referring various research papers related to above topic.

III. OBSERVATIONS AND RESULTS

From questionnaire survey among 100 respondents we got the following results:

Table no. 2 The percentage of people consuming processed food

which of the following food do you consume ?	Processed meat	Potato chips	Microwave popcorn	refined sugar	Soft drink	Smoked meat or fish
Number of people	40	96	87	93	79	56
Percentage	40 %	96 %	87 %	93 %	79 %	56 %

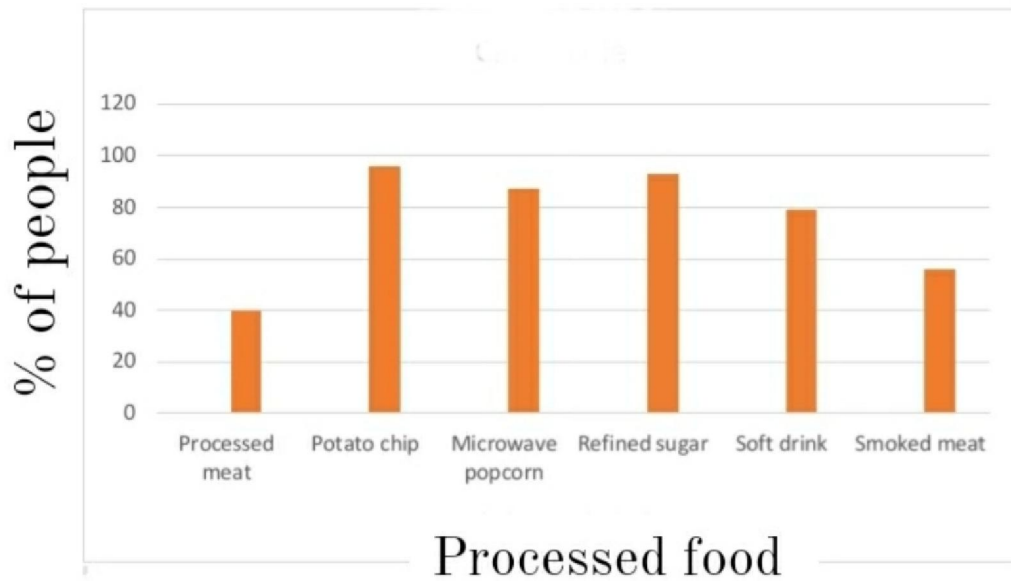


Fig no. 1 The percentage of people consuming processed food

More than 90 % people are consuming refined sugars and potato chips which contains carcinogenic compounds in less or more amount which increases risk of developing cancer among this individuals.

Table no. 3 Number of respondents who knows about cancer causing foods

Do you know that Refined/processed food can cause cancer?	Yes	No
Number of people	74	26
Percentage	74 %	26 %

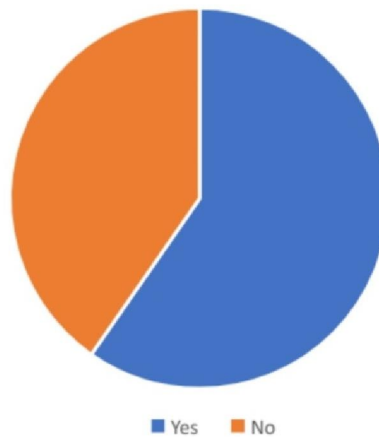


Fig no. 2 Number of respondents who knows about cancer causing foods

74% people are aware about cancer causing foods but they are still consuming it as they are habitual to diet and 26 % are people unaware about it.

Table no. 4 Number of respondents consuming natural food

which of the following food do you consume ?	Broccoli	Carrot	Cinnamon	Turmeric	Tomatoes	Garlic
No. Of people	34	68	72	98	89	76
Percentage	34 %	68%	73%	98 %	89 %	76 %

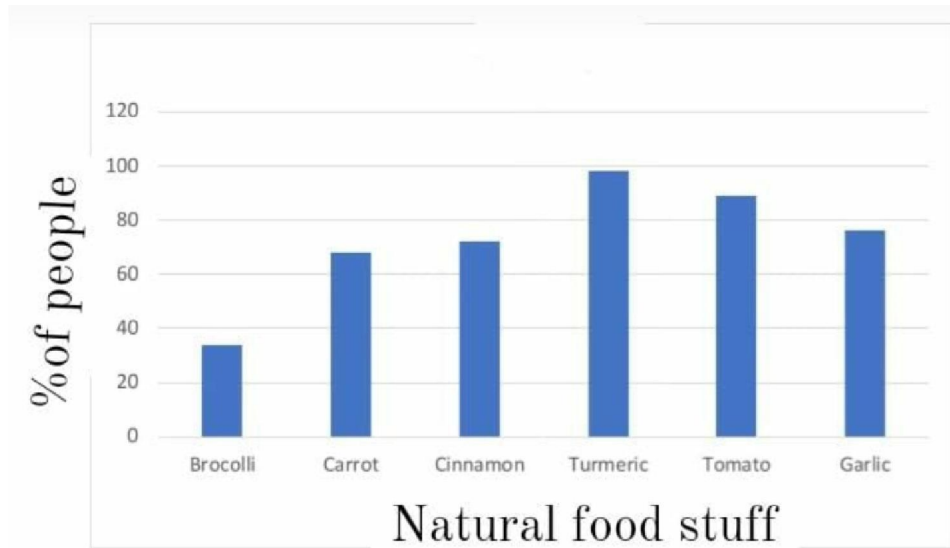


Fig no. 3 Number of respondents consuming natural food

Turmeric and Tomatoes are mostly used healthy food materials in diet of respondents. More than 50 % people are having healthy diet which is capable of avoiding cancer.

Table no. 5 Number of respondents knows about cancer fighting foods

Do you know that Natural food stuff can reduce the risk of cancer?	yes	no
No. Of people	39	61
Percentage	39 %	61 %



Fig no. 4 Number of respondents knows about cancer fighting foods

About 61 % people are unfamiliar with health benefits of consuming this natural anticancer food and 39 % people are aware about it.

IV. CONCLUSION

antioxidants helps to avoid oxidative harm and development of cancerous cells in body. Vitamin A, vitamin C, vitamin E, minerals like manganese, zinc, copper and phytochemicals like lycopene, allicin are naturally found anticancer components in food sources. Spread of cancer is avoidable by modifying our lifestyle and diet. There are some cancer causing foods which induces cancer cell growth must be avoided. Consumers should read ingredients list on packaged food before buying or consuming anything to avoid cancer and be on safer side.

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