



TODAY'S DIETARY CHANGES AND ITS EFFECT ON HEALTH

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ABSTRACT

Today's diet is heavy in saturated fat, partially hydrogenated oils, highly processed foods and incompatible combination of food. Frequently taken of such kind of food which causes improper metabolism of food. As improper metabolisms leads to indigestion and it is basic cause of various diseases. This diet in combination with a sedentary lifestyle, large portion sizes and high stress is blamed for increase rate of obesity. Disease associated with obesity include type 2 Diabetes, coronary heart disease, etc. Due to high literature rate, people are conscious about health and balanced diet. So their dietary pattern includes fresh, whole foods like, fruits, vegetables, whole grains, legumes, meat, fish which have a lower incidence and major chronic disease and especially diet related disease. But methods and food prepared or processed is improper, also nowadays artificial ripening of fruits, cold containers, various food preservatives also for cultivation of plants various types of pesticides are used which plays predominant role to give hazardous effects on health. So today's lifestyle is so fast and peoples prefers fast food such as pizza, burgers, sandwich with cold drinks or hot drinks. As combination of these food is improper it leads to indigestion, metabolic disorder, skin diseases etc. So avoiding this kind of food is better for healthy lifestyle.

KEYWORDS: Health, Junk food(incompatible diet), Life style.

INTRODUCTION

"Eat healthy and live healthy", is basic requirement of life. Healthy eating is one of the process of a well balanced life.^[1] It means getting adequate of every important nutrient, choosing a various types of foods from all types of food group and excluding excessive fat, salt, sugar, and alcohol. Our physical, mental, spiritual and social health are connected to our healthy diet and one another. Without nutritious food, metabolism is slow down progressively and physical health reduces. It protects body against illness like heart disease, type -2 diabetes, cancer, etc. food energy and nutrients, fulfil neurological and physical body function.

Globalisation and urbanisation have significantly affected one's eating habits and enforced many people to consume modern and high calorie fast foods, widely known as junk food. This exhaustive problem of ingesting junk food on a great scale and its effect on health needs significance and health education. Which can be greatly contributed to its limited ingestion and shifted over to healthy food habits for the good life.^[1]

When nutrition predominantly absorption of food substances increases the demand of the body, even have excess collection in the body more amount of energy

utilization is required to discard remaining storage. The body has an ultimate nutrition sensing and counting system for maintaining the balance among caloric absorption and storage also utilisation. This formation of nutritional sensing system is the major component. Which can be absorb and control the nutrition through sodium potassium pumps, calcium channels also autonomous nervous system.^[2] So, understanding the relation between today's dietary changes and its effect on health have been reviewed from many resources and systematically presented.

AIM: to study the dietary changes and it's effect on health.

OBJECTIVES

- 1) to know the relation between today's dietary factors and health.
- 2) to know the hazardous effect of junk food on health.

METHODOLOGY

To fulfil the aims and objectives of the study this work has been carried out in the following phase wise manner.

- Conceptual study
- Comparative study
- Discussion

- Conclusion

Concept of junk food and health

Junk food is merely known as empty calorie food. This food is high calorie rich food which are lack in micronutrients like proteins, minerals, carbohydrates, vitamins, amino acids, fibres but they have high energy. Junk food not containing nutrients which is essential for our body to stay healthy. This food has poor diet value. Junk food is a natural term which is applicable to those foods which are grasped to have small or null nutritional value. But they also contain ingredient which are considered harmful when consumed frequently or hazardous to consume at all.^[3] Junk food constitute of anything which is quickly prepared, tasty, convenient and popular, also easy for preparation. Its addiction is great because of its simplicity and attractiveness. Another important reason for addiction is great taste which is perceived by usage of oils, salt and sugars in large proportion. Packing of such foods are very attractive also there is an addition of artificial food colours, flavours, or preservatives. Advertisement plays an important role for attracting the people especially children and adults for consuming large amount of junk food.^[4]

It contains large amount of trans fat, refined sugar, polysaturated fat, white flour, salt, and various food additives and preservatives wisely tartrazine and monosodium glutamate. Simultaneously it is lack in essential vitamins, proteins, minerals, amino acids, fibres also other healthy contents. This food also has less enzyme producing vitamins and minerals but containing high calories. People's diet reflects their condition which they face or live.^[2] Under nutrition leads to nutritional deficiency and over nutrition causes illness like obesity, hyper-lipidemia, hypertension, cancer, diabetes, renal diseases, coronary heart diseases. It also underline that requirement of nutrition to our body is vary individually with different heredity, digestive capacity, illness, family backgrounds, social or economic status or different dietary habits.

Junk food and healthy food

When junk foods are consumed frequently, the excessive fat, carbohydrates and highly processed sugar found in junk food responsible for an increased risk of obesity, cardiovascular disease, cancer, renal disease and various chronic conditions.^[5] Junk food is contrary to healthy foods, they are excess in calories and little in nutrients. It has not only lack of nutrients but they contain ingredients which can be damage our health. Trans fat are frequently used in various fast food restaurants also various prepacked foods like cookies, cakes, crackers, chips, margarine, etc. These fat increase bad cholesterol level while simultaneously decreasing good cholesterol.^[6] There is also evidence which suggest that sleep deprivation stimulates people to select junk or fast food over healthy diet, also they have gained some physical dependence on junk food. There are noticeable factors

such as unhealthy food, highly processed food, high calorie fat consumption. Which are responsible for the illness like obesity, cardiac problems, dehydration, food poisoning, arthritis, diabetes, etc. are increased in developing countries.

Combination of fat and sugar having ability of producing a dopamine-driven sudden increase of comfort in people with a tendency for addictive behaviour. Excess fat content, particularly cholesterol, salt and sugar have their hazardous effects on health increased calorie content with sugar causes obesity.^[7] Closely packed sugar content leads to dental cavities and Type 2 diabetes.^[8] There is short as well as long term adverse effect. Among them short term adverse effect caused due to eating junk food is lack of energy which is occurred due to it does not provide essential nutrients and people feels weakened. It is due to they are lack in fibre and made by highly processed foods, also they have high glycaemic index. It means suddenly rise in blood sugar level but it falls quickly and further increasing hunger. Due to high cholesterol and increased level of salt leads to hypertension, coronary heart disease, stroke one by one. Increase level of salt utilisation can also affect functions of kidney and may leads renal diseases. High fat and highly processed oils in combination with spices perform a irritant action on gastric mucosa. It causes increase secretion of hydrochloric acid and it leads to gastritis. When oil reach junk food is taken, there is symptoms like drowsiness, generalised weakness and failure to concentrate. Consumption of this food over a long period of time can reduces blood circulation due to excessive fat accumulation. Decreased level of vital oxygen, proteins and other nutrients particularly can dried out grey cell temporarily. For attracting people towards junk food they added artificial food colours which may give carcinogenic as well other harmful effect to our body. Artificial colour in combination with flavour can leads to allergic asthma, hypersensitivity and skin rashes. Preclinical study on albino rats concluded that frequently consumption of junk food during pregnancy also affect the health of foetus.^[9]

High calorie food, when oxidised in the body leads to increase formation of Acetyl CoA. Increased level of Acetyl CoA is channelized out of mitochondria to its involvement in different metabolic pathways and its successful utilisation. It includes biosynthesis of cholesterol and fatty acid synthesis which leads to increase cholesterol and fatty acid formation. Increased level of fast food leads to metabolism under stress; large amount of insulin is secreted by pancreas to prevent increased sugar level. As junk food not have essential nutrients like carbohydrates, proteins, blood sugar level progressively reduces after consumption of food resulting lack of energy and feeling fatigue.^[10] Generally soft drink contain large amount of sugar also contain methylglyoxal, which is in combination with human carbonyl stress.^[11] Oil fried and highly processed food which have large amount of trans fat including with oxy-

cholesterol which may be fatal for heart. Hypertension is due to high sodium level. It also affect kidney i.e. renin-angiotensin system leads to vasoconstriction on arterioles.^[12] Excessive salt utilisation also leads to renal, liver diseases, etc. Children are addicted to junk food such as chips, colas, wafers, pizza, burger, sandwich, etc. Consumption of this food frequently not only affected on their health but also affect on their concentration as well behavioural changes are seen. Addiction of junk food in children may leads further risk of breast cancer, prostate hypertrophy, hypertension, osteoporosis. Slow growth, dental problems as well as obesity.^[13,14]

DISCUSSION

Due to globalisation and urbanisation people attracted towards modern food. There is lack of awareness on junk food. Hence people need to be educated about healthy food and junk food also their action on body. Such products are keeping out of reach from children as a preventing major and increase consumption of healthy food. Avoidance of junk food by stimulating people towards consumption of healthy food instead of diet contain lack in nutrients, highly processed and prepacked foods as they contain artificial food colours and preservatives. Be aware people from many resources like programmes, health education, advertisement etc. Dietician plays important role in it particularly during growing and old age.

CONCLUSION

Junk foods are preferred due to globalisation and awareness of its impact on health in society. Because of this food there is increase rate of obesity, hypertension and some chronic conditions which are aggregated by such foods. Encourage people for consumption of healthy diet. Essential nutrients plays important role for not only maintaining immunity but also controlling aging disorder and lifespan. So food prefer for individual is like low fat and cholesterol, rich in fibres, also contain adequate amount of sodium, calcium, iron as per daily requirement of all essential nutrients.

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