



## Harmful Effect of Chemicals Present in Junk Food

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### ABSTRACT

*Junk food is unhealthy, low in fibre, high in fat and salt, high in sugar in liquid form, it induces obesity. Studies have shown that despite being unhealthy, due to better taste such foods are gaining popularity.*

*The terms fast food and junk food are related terms. Most of the junk foods can be prepared and served fast, but all fast foods are not junk foods, especially when they are prepared with nutritious contents. Fast foods include those food stuffs which are rapidly prepared and quickly served such as Burgers, pizzas, fries, hamburgers, patties, nuggets it also includes Indian foods like pakora, samosa, namkeen etc.*

**KEYWORDS :** Junk food, Fast food, obesity, Trans fat, Obesity

Junk foods have low nutrient value in terms of protein, fibre, vitamin and mineral content, rather these foods are energy dense foods with high sugar/ fat/ salt such as Chips, chocolate, ice-cream, soft drinks and pizzas. Foods that are ready to serve after dissolving or dispersing in a liquid and sometimes undergo special processing are instant foods such as Noodles, corn flakes, soup powder. The fast foods are becoming popular among young generation due to the ready availability, taste, low cost, marketing strategies of food manufacturing units. Fast food restaurants keep limited menu in order to minimize the waiting time. As the children spend hours daily in watching television, advertisements promote these fast food which are unhealthy and have high fat, sodium and sugar contents (Batada et al., 2008). Print as well as electronic media has important role in marketing of such junk foods (Hawkes 2002). Most of the school going children skip breakfast and prefer to take junk food during recess this leads to increased body mass index (Niemeier, 2006).

#### Junk foods are full of following harmful chemicals

**Trans Fats;** Trans fats are partially hydrogenised vegetable oils, they increase the shelf life of food and add crisp, texture to food. These Trans fats are worst substances which we consume in name of food.

**Nitrite Salts;** some nitrite salts are added to foods such as processed meat, bacon, corned beef, smoked fish, ham and sausages. These salts are added as preservatives (Sharma, 2015) to keep taste, smell and texture for longer time, but these preservatives are carcinogenic and have many more harmful effects.

**Saccharin and Aspartame;** these are sweetening agents which are added to foods, but consumption of these artificial sweetening agents may cause cancers of different types.

**White Flour, Rice, Pasta, and Bread;** these refined grains are devoid of fibre and other nutrients, they cause problem in digestion, increases blood sugar, which can lead to all sorts of problems.

#### Butter Flavor

A buttered-flavored chemical called diacetyl, is used in microwave popcorn, margarine, snack foods, baked goods and candies, giving them an appetizing smell and buttery taste. However, these chemicals increase risk for Alzheimer's disease.

**Sodium Benzoate, Potassium Benzoate, Butylated Hydroxyanisole (BHA);** These preservatives are added to foods to increase the shelf life but all these have harmful effects.

**Monosodium glutamate (MSG);** It is used as "flavour enhancer" of the food, but consumption of this chemical can have serious harmful effects on chemistry of brain.

**High Fructose Corn Syrup;** High fructose corn syrup (HFCS) increases triglycerides, boosts fat-storing hormones, and leads to obesity.

**Food Coloring;** Certain chemicals which give color and tasty look to food are being used, these chemicals are by products of coal tar and other chemicals that can increase the risk of certain cancers.

#### CONSEQUENCES OF EXCESSIVE FAST FOOD CONSUMPTION

Consumption of diet high in sugar, saturated fat, salt and calorie content in children can lead to early development of obesity, hypertension, dyslipidemia, impaired glucose tolerance and risk of future heart diseases (Asgary et al., 2009). Fast foods have higher proportion of calories (Schmidt et al., 2009). Moreover, the low micronutrient content such as carotene, vitamin A, vitamin C, calcium and magnesium (Bowman & Vinyard, 2004) can lead to osteoporosis.

Diets rich in free sugars can damage the enamel of teeth. Certain Junk foods often contain colors that are carcinogenic and harmful to the body. The high salt content of fast foods also increase risk of high blood pressure, strokes, and kidney problems. In addition, some studies have shown that calcium competes with sodium. In other words, as the intake of sodium increases, there is an increase in the urinary excretion of calcium. This increased excretion of calcium may be responsible for increased bone demineralization which, in turn, increases the risk for osteoporosis.

Fast food causes obesity, increase the risk for high cholesterol and fatty streak development which translates into greater risk for cardiovascular disease among children.

#### CONCLUSION

Unfortunately fast foods are more filling and have more caloric per bite, so they are consumed by large number of people. Fast foods are high in fat, typically low in fibre (Kimm, 1995) because of the lack of complex carbohydrates. Complex carbohydrates are often high in fibre, which is associated with lower cholesterol levels, improved digestive function, and decreased risk of cardiovascular disease.

Nutritional labelling (calories, added sugar, total fat, Trans fat, saturated fat, sodium and protein content) of the food products should be provided in menu, menu boards, food wrappers and containers in fast food restaurant.

Moreover intake of healthy food should be promoted in children, so child should be given brightly colored vegetables, fruits and sprouts, ice-cream, chocolates and other heavy desserts. Such items can be replaced by low fat fresh yogurt, Fresh lime juice, coconut water and fresh fruit juices should be preferred to sodas and soft drinks as beverages, Prefer grilled fresh sandwiches rather than fried ones, avoid dishes with rich creamy layers and lots of spices, avoid deep fry to decrease the fat content.

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