

IMPACT OF JUNK FOOD ON CHILDRENShanki Kaundal^{1*}, Vatika Gupta² and Umang Thakur³¹Medical Officer Specialist (MD Pediatrics) Civil Hospital Taunidevi, Hamirpur, Himachal Pradesh.²Medical Officer Specialist (MD Pediatrics) District Hospital Mandi, Himachal Pradesh.³Medical Officer Specialist (MS Ophthalmology) District Hospital Mandi (H.P).***Corresponding Author: Dr. Shanki Kaundal**

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ABSTRACT

Junk food comprises of foods that are high in dietary fats, sugar, salt, but are relatively low in other important nutrients such as protein, fiber, vitamins, and minerals or those which are nutritionally inappropriate. The most commonly consumed junk food items are bakery products, sweetened beverages, burgers, caffeinated drinks, chips, chocolates, noodles, pizza, and soft drinks. Junk food and its impact on children is a topic of concern for parents, health professionals and society as a whole. Junk food culture is an emerging trend among the younger generation. Junk food is extremely attractive to most children because of easy availability, the taste, comparatively lower price. Great taste, attractive appearance along with advertising has played a major role in attracting people particularly adolescents to the selling joints. Since children typically do not understand the consequence of these unhealthy practices, it can be quite addictive. A PAN India survey organized by the Centre for Science and Environment (CSE) among 13,274 children between the ages 9–14 years reported that 93% of the children ate packed food and 68% consumed packaged sweetened beverages more than once a week, and 53% ate these products at least once in a day. Almost 25% of the School going children take ultra-processed food with high levels of sugar, salt, fat, such as pizza and burgers, from fast food outlets more than once a week.^[1] Fast food consumption was reported by 97.5% students in a study done in China.^[2] In a prospective study done in Lucknow, India, junk food consumption was found to be 98% in children.^[3]

Consequences of excessive junk food consumption

The current popularity of consumption of fast foods in this age of urbanization has resulted in several adverse effects on health of children. The energy density of fast foods had been found to be more than twice the recommended daily allowance for children.^[4] The major adverse effects related to intake of junk foods are obesity and its associated complications, dental caries, allergies, Cardiometabolic risk, High blood pressure, Behavioural symptoms, micro-organism contamination leading to infections, and risk of cancer due to carcinogenic and allergenic properties of some food additives.^[5]

Overweight/Obesity

Burden of obesity has increased tremendously over the past few decades in most parts of the world. High consumption of Junk Foods contributes to the overweight among School-aged children in India from 9.7% to 13.9% over a decade.^[6] Due to high energy content in junk food, high amount of fat, free sugar, chemical additives, and high salt content and presence of a low amount of micronutrients and fiber, junk food is found to be associated with obesity in children.

Childhood obesity is the upcoming pandemic threatening Indian population. As a result of this, even young

children are developing health problems like polycystic ovarian disease (PCOS), diabetes, high blood pressure etc. During COVID-19 pandemic, burden of obesity has been increased, with school closures and lockdowns, children's daily routines were disrupted. This could have led to irregular sleep patterns, less physical activity, and increased sedentary behaviors.

Digestive problems

Excessive consumption of junk food can lead to various digestive issues like gastro-esophageal reflux disease (GERD), altered bowel habits, irritable bowel disease. High fat content and high amount of salt and spices in junk food cause irritation on stomach lining and disrupt normal anatomy and gut microbiota. As the fiber content is very less in junk foods, problems like hemorrhoids and constipation increase. A diet high in unhealthy fats and low in fiber can also increase the risk of gallstones, which can cause severe abdominal pain and other digestive disturbances

Lack of sustained energy

Junk food lacks essential nutrients like vitamins and proteins that are most wanted and supportive for a healthy body. Children may feel full and satisfied but it can make them drained of energy throughout the day.

Sometimes, the daily activities will also become a daunting task for them as the junk food lowers the energy level very soon.

Blood sugar fluctuations

Junk food is often rich in refined sugars and simple carbohydrates. Consuming these foods can cause rapid spikes in blood sugar levels followed by crashes, which can result in feelings of tiredness and fatigue.

High blood pressure

High intake of junk food like packed chips and processed foods which are loaded with high amount of sodium content leads to high blood pressure especially in genetically predisposed children. Obesity is another known risk factor for hypertension as it increases the workload on blood vessels and heart.

Cardiometabolic risk

Cardiometabolic alterations in children and adolescents have shown association with consumption of junk food and ultraprocessed diet. Children following this unhealthy diet are found to have higher levels of LDL cholesterol, triglycerides and fasting glucose and lower concentrations of HDL. Chances of insulin resistance were also high in such children.

Behavioral symptoms

Evidence shows that children who are frequent fast food consumers are more susceptible to adverse psychological behavior. It is hypothesized that unhealthy diets affect mental state and brain function through oxidative stress processes, inflammation, and stress response systems⁷; while vitamins, antioxidants, beta-carotene, and minerals in fruits and vegetables are associated with lower levels of inflammation and oxidative stress markers.^[8]

Strategies to reduce the trend of junk food consumption among children

Parental Education and Involvement:

Before convincing children to make healthy food choices it is important to encourage parents to be role models by making healthier food choices themselves. We should aim to educate parents as well children about the health risks associated with frequent fast food consumption, such as obesity, diabetes, and heart disease.

Healthy home environment:

Stock the home with healthy food options like fruits, vegetables, whole grains and limiting the availability of junk food and sugary snacks and beverages at home. Most children snack while watching television, so screen time of children should be limited.

Promote nutritional education:

Nutritional education need to be incorporated in school curriculum to teach children about Importance of balanced meals, portion control, reading food labels and adverse effects of junk food.

CONCLUSION

Junk food is considered as a major factor that contributes to the increasing burden of lifestyle diseases especially in children. Children are lured to these unhealthy choices of food because of their convincing marketing strategies and peer pressure. Excessive consumption of junk food which is high in salt/sugar and calorie content makes children more vulnerable to early development of obesity and cardiovascular diseases.

We should aim for high-fiber foods such as whole grains, vegetables, and fruits; meals that have moderate amounts of sugar and salt; and calcium-rich and iron-rich foods. It is of utmost urgency to spread awareness among children and young adults about benefits of health home cooked food and the adverse effects of junk food. We need to focus on education and health promotion around healthy food options and legislations to regulate marketing of fast foods need to be more stringent. There is no better time than now to build a supportive environment nurturing children and young adults in society and promising good health. Statutory warning about hazards should also accompany television advertisements promoting fast foods.

REFERENCES

1. Bhushan, C., Taneja, S., Khurana, A. Centre for Science and Environment, New Delhi, Burden of Packaged Food on Schoolchildren: Based on the CSE Survey 'Know Your Diet', 2017.
2. SP Zhu, YJ Ding, XF Lu. Study on factors related to top 10 junk food consumption at 8 to 16 years of age at Haidian District of Beijing. *Zhonghua Liu Xing Bing Xue Za Zhi*, 2008; 29: 757–62.
3. S Manjunatha, S Mishra. Fast Food Consumption Pattern and Obesity among School Going (9-13 Year) in Lucknow District. *International Journal of Science and Research*, 2014; 3: 1672–74.
4. AM Pringle, SA Jebb. Fast foods, energy density and obesity: a possible mechanistic link. *Obesity Rev*, 2003; 4: 187–94.
5. Keshari P, Mishra CP. Growing menace of fast food consumption in India: Time to act. *Int J Comm Med and Public Health*, 2016; 3: 1355-62.
6. H. Ranjani, T.S. Mehreen, R. Pradeepa, R.M. Anjana, R. Garg, K. Anand, *et al.* Epidemiology of childhood overweight & obesity in India: a systematic review *Indian J. Med. Res*, 2016; 143: 160-174.
7. Jacka FN, Mykletun A., Berk M, Bjelland I, Tell GS. The association between habitual diet quality and the common mental disorders in community-dwelling adults: The Hordaland Health study. *Psychosom Med*, 2011; 73: 483-90.
8. Baldrick FR, Elborn JS, Woodside JV, Treacy K, Bradley JM, Patterson CC, *et al.* Effect of fruit and vegetable intake on oxidative stress and inflammation in COPD: A randomised controlled trial. *Eur Respir J*, 2012; 39: 1377-84.