



## ADVERSE EFFECT OF FAST FOOD ON OUR HEALTH

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### ABSTRACT:

'Eat healthy and live healthy' is one of the essential requirements for long life. Unfortunately, today's world has been adapted to a system of consumption of foods which has several adverse effects on health. Lifestyle changes has compelled us so much that one has so little time to really think what we are eating is right! Globalisation and urbanisation have greatly affected one's eating habits and forced many people to consume fancy and high calorie fast foods, popularly known as 'Junk foods'. Fast food is affordable and easily accessible, its long-term health implications are concerning. This study explores the adverse effects of frequent fast food consumption, the study highlights the growing health risks posed by fast food and underscores the need for better awareness and healthier eating habits

**Keywords:** fast food, high calories, junk foods.

### Introduction

In recent years, the global consumption of fast food has risen dramatically due to urbanization and the desire for quick meals. While fast food provides convenience, its frequent intake is linked to Food is primer necessity for creatures especially for human because it supplies energy for body, maintain tissues, repair them and prevent from diseases. Today, in our diet the fast food is very common. Fast food is such type of food that is prepared and served very quickly but fast food is less nutritious as compared to traditionally foods and other dishes. Traditional food is made by herbal plants which have many nutrients, original taste and more delicious. These foods do not have preservative, artificial flavor and coloring. Fast food is usually referred to burgers, pizza or French fries or any kind of food that can be prepared and saved quickly at low price. According to the National Institutes of Health (NIH) fast food are high in saturated fat, salt and calories. Now a day the traditional foods are replaced by the fast food. significant health risks. Typically, these foods are high in calories, saturated and trans fats, sugar, sodium, and refined carbohydrates while lacking essential nutrients. Such imbalances contribute to various chronic conditions, including obesity, type 2 diabetes, hypertension, and cardiovascular disease.

### Research Objectives

1. To analyze the nutritional content of fast food in relation to dietary guidelines.
2. To examine the correlation between frequent fast food consumption and chronic illnesses.
3. To explore the mental health implications of a fast food-rich diet.
4. To identify specific components in fast food—like fats, sugars, and carbohydrates—that are responsible for these health issues.

### Methods

#### *Primary Research:*

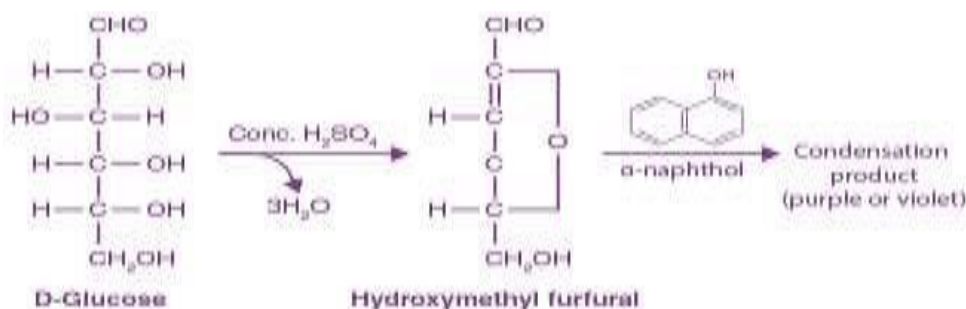
A questionnaire-based survey was conducted among 50 students aged 22–25 to assess their fast food habits, awareness of health risks, and perceived effects. Lab tests were also conducted on fast food samples in our college lab, and physiological tests were performed on student volunteers.

#### *Secondary Research:*

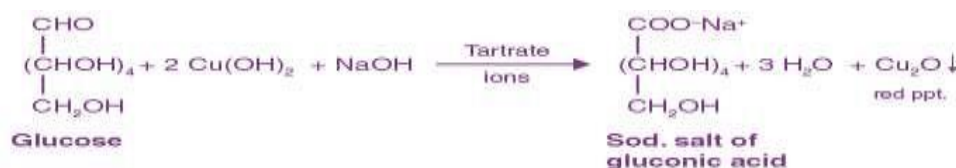
Articles from health journals, WHO and CDC reports, published papers, and nutrition databases were used.

#### **Test of carbohydrates:**

**Molisch's test** – Given sample food + Molisch's reagent → Purple or violet ring confirms the presence of carbohydrate  
Positive result confirmed by a violet ring.



**Fehlings test** – Given sample food + Fehling’s reagent → Red precipitate confirms the presence of carbohydrates  
**Red precipitate indicated the presence of reducing sugars.**



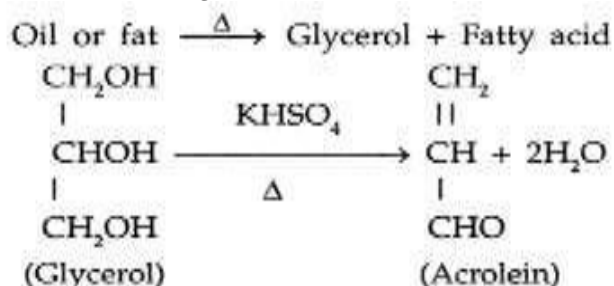
#### Test of fat:

Fats are soluble in organic solvents like chloroform, alcohol, etc. It is insoluble in water. So, if the given sample forms an oily layer above the surface of the water then fat is present. Partially soluble in alcohol and fully soluble in chloroform than the presence of fat is confirmed

#### Acrolein Test:

Fats and oils when heated with some crystals of potassium bisulfite  $\text{KHSO}_4$  in a test tube. A pungent irritating odour or smell of acrolein confirms the presence of fat or oil.

The chemical reaction is given below.



**Huble's Test (Iodine Number):** Huble's reagent (an alcoholic solution of iodine and mercuric chloride) reacts with the oil or fat. If the oil is unsaturated, the violet color of iodine fades. The extent of fading is related to the degree of unsaturation.

**Test of blood sugar level:** We take blood sugar test of all 20 students which are participate in this studies before the study starts and blood sugar levels of all students are normal. For test of sugar we use different method like we classify 20 students in two groups each groups has 10 students we classify them in group A ( given fast food like pizza burger and French fries ) And group B ( given coocked made food). This study take 2 weeks of time for test of sugar we use glucometer. we take the same test again but this time we give fast food to group B and home foods to group A for 3 weeks.

**Test of BP:** This study is similar to blood sugar study but we take different 20 students in this study. For test of BP we use different method like we classify 20 students in two groups each groups has 10 students we classify them in group A ( given fast food like pizza burger and French fries ) And group B ( given coocked made food). This study take 2 weeks of time test of BP It's typically done with a sphygmomanometer (blood pressure cuff). we take the same test again but this time we give fast food to group B and home foods to group A for 3 weeks.

We use another method for this study also which gives instant results. Give high amount o fast fast food to group A and no fast foods to group B.

## Result and discussion Carbohydrate

Molisch’s and Fehling’s tests confirmed high carbohydrate levels in items such as French fries, chowmein, and burgers. Excess carbohydrate intake is known to contribute to obesity, diabetes, and heart problems.

French fries	present
manchurian	present
chowmein	present
Burger	present

***Fat***

Hubble's Test revealed high levels of unsaturated fats in fast foods like pizza and burgers. Long-term intake increases the risk of obesity and heart disease

***Blood sugar levels***

After 2 weeks we take a test of blood sugar levels on group A and B. Group A shows high spike on sugar levels but group B shows moderate spike on blood sugar levels. In second study students of group B shows very high spike on blood sugar levels as they consume fast foods on daily basis more than 34 times daily and students who didn't consume fast foods has no spike on blood sugar levels.

***Test of BP***

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***Survey Results:***

Health Issue	Reported (%)
Weight gain/Obesity	56%
Digestive issues	34%
Acne/Skin problems	28%
Lethargy/Fatigue	21%
Increased cholesterol	10%

**Key Health Impacts of Fast Food**

**Obesity:** The United States Department of Agriculture points out that typical fast food contains a very high number of calories. If a person eats more calories than they burn each day, they gain weight, which may lead to obesity. According to the Centers for Disease Control and Prevention (CDC) Trusted Source, obesity increases a person's risk of developing a range of serious health conditions. High caloric density and large portion sizes make fast food a leading contributor to global obesity rates, especially among youth.

**Hypertension(HighBP):**

A small 2016 study Trusted Source found that consuming high levels of salt could immediately impact the proper functioning of a person's blood vessels. Excess sodium intake also has links to fluid retention.

**Type 2 Diabetes:**

Overeating junk food can make an individual obese or overweight. These conditions can further lead to type 2 diabetes and decreased insulin resistance, eye damage, skin conditions, slow healing, hearing impairment, sleep apnea, and dementia. Poor diet choices can lead to poor glycemic control, making diabetes management more challenging.

**Digestive Disorders:**

Many fast food meals are extremely low in fiber. Doctors associate low-fiber diets with a higher risk Trusted Source of digestive conditions such as constipation and diverticular disease, as well as reductions in healthy gut bacteria.

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**Conclusion**

Previously consumption of fast food and junk food was only a problem in America and other western countries, but now a day many Asian countries like Japan, China and India is also suffering from these diseases. Awareness on health hazards of fast food need to be taught at school level. Parents have to set an example themselves by not eating fast food and improving homemade food for their kids to discourage the fast foods. This will minimize life style disorder among children and adolescent to greater extent. Punjab Government sets an example for banning junk food in schools to minimise the effect of fast food on human health

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