

“Survey on Junk Food and Its Toxic Effects on Youths of Sindhudurg”

¹Mr. Ritesh Tamanekar, ²Mr. Omkar Kulkarni, ³Ms. Dikshita Sangle,
⁴Ms Sayali Satardekar, ⁵Ms. Rushika Kubal, ⁶Dr. Vijay Jagtap

Yashwantrao Bhonsale College of Pharmacy, University of Mumbai Sawantwadi – 416510 Maharashtra India
Corresponding Author: Mr. Ritesh Tamanekar, Yashwantrao Bhonsale College of Pharmacy, Sawantwadi – 416510 Maharashtra, India

Date of Submission: 15-07-2021

Date of Acceptance: 31-07-2021

ABSTRACT:

Background and aim: Drastic changes are observed among the people in the recent years with regard to selection of different food items. On the other hand, various diseases were reported among the people everywhere the world and thus the apparent reasons were the consumption of junk foods. The aim of present study is to research food consumption habits among the youths of Sindhudurg

Method: This survey was conducted in Sindhudurg, India. Total 521 responses were obtained. A Google form having 3 sections namely General Information, Personal Information, Junk food and health related information was prepared and distributed.

Questionnaires were shared to the students through different social media like WhatsApp, Gmail, Instagram, and Facebook. The form was distributed and data collected between March to April 2021.

Among the 521 respondents 287 were males and 232 females. All the participants were in the age group from 15-24 years. The responses were collected and counted manually based on the options specified for each question framed.

Result: Total 521 responses were received. Around 58.8 % consume junk food 1-2 times a day on weekly basis, 27.1% indicated that they take 3-4 times weekly. Only 5.6% and 9 % consume daily or 4-6 times weekly respectively. Out of 521 respondents 36% youths said they suffer heartburn, 32.6 % said vomiting, 18.8 % said they suffer from diarrhea.

Conclusion: The result from the present study conclude that the respondents were diplomatic in their answers and only few were obvious to fact that serious health effect might arise upon continuous consumption of junk food.

KEYWORDS: Youths, Effects of junk food, Serious health effects.

I. INTRODUCTION:

Junk food refers to fast food, which are easy to make and easy to consume. They are Low in nutritional value. The term ‘Junk Food’ was coined by Michael Jacobson, Director of Center for Science in 1972 in the public interest. Junk food contains high Level of refined sugar, white flour, Trans fat, polyunsaturated fat salt and numerous Food additive such as monosodium glutamate (MSG) and tartrazine and lacking in Protein, vitamin and fiber. Junk food instead high in fat, sodium, sugar, provides High calories but is of no value. Junk Food seems too easy to carry, purchase and Consume. The terms junk food and fast food are used interchangeably. Ingredients Of junk food give them good taste, making them addictive and cause them many Health hazards

REASONS WHY JUNK FOOD BECOME POPULAR:

- 1) Time: Junk food addiction is so high because of its simplicity. Many of People’s prefer to eat them while watching TV, it saves their time when they Are in a hurry eating pizzas and burgers as they are served at their door step Hot and ready to eat.
- 2) Taste: Another main reason that pushes people towards junk food is its taste. But junk food gets their taste due to large usage of oils salts and sugar which Affects human health. Once they caught in junk food addiction, they find it Hard to think about the loss of nutrition due to junk food.

- 3) Advertisements of junk foods: Junk foods are became popular through Advertisements. They mostly target teenagers because teenagers are easy and Potential target for junk food.
- 4) Shelf life: Most junk foods have long shelf life and they do not require any Special storage condition like refrigerator ex. Chips and wafers which Increases demand for junk food.
- 5) Cost: The cost is less as compared to Healthy foods which is a main reason Of popularity of junk food. Due to low cost it is accessible to all classes of People's.

PROBLEMS ASSOCIATED WITH JUNK FOODS:

- High salt content
- High fat content
- High sugar content

TYPES OF JUNK FOOD:

Pizza, Burgers, Candy, Donuts, Pastry, Ice-creams, Cookies, Noodles, French fries, Chips, Samosa, Kachori, Carbonate beverages, Panipuri, Pakoda

HARMFUL CHEMICALS PRESENT IN THE JUNK FOODS:

There are a lot of chemicals present in junk food that can be harmful to human health. Some common chemicals that are hazardous to health have been discussed here.

- Monosodium Glutamate (MSG)
- Sulphites
- Caramels
- Sodium Nitrite and Sodium Nitrate
- Butylated hydroxyanisole (BHA)
- Tartrazine

HARMFUL EFFECTS OF JUNK FOODS:

- 1) Obesity

- 2) Diabetes Mellitus
- 3) Heart Disease
- 4) Dental Cavities
- 5) Kidney Disease
- 6) Hypertension
- 7) Neurological disorders
- 8) Cancer
- 9) Hypoxia
- 10) Asthma

TIPS TO AVOID JUNK FOOD

- DRINK WATER
- EAT MORE PROTEIN
- PLAN YOUR MEALS
- DISTANCE YOURSELF FROM THE DESIRE
- FIGHT STRESS
- TAKE SPINACH EXTRACT
- GET ENOUGH SLEEP
- APPLY AWARE UPTAKE
- EAT CORRECT MEALS

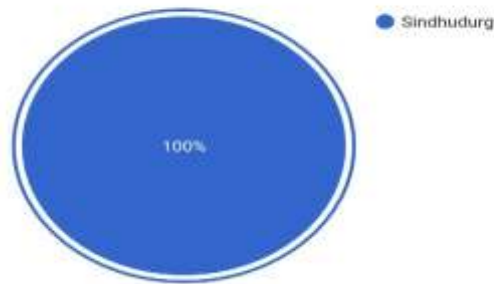
II. METHODS:

The present survey was conducted in Sindhudurg, India. The population sample included students from Devgad, Dodamarg, Kankavli, Kudal, Sawantwadi, Malwan, Vengurla and Vaibhavwadi. Total 521 responses was obtained. A Google form having 3 sections namely General Information, Personal Information, Junk food and health related information was prepared and distributed. Questionnaires were shared to the students through different social media such as WhatsApp, Gmail, Instagram, and Facebook. The form was distributed and data collected between March to April 2021. Among the 521 respondents 287 were males and 232 females. All the participants were in the age group from 15-24 years. The responses were collected and counted manually based on the options specified for each question framed.

QUESTIONNAIRE:

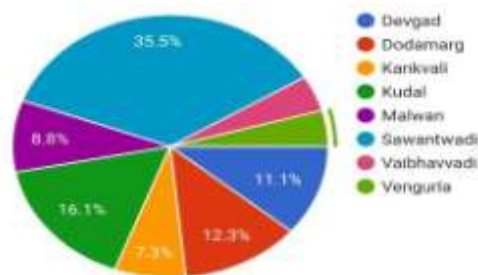
- District you belong –
 - Sindhudurg

District you belong to
521 responses



- Taluka you belong –
 - Devgad
 - Dodamarg
 - Kankavli
 - Malvan
 - Sawantwadi
 - Kudal
 - Vengurla
 - Vaibhavwadi

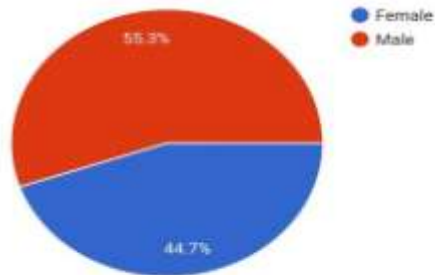
Taluka you belong to
521 responses



- What is your gender-
 - Female
 - Male

What is your gender?

519 responses

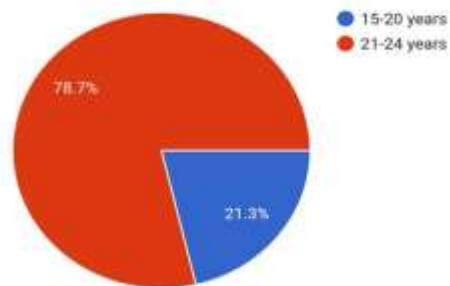


- Which age category do you belong? -

- o 15-20
- o 21-24

Which Age Category do you belong ?

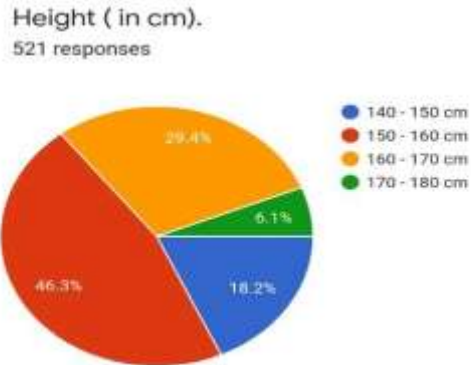
517 responses



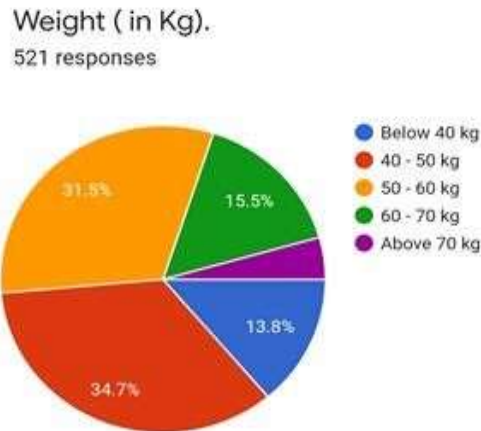
- Height in cm -

- o 140-150
- o 150-160
- o 160-170

- o 170-180

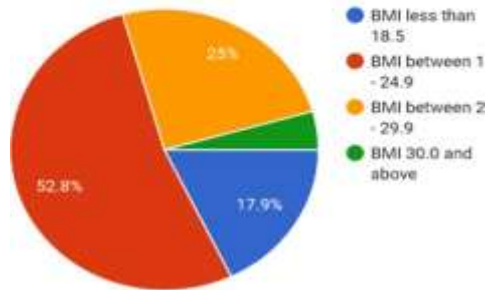


- Weight in kg-
 - o Below 40
 - o 40-50
 - o 50-60
 - o 60-70
 - o Above 70

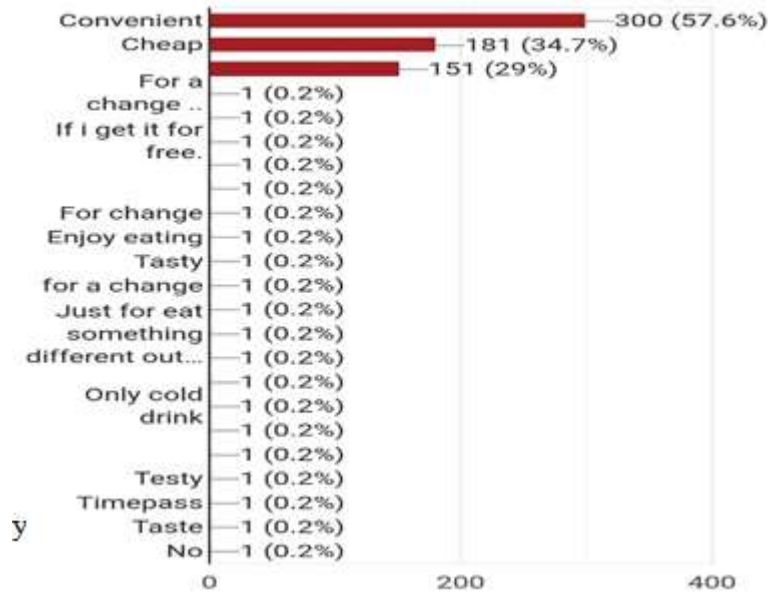


- BMI (Body mass index)-
 - o BMI less than 18.5
 - o BMI between 18.5-24.9
 - o BMI between 25.0- 29.9
 - o BMI 30.0 and above

BMI (Body Mass Index) calculate by using formula.
 521 responses

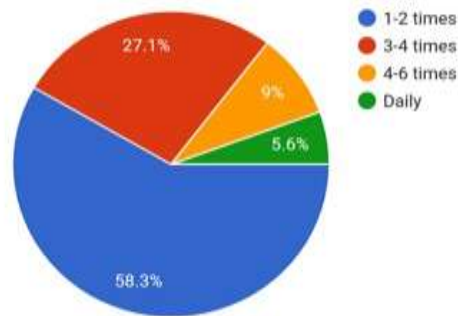


Why do you choose junk food?
 521 responses



- How many times you consume junk food? -(Weekly):
 - 1-2 times
 - 3-4 times
 - 4-6 times
 - Daily

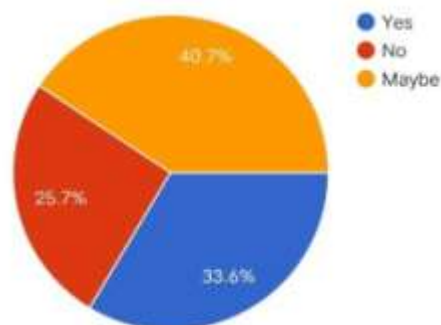
How many times you consume junk food?(weekly)
521 responses



- Why do you choose junk food? -
 - Convenient
 - Cheap
 - Don't have time to cook
 - Other...
- Are you feeling to eat junk food by seeing Advertisement/Photos? -
 - Yes
 - No
 - Maybe

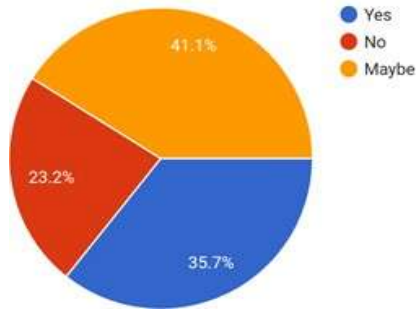
Are you feeling to eat junk food by seeing Advertisement/Photos ?

521 responses

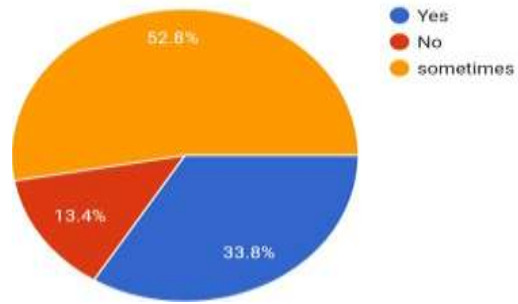


- Are you feeling to eat junk food by distinctive food odor? -
 - Yes
 - No
 - Maybe

Are you feeling to eat junk food by distinctive food odour?
 521 responses

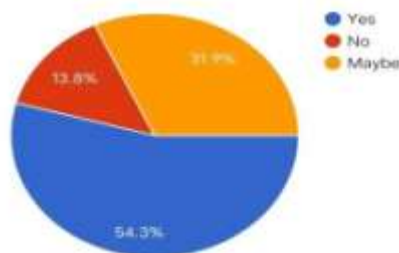


Do you check the nutrient fact label on junk food ?
 521 responses



- Do you consume the junk food that is instantly prepared at home or which is canned and refrigerated? (Like noodles, chips, soft drinks, cakes, etc.) -
 - Yes
 - No
 - Maybe

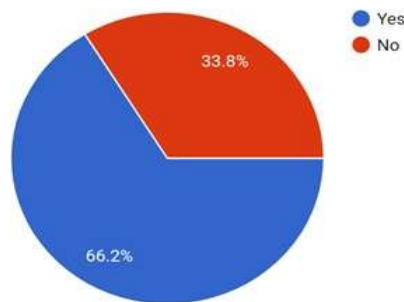
Do you consume the junk food that is instantly prepared at home or which is canned and refrigerated? (like noodles, chips, soft drinks, cakes ,etc)
 521 responses



- Do you check the nutrient fact label on junkfood? -
 - Yes
 - No
 - Sometimes

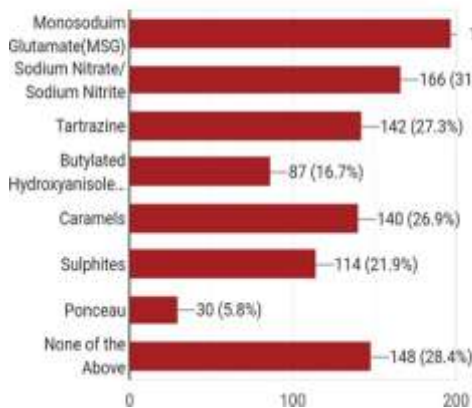
- Are you aware about the chemicals present in junk food? -
- Yes
- No

Are you aware about the chemicals present in junk food?
 520 responses

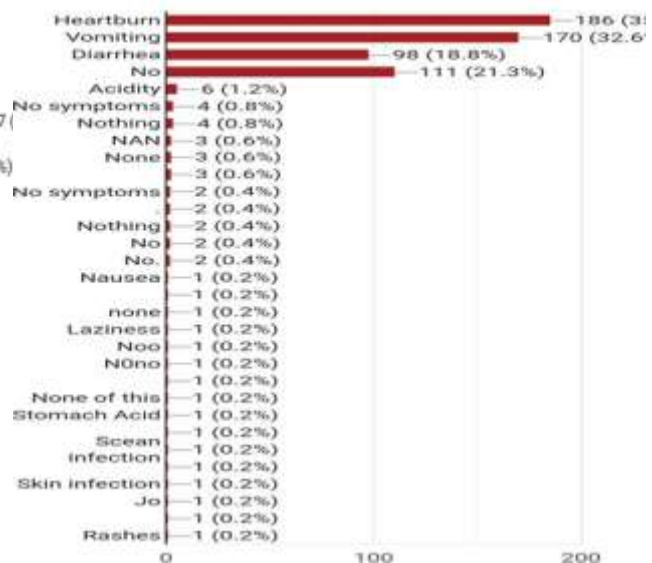


- Which of the following chemicals have you heard about? -
- Monosodium Glutamate(MSG)
- Sodium Nitrate/Sodium Nitrite
- Tartrazine
- Butylated Hydroxyanisole(BHA)
- Caramels
- Sulphites
- Ponceau
- None of the Above

Which of the following chemicals have you heard about?
 521 responses

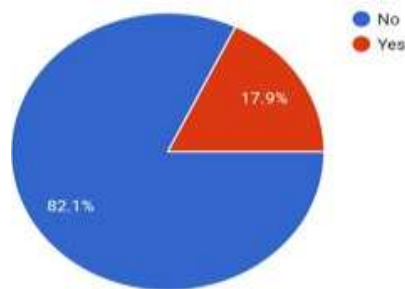


Do you have any of these symptoms after eating junk food?
 521 responses



- Are you eating junk food more in stressed condition?
 - Yes
 - No

Are you eating junk food more in stressed condition ?
 521 responses



- Do you have any of these symptoms after eating junk food?
 - Heartburn
 - Vomiting
 - Diarrhea
 - Other...

- Do you have any of these symptoms after eating junk food?
 - Diabetics
 - Obesity
 - Laziness
 - Others

Do you have any health issues?
 521 responses



- Is junk food necessary?
- YES/NO write why?

Ans: ____

III. RESULT AND DISCUSSION:

Total 521 responses were received.

JUNK FOOD EATING HABITS:

Three out of 12 questions were asked to analyse the eating habits of the youths of sindhudurg. Around

58.8 % consume junk food **1-2 times** a day on **weekly** basis, **27.1%** indicated that they take **3-4 times weekly**. Only **5.6%** and **9 %** consume **daily** or **4-6 times** weekly respectively. And when youths were asked to choose why they eat junk food respondent said i.e. **84.3 %** said because it is **convenient** and **34%** said that junk food is **cheap** and easily available. While **29%** said they don't have time to cook. Some youths have other reasons like they want change, they have habit of eating junk food very often. Another question was asked about eating canned and refrigerated food or food that is instantly prepared at home like noodles, cakes, stored chips and snacks. **54.3 %** respondent said **YES** they prefereating canned food very often. While only **31.9 %** said **NO** and **13.8 %** said **SOMETIMES**.

REASONS FOR EATING JUNK FOOD:

Three questions out of 12 where asked to analysed Reasons for eating junk food over the healthy nutritional food. Of which one was Do you feel eating junk food after looking at advertisement and photos? Respondents said i.e. **33.6 %** youths said

YES and

25.7 % youths said **NO**. While some said **MAY BE (40. 7%)**. Another question was feeling to eat junk food because of distinctive food odours? **35.7 %** youths said **YES**, **23.2 %** said **NO**. **41.1 %** said **MAY BE**. One more question was asked as youths nowadays face stressed conditions very often so, they were asked if they feel to eat junk food in stressed conditions answers where **YES -17.9 %** and **NO - 82.1 %**.

AWARENESS ABOUT JUNK FOOD:

Out of 12 questions three questions were asked to analyze about the junk food facts. About **33.8 %** of the respondent said they do check the quality and nutrient fact label on junk food. Followed by **52.8 %** respondents said they **SOMETIMES** check the nutrient label and **13.4 %** said they don't check the nutrient value at all. For the question asked about the awareness about the chemicals present in the junk food **66.2 %** respondents said **YES** they are aware off & **33.8 %** respondents said **NO** they are not aware about the chemicals present in the junk food. In case of chemicals present in the junk food and their safety level information youths were allowed to choose the chemicals they have heard of. Following is the list of chemicals and % of respondents who have heard.

| Name of the chemical | % of respondents |
|-----------------------------------|------------------|
| 1. Monosodium glutamate | 41.1% |
| 2. Sodium nitrate | 31.9% |
| 3. Tartrazine | 27.3% |
| 4. Butylated hydroxyanisole (BHA) | 16.7% |
| 5. Caramels | 26.9% |
| 6. Sulphite | 21.9% |
| 7. Ponceaus | 5.8% |

chemicals and % of Respondent

While **28.4%** respondents choose **NONE OF THE ABOVE** that means they are not aware about the anyof the chemicals mention.

HEALTH ISSUES AND SIDE EFFECTS:

Two questions out of 12 where asked to analysed

about health issues and side effects the youths of sindhudurg. Youths where asked about the various symptoms after eating junk food. Out of which **36%** youths said they suffer **heartburn**, **32.6 %** said **vomiting**, **18.8 %** said they suffer from **diarrhea**.

| Symptoms | % Of Respondent |
|-----------|-----------------|
| Heartburn | 36% |
| Vomiting | 32.6% |
| Diarrhea | 18.8% |

Symptoms and % of respondent

Some youths noted other symptoms like Acidity, stomach pain, skin infection, Headache, Nausea. While **25.28 %** have **NO symptoms** at all after eating junk food. Other question was asked about their regular health issues. **5.6%** said they have **Diabetes** and **23.4%** said **obesity** and **50.1%** said **laziness** while some youths noted other health issues like Asthma, Acidity, vomiting. We have also asked about their BMI i.e. Body mass index. After collecting data, we conclude that **17.9%** youths of sindhudurg are **underweight**, **52.8%** are having **normal** body index and **25%** are **overweight** and only **4.3%** are **obese**.

OPINION AND NESSECITY OF JUNK FOOD:

One question out of 13 was asked for the opinion about junk food and its necessity among the youths of sindhudurg. **77.8%** youths said **YES** junk food is necessary. They said junk food is necessary for change from daily schedule, enjoying food is also thee part of healthy life. To change the boarding homemade taste junk food necessary in between. Some said junk food is convenient and cheap also easily available whenever and wherever needed. Some youths feel satisfied after eating junk food. Although there are **22.2%** youths saying **NO** junk food is not necessary. As it leads to various health issues and health problems. It has low nutritional value. Many youths reported laziness and obesity. In some cases, it is addictive and lead to serious health issues like asthma.

IV. CONCLUSION:

The result from the present study conclude that the respondents were diplomatic in their answers and only few were obvious to fact that serious health effects might arise upon continuous consumption of junk food.

The focus of our finding include the views of adolescents on junk foods, individual preferences, consumption rates and familiarity regarding the harmful health effects of over consumption of the junk food products. From our study we have identified certain factors responsible for increased eating habits of junk food include: first, role the role of television advertisement which attracts the collegestudents to junk food second majority of the sample population agreed to the fact of getting addicted to junk foods. Third, a definite need for the younggeneration to teens to understand that the nutrient facts and various chemical additives are added to enhance junk food eating since the awareness of individuals about delimiting nutrient levels in junk foods has to be dissipated more for effective, safe, and healthy balanced diet

REFERENCES:

- [1]. Bhaskar Rajveer, Ola Monika. Junk food: Impact on health. Journal of Drug Delivery and Therapeutics 2012, 67-73.
- [2]. Kiran Patni, Ashutosh Pratap Pande, Tanuj Joshi. A review on Hazardous Chemicals Present in Junk Food. Journal of University of Shanghai for Science and Technology, Vole- 22, Nov 2020,450-455.
- [3]. Amy Jo Vassallo. Junk Food Marketing: Content Analysis. JMIR Public Health Surveill Vol- 4 2018.
- [4]. Hoda Zahedi, Roya Kelishadi. Association between Junk Food Consumption and Mental Health. Nutrition Vol- 30, 2014.
- [5]. Nilima Y. Bhoge, Junk Food and Human Health: A Synoptic Review, International Journal of Therotical and Applied Sciences, 7(1) 2015, 51-55.
- [6]. Ashakiran and Deepthi R, Fast Food and their impact on Health, Journal of Krishna

- Institute of Medical Sciences University Vol-12012, 2231-4261.
- [7]. Derek Bryan, reason people eat junk food instead of healthy food, October 2017.
 - [8]. Yexin Jessica Li, the influence of Health motivation and colorie ending on preference for indulgent foods, *Journal of Consumer research* Vol-46, 2019 606-619.
 - [9]. Himanshu Sharma Effects of Fast food on the body 2015.
 - [10]. Willam Harris, Top 10most common ingredients in fastfood.
 - [11]. Martin w. Sivula, Factors that Affect Fast Food Consumption, A Review of the Literature May 3, 2016.
 - [12]. Livestrong.com Karen Hellesvig Gaskell. Definition of fast foods.
 - [13]. Farah Sheikh Fast Food vs. Home cooked Meals: comparison of Nutritional Values, 26 may 2017.
 - [14]. Susie Burrell. Real reasons we eat junk foods Feb 2017.
 - [15]. Natalie Butler, R.D, Erin Moore How to Stop Eating Junk Food. Tips to control your cravings, October 12, 2017.
 - [16]. Subhalakshmi.K, Dhanasekar.M. A Study on fast food culture among teenagers in urban India. *International Journal of Pure and Applied Mathematics*. Vol 120 No. 5 2018, 215-238
 - [17]. Hyun-sun seo, Soo- kyung, Lee and Soyoung Nam. Factors influencing Fast food consumption behavior of Middle-school students Seoul. *Nutrition Research and Practice* 2011; 5(2):169-178.
 - [18]. Aysha karamat Baig, Munazza saeed, Review of Trends in Fast Food consumption *European Journal of Economics, finance and administrative sciences*, ISSN 1450-2275 Issue 48(2012).
 - [19]. Alfitrah, Eman Al-saad causes and Effects of fast food *International Journal of Scientific and Technology Research* vol-5, Issue 04, April 2016.
 - [20]. Steve Milano. Howteenagers are get affected by advertisements. *Small business Advertising and marketing*. Dec 2020