#### How to Cite:

Smitha, L. (2022). A study on impact of junk food on Indian traditional millets recipe. *International Journal of Health Sciences*, 6(S1), 2837–2844. https://doi.org/10.53730/ijhs.v6nS1.5281

# A Study on Impact of Junk Food on Indian Traditional Millets Recipe

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**Abstract**—Indian tradition foods are the best source of healthy and energetic nutrient food to the human. Millets Recipe of India is also a one of the best source of nutrient food. Recently Junk food impacts on the Indian tradition foods. This junk food instead of providing strength and health it affects the health of human and caused to various diseases. This Paper Studies how the junk food impacted on Indian Millet recipes through the Questionnaire and direct interaction with 40 respondents from the selected areas of Tumkur City only.

Keywords---Indian Tradition Food, Junk Food, Millets.

#### Introduction

Millets are coarse grains which have been traditionally grown and eaten in the Indian subcontinent for the last 5000 years. They contain high nutritional value and are rich in proteins, vitamins, minerals and fibers. Unlike other cereals, millets require little water and ground fertility. They have long enjoyed the tag of "poor man's food grain" due to its sheer affordability. However, of late, it has come into the notice of fitness-centric youngsters who are learning the wellness potential of this humble food.

Millets contain a host of micronutrients such as iron, calcium and phosphorus. Also, they take time to digest, which don't cause the blood sugar spike associated with easily digestible food. Introducing millet into your diet can help you control diabetes for the same reason.

Millets are not only good for us but the environment too, as they are largely rainfed crops and do not put pressure on our already diminishing water resources. Additionally, these grain crops do not attract pests and so, can grow perfectly well without the use of pesticides.

Junk food is unhealthy food that is high in <u>calories</u> from <u>sugar</u> or <u>fat</u>, with little <u>dietary fiber</u>, <u>protein</u>, <u>vitamins</u>, <u>minerals</u>, or other important forms of <u>nutritional</u>

<u>value</u>. junk foods are Fast foods like Fish & Chips, Pizza, Burger, Fried chicken, Sausages, Noodles, Pasta, etc Snacks &, Desserts like Hot-dogs, Donuts, Potato chips, French fries, Crisps, Popcorn. These junk food mainly impact on Indian traditional Millet Recipes. Junk foods are tasty food but zero nutrients. These foods recently used by many people than Millets. Children's are also like to eat this junk food instead of millet recipes because of their good taste and attractive colors.

# Millets are generally divided into two broad categories

1. Naked grains and 2. Husked Grains.

#### 1. Naked grains

Naked grains refer to the three popular millet types which are devoid of the hard, indigestible husk that some millets have. Namely, Ragi, Jowar and Bajra. These millets don't require processing after harvest; they can simply be used after being cleaned. These are the major millet types which are largely cultivated and quite popular because of this ease of use.

# 2. Husked grains

These millet types consist of an indigestible seed coat. The husk on them needs to be removed before they are fit for human consumption. Once done by hand, these millets soon fell out of favour since the processing of these grains was never mechanized the way it was done for rice and other types of cereals. Foxtail millets, little millets and Kodo millets belong to this second type.

### **Types of Millets**

Millets come in different shapes and sizes. The two broad categories of millets discussed above contain numerous kinds of millets. We will take a look at some of these different types of millets below –

#### 1. Foxtail millet

Foxtail millet, or as it is indigenously called, kakum/kangni is commonly available as semolina or rice flour. Foxtail millet contains blood-sugar balancing healthy carbohydrates. Its iron and calcium content also helps strengthen immunity. It helps regulate your blood cholesterol and increases HDL cholesterol levels in your body.

**2. Finger millet:-** Finger millet, i.e. Ragi, is used as a healthier cereal substitute for rice and wheat. The millet variant is gluten-free and rich in protein and amino acids. Finger millet is supposed to aid brain development in growing children.

#### 3. Pearl millet

Pearl millet or bajra is incredibly nutrient-dense. It contains minerals such as calcium and magnesium, protein, fiber and iron. Practising daily consumption of pearl millet can be very beneficial for your health, such as helping you fight against Type II Diabetes.

## 4. Buckwheat

Buckwheat is the millet type you should consume if you want to lose weight. It makes for a healthy food option for diabetics, helps lower blood pressure and improves cardiovascular health. Buckwheat also fights against diseases such as gallstones, childhood asthma and breast cancer.

#### 5. Little millet

Little millet is also a great millet option for those looking to lose weight. You can eat it as a rice replacement. It is high in fibre and filled with numerous minerals such as potassium, zinc, iron and calcium. It is also packed with the health benefits of vitamin B and works as an antioxidant for your body, once consumed.

# Millet benefits

Millets are rich in several beneficial nutrients such as phosphorus, magnesium, copper, manganese, and so on. Incorporating millet into your diet can help because of the following millet benefits:

# 1. Aids weight loss

The calorie content of millets is incredibly low, and so, they are a great food product for weight loss hopefuls. Not just those looking to lose weight, millet benefits people who are conscious of their fitness too. It helps them maintain their energy level throughout the day without having to keep eating constantly to refuel themselves.

Millets also keep you satiated for longer than other carbohydrates which are digested within a couple of hours of being consumed. When you consume millets, you feel fuller for longer as they take some time to get digested and absorbed into your body. You don't have to reach out for unhealthy snacks, as a result.

## 2. It boosts your immunity

Our body's immunity is built on the protein we consume. Millets provide a great source of protein and can help build and strengthen our immunity. The stronger our immunity, the less disease-prone we will be.

#### 3. Reduces cardiovascular risks

Millets contain essential fats, which provide our bodies with natural fat. It also helps excess fat from being deposited over our muscles, which then effectively lower our risk of high cholesterol, strokes and other heart complaints. The potassium content in millets regulates your blood pressure and optimize your circulatory system.

# 4. Prevents asthma

The magnesium contained in millets can reduce how frequently you experience migraines and bring down the severity of your asthma complaints. Unlike wheat, millets don't contain the allergens which lead to asthma and wheezing.

#### 5. Helps your digestion

Millets are a rich fiber source which can benefit digestion by helping alleviate bloating, gas, cramping and constipation. Good digestion keeps digestive complaints like gastric/colon cancer and kidney/liver complaints away.

#### 6. Acts as an antioxidant

Millets can help your body detox because of its antioxidant properties such as quercetin, curcumin, ellagic acid and other useful catechins which help flush out toxins from your body and neutralise the enzymatic actions of your organs.

#### Junk Food

Any food that has no or negligible nutritional value can be considered as junk foods. Most of the fast foods, including candy, bakery products, burgers and sausages, salty and oily snacks or soft drinks can be categorized as junk food.

They have a high calorie content, salts and fats. The more we consume these, the less is the intake of essential nutrients and vitamins in the body.

#### Health Problems of Junk Food

# **Increased Obesity**

One of the most common side-effects of consuming junk foods is increased obesity. It's composition of loads of sugar, calories and fats contribute to weight-gain. Obesity can cause many medical issues like diabetes, joint-pain and heart diseases.

# Loss of Memory and Learning Problems

A study published in American Journal of Clinical Nutrition stated that people who ate junk food performed poorly in cognitive tests. It concluded that junk foods can deteriorate your memory and can leave with you with a weaker brain. It causes a sudden inflammation in the hippocampus in the brain which is responsible for memory and recognition.

## Lead to Depression

Junk foods are loaded with high sugar and fats that can cause certain chemical reactions in the brain which affect its functioning. By consuming too much of it, the body loses essential nutrients and amino acids. These symptoms eventually lead to inability of brain to deal with stress and can leave you feeling depressed.

# **Worsens Appetite and Digestion**

Consumption of excess junk food leaves the brain in a dilemma. Excessive sugar intake can cause blood sugar level to fluctuate and makes the brain demand more food, which eventually leads to overeating. It makes it difficult for the body to digest excessive junk food.

## Inadequate Growth & Development

Surviving on junk food causes deficiency of essential nutrients and vitamins required for the proper growth and development of the body. Unhealthy eating habits combined with imbalance of fatty acids and required nutrients can hamper the development of your brain and other body parts. Excess intake of soda and sugar also causes tooth decay and weakening of your bones.

#### **Research Methods**

#### Statement of the Problem

Paper entitled "A Study on Impact of Junk Food on Indian Traditional Millets Recipe" is very relevant to the today's situation because junk food mainly influenced on Indian traditional food millet recipe. Gradually our Indian traditional food is replaced by junk foods which are zero nutrient and also harmful to human health.

# **Objectives:**

- 1. To identify the health benefits of Millets.
- 2. To identify the health problems of junk food.
- 3. To study the impact of junk food on Indian tradition food Millets.

#### **Hypothesis**

HO: There is no impact of Millet recipe Nutrient on healthy food at Tumakuru city

#### **Sources of Data:**

Primary data is collected through questionnaire and direct interaction with selected respondents. Secondary data is collected from News papers, Journals and websites.

#### Limitations:

- 1. This study is limited to selected areas of Tumkur city only.
- 2. This study is limited to selected items of south Indian Millet food only.

### **Analysis of Data**

# Primary Data is collected from 40 respondent. The Analysis of data is as follows:

- 1. Gender:- Male:- 21 and Female:- 19
- **2. Qualification:** 1. S.S.L.C.:- 01. 2. P.U 3.Degree:- 04. 4. P.G.:-29. 5. Any other (D.Pharma):- 03.
- 3. Profession: 1. Government: 13. 2. Private College/Company: 10.
  - 3. Service: 04. 4. Entrepreneur: 13
- 4. Age:- 1. 20 to 30:- 07. 2. 30 to 40:- 15. 3. 40 to 50:- 09. 4. 50 and above:- 09. Deg
- 5. Millet recipe are the Nutrient and healthy food:-
- 1. Strongly Agree: 21. 2. Agree:-19. 3. Disagree:-Nil. 4, Strongly Disagree:- Nil.
- 5. Neutral:- Nil.
- 6. Benefits of Millet recipe are:
- 1. Boost immunity: 06. 2. Aids to weigh loss:-11. 3. Helps to Digestion:- 08. 4. Reduce heart Problem:- Nil. 5. All the Above: 15.
- 7. Which of the following Millets your are using in your daily food recipe:-
- A. Foxtail Millet and Finger Millet:- 09. B. Finger Millet:- 22. C. Little millet:- Nil.
- D. All the Above: 09.
- 8. Your usage of Millet in your Food Recipe is:-
- A. Daily: 12. B. Weekly: 08. C. Frequently: 05. D. Rarely: 15.
- 9. Do you Agree Junk Food Reduces the use of Millet Recipe:-
- 1. Strongly Agree:- 11. 2. Agree:- 24. 3. Disagree:- 05. 4. Strongly Disagree:- Nil.
- 5. Neutral: Nil.
- 10. Which of the following junk food you are using in your food intake:-
- A. Pizza:- 08. B. Burger:- 05. Both burger, French fries and pizza:-05. 5. Sand which:- 04. Never:- 18.
- 11. Junk food is harmful to our health.
- 1. Strongly Agree: 23. 2. Agree:-14. 3. Disagree:- Nil. 4. Strongly Disagree: Nil. 5. Neutral: 03.
- 12. Your opinion about Junk food and Millet Recipe.
- 1. Millet is Staple food. This is very healthy and nutrient food of Indian. But regular use junk food impacts our health.
- 2. Junk food with zero nutrient value and it impact on our digestion.

- 3. Millet recipes are healthy food but many People are not aware about this traditional food.
- 4. Government support and encouragement to farmers to grow millets is very essential for Millet usage.
- 5. Junk food leads to obesity and diabetic.
- 6. Millets yield is very low and it leads to increasing prices of millets.
- 7. For junk food we pay money and also get many diseases. But millets enthough costly it avoids many diseases and maintain good health.
- 8. Millets recipes improve strength in our bones and muscles.
- 9. Junk food damages our Physical health and also it impact on the mental health of the human being. It impact of our behavior also.
- 10. Milets recipe regulates our blood supply.
- 11. Millet recipe are the traditional food system gives strength mental health. recently junk food dominate in our food intakes especially children prefer junk food which is tasty to our tongue but it leads various health problems but the children's are not aware about this.

# **Hypothesis Testing**

HO: There is no impact of Millet recipe Nutrient on healthy food at Tumakuru city

Sl No	Observed Frequency (O)	Expected Frequency (E)	O-E	(O-E)2	(O-E)2/E
1	21	8	13	169	21.13
2	19	8	11	121	15.13
3	0	8	-8	64	8.00
4	0	8	-8	64	8.00
5	0	8	-8	64	8.00
Total	40	40	0	482	60.25

$$x^{2}$$
 obs= $\sum \frac{(Oi-Ei)^{2}}{Ei} x^{2} = 60.25$ 

Degrees of freedom = x-1 = 5-1 = 4, Table value of  $x^2$  @  $\propto 5\%$  with 4 d.f = 9.488  $x^2$  obs = 60.25 > 9.488.

**Interpretation:** The above indicate the  $x^2$  obs value 60.25 which is greater than 9.488. Hence the null hypothesis is rejected. And there is impact of Millet recipe Nutrient on healthy food at Tumakuru city

S1 No	Observed Frequency (O)	Expected Frequency (E)	O-E	(O-E)2	(O-E)2/E
1	11	8	3	9	1.13
2	24	8	16	256	32.00
3	5	8	-3	9	1.13
4	0	8	-8	64	8.00
5	0	8	-8	64	8.00
Total	40	40	0	402	50.25

$$x^{2}$$
 obs= $\sum \frac{(0i-Ei)^{2}}{Ei} x^{2} = 50.25$ 

Degrees of freedom = x-1 = 5-1 = 4, Table value of  $x^2$  @  $\propto 5\%$  with 4 d.f = 9.488  $x^2$  obs = 50.25 > 9.488.

**Interpretation:** The above indicate the  $x^2$  obs value 50.25 which is greater than 9.488. Hence the null hypothesis is rejected. And there is impact of Millet recipe Nutrient on healthy food at Tumakuru city

#### Findings:

- 53% of the respondents are strongly agreed that Millet recipes are the healthy food but junk food impact on our physical and mental health. 17% of the respondent is agreed that Millet recipe is the healthy food.
- Millet recipes are the aids to weight loss helps digestion. Reduce diabetic problems and reduce heart problems and boost immunity.
- 55% of respondent use Finger millet in their food intake. 23% of the respondent use both Foxtail and finger millet in their food intake. 22% respondent use different millets in their food intake.
- Usage of millets recipe by the respondent in daily is about 30%. Weekly usage is by 16%. Frequent usage is by 13% and Rarely use of the millet recipe is 41%.
- 28% of the respondent strongly agreed that junk food reduces the use of millet recipe. 60 % of the respondent Agreed the same and 12% of the respondent Disagreed about the same.
- 52 % of the respondent uses junk food frequently in their food intake.
- 58% of the people strongly Agreed that junk food is harmful to our health and 35% of the people agreed that junk food is harmful to our health and Rest is neutral about junk food.

# Suggestion:

- Government Financial support to grow millet is very essential to increase the yield of millets.
- Farmers are also grow more millet in order minimize millet prices.
- Public awareness about benefits of millet and unhealthy problems of junk food is very essential.

- Children's are more attracted towards taste and attractive color of junk food therefore teachers create awareness among children about problems of eating junk food and encourage the use of millet recipes.
- More Conference and seminars are conducted by the Government and universities in order to encourage Indian traditional food.

#### Conclusion

Junk food is very tasty food but no nutrient value and also it impacted on human health. Millet recipe is the one of the Indian traditional food and it is very healthy and nutrient food. Our old generation is using these millets and they are very strong and healthy. Today our generation likes to use junk food because of its taste and dislike to use Millets recipes but this junk food habit is not good for health. People are need to aware the benefits of the millet recipes and change their food habits and it is best to follow our traditional foods and add more millets foods in their daily intake of food.

# Acknowledgment

We humbly and heartily pray almighty for all His abundant grace showered on me throughout my life and in the duration of my research work. We owe a deep sense of gratitude to all respondents, My Family members, all my colleagues and many more people who directly and indirectly helped me in carrying out this research work and in completing the article.

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