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Research paper

Awareness towards Impact of Junk Food Wrappers on Environment: A Case Study of Jammu Region

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ABSTRACT

The consumption of junk food has increased in recent years, leading to a significant impact on the environment. This research paper presents a case study conducted in Jammu, India, to explore the attitudes and behaviors of individuals towards junk food wrappers and their impact on the environment. The survey targeted individuals aged between 10 and 40 years and received 100 responses. The findings reveal that a majority of participants were aware of the harmful impact of junk food wrappers on the environment and believed that the government should take more action to address the issue. Concern for the environment and personal responsibility were identified as significant motivators for appropriate disposal of junk food wrappers. The survey also highlighted the importance of government regulations and increasing public awareness to encourage the use of environmentally friendly packaging in the fast-food industry. The results of this study can guide policymakers, fast-food companies, and environmental organizations in developing effective strategies to mitigate the environmental impact of junk food wrappers.

1. Introduction

Junk food is a popular term used to describe unhealthy food that is easily and readily available, often containing high levels of sugar, salt, and saturated fats (Bhaskar, 2012). Junk food packaging is made from various materials, including plastic, aluminum, and paper, which can have negative impacts on the environment. When these wrappers a-re produced, transported, used, and disposed of improperly, they can cause pollution, harm wildlife, and contribute to global warming. This research paper will discuss the impact of junk food wrappers on the environment, including the negative effects of plastic, aluminium, and paper packaging, and the et-

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-hical implications of their manufacture and disposal.

Junk food has become an integral part of our daily lives, with fast food chains and convenience stores popping up everywhere (Namara & Green, 1991). These foods are usually packaged in single-use wrappers or containers that are not biodegradable, meaning they do not decompose naturally in the environment (Ncube et al., 2020). As a result, these wrappers can have a significant impact on the environment, particularly in Jammu, the winter capital city of Jammu and Kashmir. The city is surrounded by beautiful natural landscapes, including the Himalayan mountain range, and is home to many endangered species. However, the increasing use of junk food wrappers in the city is contributing to the pollution of these natural resources.

Junk food, also known as fast food, is a popular and convenient option for many people in today's fast-paced society (Bohra et al, 2021). However, the packaging and wrappers used for these foods have become a major environmental concern in Jammu and around the world.

Junk food wrappers, made from materials such as plastic and aluminum, are not biodegradable and can take hundreds of years to break down in the environment. This means that they do not decompose naturally and instead contribute to the growing problem of pollution and litter in the area (Kumar et al., 2021). These wrappers are often seen on the streets, in parks and other public places, and in bodies of water, where they can harm wildlife and marine life (Sheavly & Register, 2021). In addition to their impact on the environment, junk food wrappers also contribute to the problem of landfills. As the population continues to grow, the amount of waste generated also increases, and landfills are becoming increasingly overfilled. This can lead to environmental hazards such as groundwater contamination and air pollution (Winkler & Zharykov, 2011). The problem of junk food wrappers in Jammu is further compounded by the lack of proper waste management and recycling facilities in the area (Thakur et al., 2021). Many people do not have access to recycling programs and are not educated on how to properly dispose of their waste. This leads to a large amount of wrappers and other waste being left on the streets and in the environment. Plastic packaging is commonly used to wrap and contain junk food products (Marsh & Bugusu, 2007). However, plastic is non-biodegradable and can take hundreds of years to break down, leading to the accumulation of plastic waste in landfills and the natural environment (Thiagamani, 2019). Plastic wrappers can also pose a risk to wildlife, as they can be ingested or entangled in the material, leading to injury or death. Furthermore, the toxic chemicals produced during the plastic manufacturing process can pollute the environment, contributing to air and water pollution.

Research shows that Americans use approximately 100 billion plastic bags each year, and only a small percentage of these are recycled or properly disposed of (Plastic Pollution Coalition, 2020). This statistic points to the alarming amount of plastic that is being produced and discarded, which has significant implications for the environment. As a result, many countries have started to implement bans on single-use plastics, to reduce their negative environmental impact. Paper is also a commonly used material for junk food packaging, particularly for fast-food items such as burgers and fries. Paper is biodegradable, meaning it will decompose over time, making it a more environmentally friendly option than plastic and aluminum. However, paper production can have negative environmental impacts, including deforestation, the release of greenhouse gases, and the depletion of natural resources. Additionally, the ink and dyes used to print on paper packaging can contain toxic chemicals, which can be problematic when the paper is not recycled properly. Improper disposal of paper products can also contribute to litter, exacerbating the negative impact on the environment. The environmental impacts of junk food wrappers raise ethical concerns regarding the use and disposal of such products. Junk food wrappers contribute to the accumulation of waste in landfills, pollution of the natural environment, and harm to wildlife. The production and disposal of these wrappers also contribute to the depletion of natural resources and the release of greenhouse gases. This raises questions in terms of ethical consumerism, corporate responsibility, and government policy. Consumers have the power to reduce the negative environmental impact of junk food packaging by making conscious purchasing decisions and choosing products with eco-friendly packaging. Similarly, corporations have a responsibility to reduce their footprint and adopt sustainable practices in their manufacturing and supply chains. Governments can also play a role by implementing policies and

regulations that promote the use of environmentally friendly materials and reduce waste. The aim of this study was to find out the awareness of local residents of Jammu city towards impact of junk food wrappers on the environment and its management.

2. Methodology

2.1 Survey Design

A comprehensive survey was conducted in District Jammu to assess the consumption patterns of junk food and the disposal practices of its wrappers. The survey targeted a diverse sample population, including consumers, food vendors, and waste management authorities. The data collected through this survey formed the foundation for further analysis.

2.2 Data Collection

To gather primary data, structured questionnaires were distributed among the participants through online method, including consumers of junk food, vendors operating food stalls, and waste management authorities. The questionnaire included sections on junk food consumption frequency, preferred types of junk food, disposal practices, awareness of environmental impacts, and suggestions for improvement. The survey was conducted over a period of one month to ensure an adequate representation of the population.

2.3 Data Analysis

The collected data were compiled and analyzed using statistical techniques. Descriptive statistics such as frequencies, percentages, and averages were calculated to summarize the responses. The findings were presented using pie-charts/graphs to facilitate understanding and interpretation.

2.4 Environmental Impact Assessment

The environmental impact of junk food wrappers was evaluated using a multi-faceted approach. This involved assessing the composition of wrappers, their degradation rates, the presence of harmful chemicals, and the impacts on local ecosystems. Extensive literature review and consultations with environmental experts were conducted to gather relevant information for this assessment.

3. Results

The survey results indicated various aspects related to the consumption and disposal of junk food wrappers, as well as people's awareness and opinions on the environmental impact of such waste. In terms of consumption, 25% of the participants consume junk food 2-3 times a week, while 37% consume it rarely. Chips were found to be the most consumed junk food (48% of participants), followed by fast food (33%) and soda (5%). When it comes to the disposal of junk food wrappers, 42% of participants always dispose of them appropriately, while 42% do so sometimes. The most preferred method of disposal is throwing them in the trash bin (84% of participants). Interestingly, a significant percentage of participants (67%) have witnessed someone littering junk food wrappers, highlighting the issue of improper disposal. The majority of participants (97%) believed that junk food wrappers are harmful to the environment, and 76% express a high level of care for their impact. However, there is some lack of knowledge regarding the decomposition time of these wrappers, with 44% of participants are unaware about this fact. Regarding solutions, increasing public awareness (51%) is considered the most effective measure to reduce the environmental impact of junk food wrappers. Participants also express a willingness to contribute personally, with 74% having participated in a community cleanup to remove littered junk food wrappers. Additionally, 74% of participants are willing to pay extra for junk food products if the packaging is environmentally friendly (Table 1). However, opinions are divided on whether there should be a tax on junk food packaging to discourage consumption.

4. Discussion

One notable finding is that the majority of participants were aware of the harmful impact of junk food wrappers on the environment. This high level of awareness is crucial in driving behavioral changes and promoting responsible disposal practices. It also indicates that educational campaigns and initiatives have been successful in raising awareness about this issue.

The survey also revealed that a significant percentage of participants consumed junk food regularly, with chips being the most preferred option. This highlights the need to address not only the disposal of junk food wrappers but also the reduction

in consumption. Encouraging healthier food choices could have multiple benefits for both individuals' health and the environment. In terms of disposal methods, the preferred option was throwing wrappers in the trash bin, which aligns with responsible waste management practices. However, a considerable percentage of participants admitted to sometimes or rarely disposing of junk food wrappers appropriately. This indicates a need for further education and reinforcement of responsible disposal habits.

Table 1 Food consumption and Perception of respondents towards Health Awareness due to junk food

TOPIC	PERCENTAGE
Consumption of Junk Food	
2-3 times a week	25%
Rarely	37%
Once a week	25%
Never	12%
Types of Junk Food	
Chips	48%
Fast food	33%
Soda	5%
Candies, fruits, biscuits, and others	14%
Disposal of Junk Food Wrappers	
Always disposed appropriately	42%
Sometimes disposed appropriately	42%
Rarely disposed appropriately	8%
Never disposed appropriately	5%
Preferred Method of Disposal	
Trash bin	84%
Recycling	11%
Littering	3%
Burning	1%
Other methods	1%
Littering of Junk Food Wrappers	
Witnessed littering	67%
Not witnessed littering	33%
Harmful Impact of Junk Food Wrappers	
Believe it's harmful to the environment	97%
Do not believe it's harmful to the environment	3%
Decomposition Time of Junk Food Wrappers	
Less than a year	6%
1-3 years	9%
3-5 years	4%
More than 5 years	45%
Don't know	44%
Littering of Junk Food Wrappers in Public Places	
Daily	67%
Rarely	16%
2-3 times a week	11%
Once a week	6%
Production of Junk Food Wrappers	
Believe it should be banned	96%
Do not believe it should be banned	4%
Discarding of Junk Food Wrappers in Drains and Rivers	
Daily	64%
2-3 times a week	15%
Once a week	6%
Rarely	16%
Level of Awareness about the Impact of Junk Food Wrappers	
High level	51%
Moderate level	41%
Low level	8%
Opinion on Fast-Food Restaurants Being Held Accountable	
Should be held accountable	82%
Should not be held accountable	18%
Degree of Care for the Impact of Junk Food Wrappers	
Care a lot	76%
Care somewhat	23%
Do not care at all	1%
Participation in Community Cleanups	
Participated	74%
Not participated	26%
Measures to Reduce the Environmental Impact of Junk Food Wrappers	
Increasing public awareness	51%
Implementing better disposal methods	24%
Increasing recycling facilities	13%
Imposing fines for littering	13%
Opinion on Imposing Tax on Junk Food Packaging	
Should have a tax	46%
Should not have a tax	43%
Unsure	10%
Willingness to Pay Extra for Environmentally Friendly Packaging	
Willing to pay extra	74%
Not willing to pay extra	26%
Opinion on Government's Role in Reducing	
Government should do more	92%
Government should not do more	8%
Motivators to Dispose of Junk Food Wrappers	
Concern for the environment	43%
Personal responsibility	42%
Fear of being fined	10%
Social pressure	5%
Ways to Encourage the Use of Environmentally Friendly Packaging in the Fast-Food Industry	
Government regulations	25%
Consumer demand	7%

Littering of junk food wrappers was a common occurrence according to the survey, with the majority of participants reporting daily sightings. This suggests a lack of awareness or disregard for the impact of littering on the environment. It is essential to address this issue through awareness campaigns, stricter regulations, and enforcement to deter littering behaviors. Participants overwhelmingly supported

the idea of holding fast-food restaurants accountable for the littering of junk food wrappers. This highlights the need for collaboration between government bodies and the fast-food industry to develop sustainable packaging solutions and implement better waste management practices. Increasing public awareness emerged as the most preferred measure to reduce the environmental impact of junk food wrappers, indicating the importance of educational campaigns and initiatives. Participants also expressed support for implementing better disposal methods, increasing recycling facilities, and imposing fines for littering. These measures can be effective in reducing litter and promoting responsible waste management. Furthermore, the survey revealed that a significant percentage of participants were willing to pay extra for junk food products if they were packaged in an environmentally friendly manner. This indicates a growing consumer demand for sustainable packaging options, which could incentivize the fast-food industry to adopt more eco-friendly practices. Overall, the survey findings suggest that there is a strong awareness and concern among individuals regarding the environmental impact of junk food wrappers in Jammu. It is crucial to build upon this awareness and translate it into concrete actions, such as promoting responsible disposal habits, encouraging healthier food choices, and implementing sustainable packaging solutions. Collaboration between government, fast-food companies, and individuals is key to effectively reducing the environmental impact of junk food wrappers and promoting a more sustainable future.

5. Conclusion

The findings indicated that individuals are not only aware of the detrimental effects of these wrappers but also recognize the importance of taking personal responsibility for their disposal. Moreover, the results highlighted the significant role of government regulations in driving individuals to dispose of junk food wrappers appropriately and promoting the adoption of environmentally friendly packaging in the fast-food industry. The survey's implications extend beyond mere awareness, as they provide valuable insights for various stakeholders to initiate targeted actions aimed at reducing the environmental impact of junk food wrappers. It is believed that individuals can actively support businesses that prioritize sustainable packaging and responsible waste management. They can also engage in grassroots movements, sign petitions, or raise awareness on social media to encourage both the fast-food industry and the government to prioritize environmental sustainability. Overall, the survey results offer valuable insights into the public's awareness and concerns regarding junk food wrappers' environmental impact. By considering the role of personal responsibility, government regulations, and the fast-food industry's actions, these findings can guide effective measures to mitigate the harm caused by these wrappers. By harnessing these insights, stakeholders can collectively work towards a more sustainable future, where junk food packaging no longer poses a threat to our environment.

6. Recommendations

Firstly, the government can leverage these findings to strengthen existing regulations or develop new policies that encourage sustainable packaging practices. By implementing stricter guidelines and providing incentives for eco-friendly alternatives, the government can significantly contribute to minimizing the environmental footprint of the fast-food industry. Secondly, the fast-food industry itself can utilize these survey results to enhance its sustainability efforts. Recognizing that consumers are increasingly concerned about environmental issues, fast-food chains can invest in research and development to explore innovative packaging solutions that are biodegradable, compostable, or easily recyclable. Furthermore, industry leaders can collaborate with packaging manufacturers to establish industry-wide standards for eco-friendly packaging and promote responsible disposal practices among their customers. Lastly, individuals can play a pivotal role in reducing the environmental impact of junk food wrappers by making conscious choices and advocating for change.

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Declaration of Conflict

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