

# Implication of Calorie Values in Online Food Menus, Healthy Choice, and Awareness in India

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- **Rationale**
- **Data and Methods**
- **Results**
- **Discussion**
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# Previous Studies Across Globe on Calorie Labelling

- ❖ The emergence of online food services in India offers a variety of high nutritious and affordable food options, thereby creating the ability to diversify the menu (R. Abdulkader et al., 2022)
- ❖ Research in Saudi Arabia found that while many students noticed calorie labels in restaurants but only a small percentage paid attention to them (N. Bawazeer et al., 2022)
- ❖ Similarly, a study on online food ordering apps in Saudi Arabia revealed limited consumer awareness and interest in menu calorie information (Alkhunein et al., 2024)
- ❖ Studies in India have looked into the impact of calorie labelling on food choices

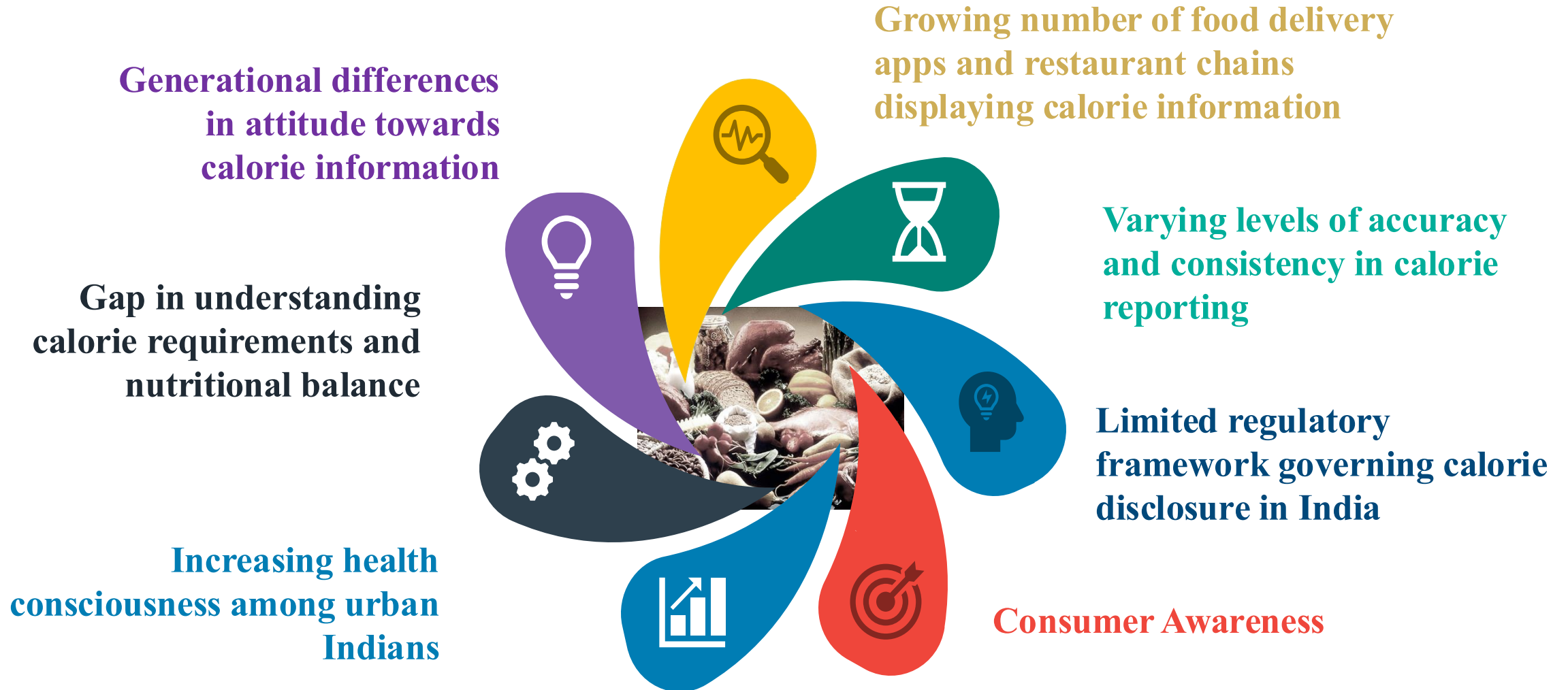
## In Continuation..

- ❖ It may be yet that presenting calorie information in modified and more visually appealing manner such as rank-ordered or colour-coded manner may increase the effectiveness of the information (Liu et al.,2012)
- ❖ So, calorie labelling has the potential to affect the food choices and its impact may be limited without the additional strategies to increase consumer awareness and engagement
- ❖ The inclusion of calorie information on online food menus in India represents a significant shift in the country's approach to food transparency and health awareness
- ❖ The analysis presented here wants to examine the various implications of this practice, its impact on consumer behavior, and its role in promoting healthier eating habits in the Indian context



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# The Rationale Behind how Calorie Values on Online Food Menus Influences Health-conscious Choices And Nutritional Awareness



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## Data were collected through online Survey

- ❖ The data in the study is the result of an online survey conducted via Google forms over 669 individuals
- ❖ The survey included participants aged 13 and older from urban and semi-urban areas. It aimed to understand their awareness of calorie information, its effect on food choices, and perceptions of healthy eating
- ❖ Data were collected over two months and analyzed using descriptive and inferential statistics to explore the relationship between calorie awareness and healthy food choices

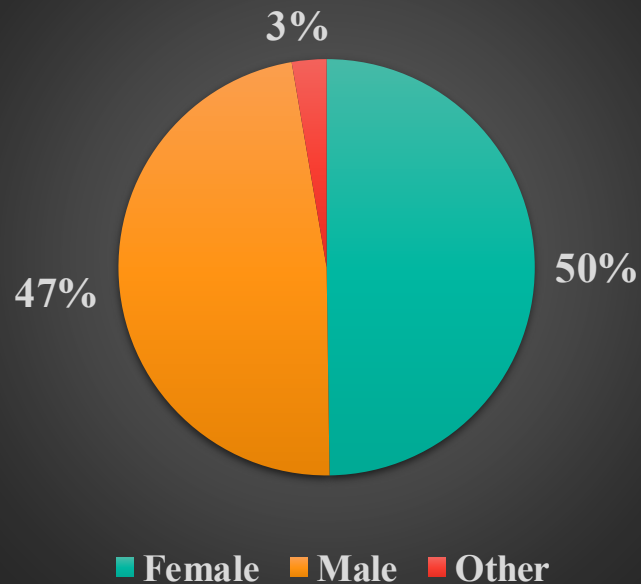


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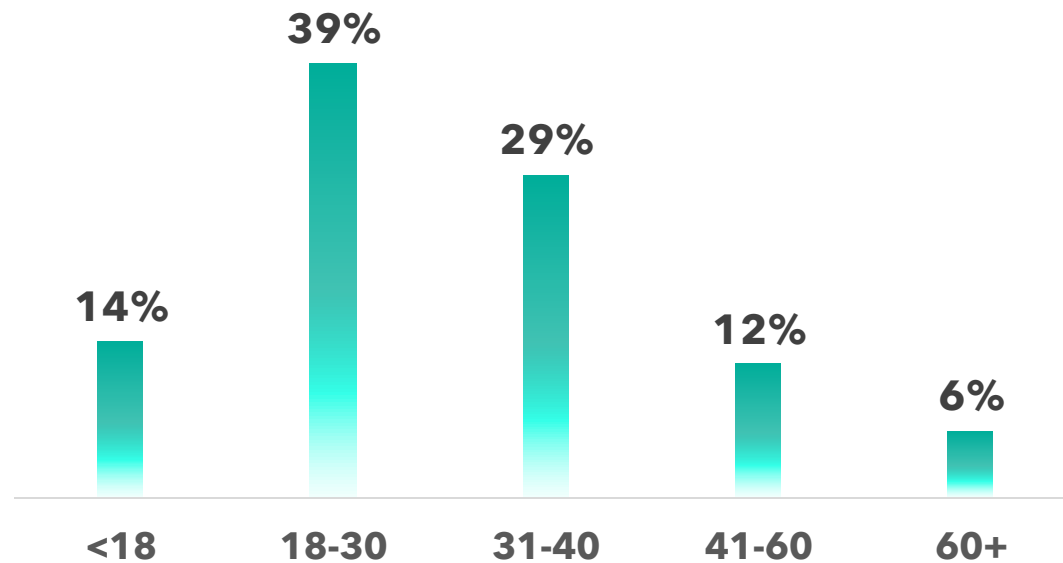
# Participants SDOH information

- Representation of both the sexes are almost homogeneous with the mean age of  $31.7 \pm 14.09$  and ranges 13-73 yrs
- 7 out of every 10 participants are from as group 18-40
- ~70% of them are from urban locality

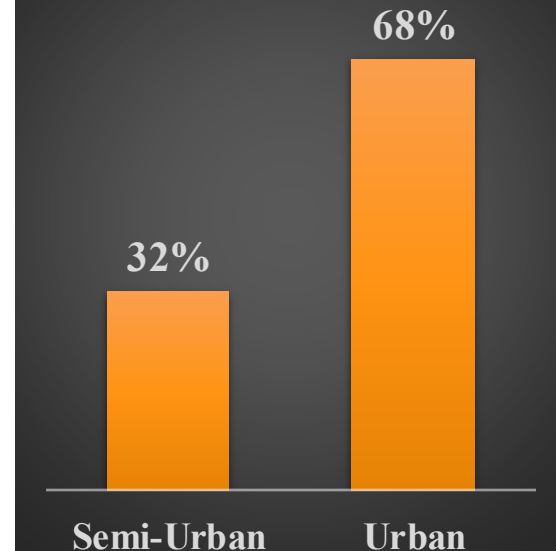
## Gender



## How old are the participants ?



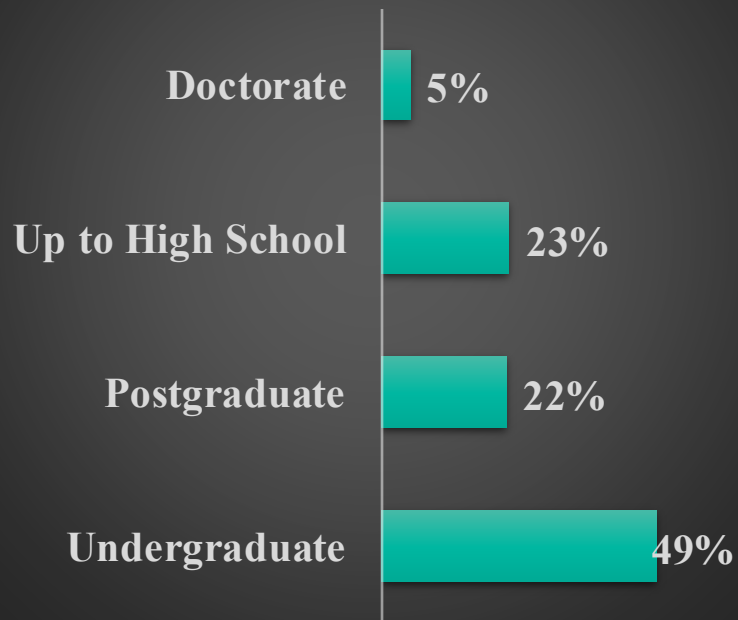
## POR



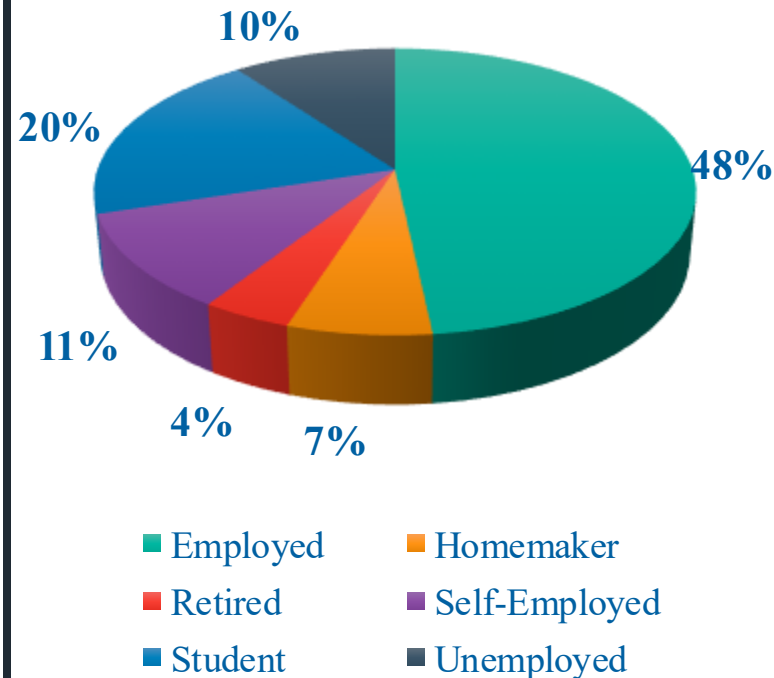
## SDOH Cont.

- ❖ Almost half of the participants are undergrads ( As expected 🤪 )
- ❖ 60% and 20% of them are employed and student respectively
- ❖ ~70% have income level <INR 50k ( ~\$600 USD)

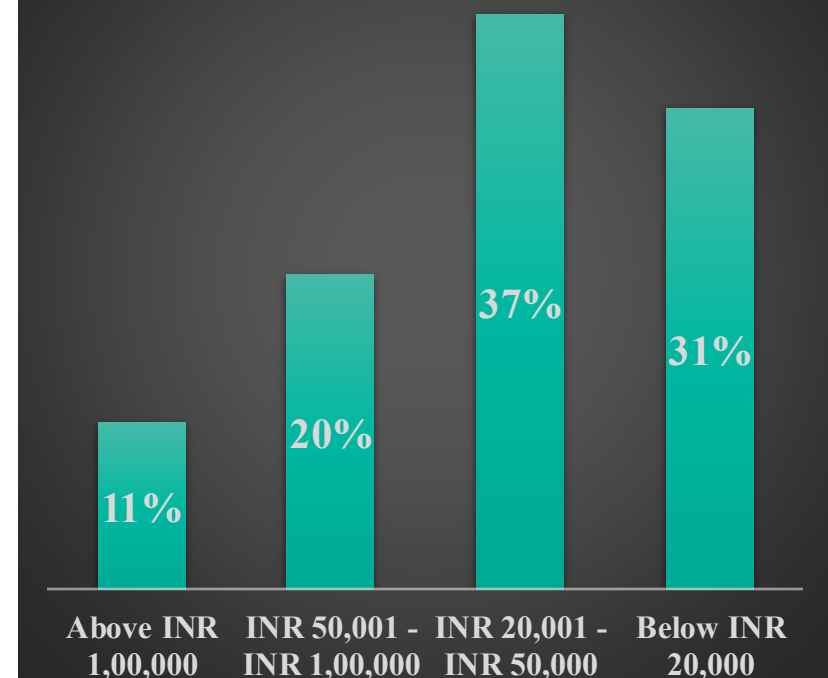
### Education Qualification



### Employment Status

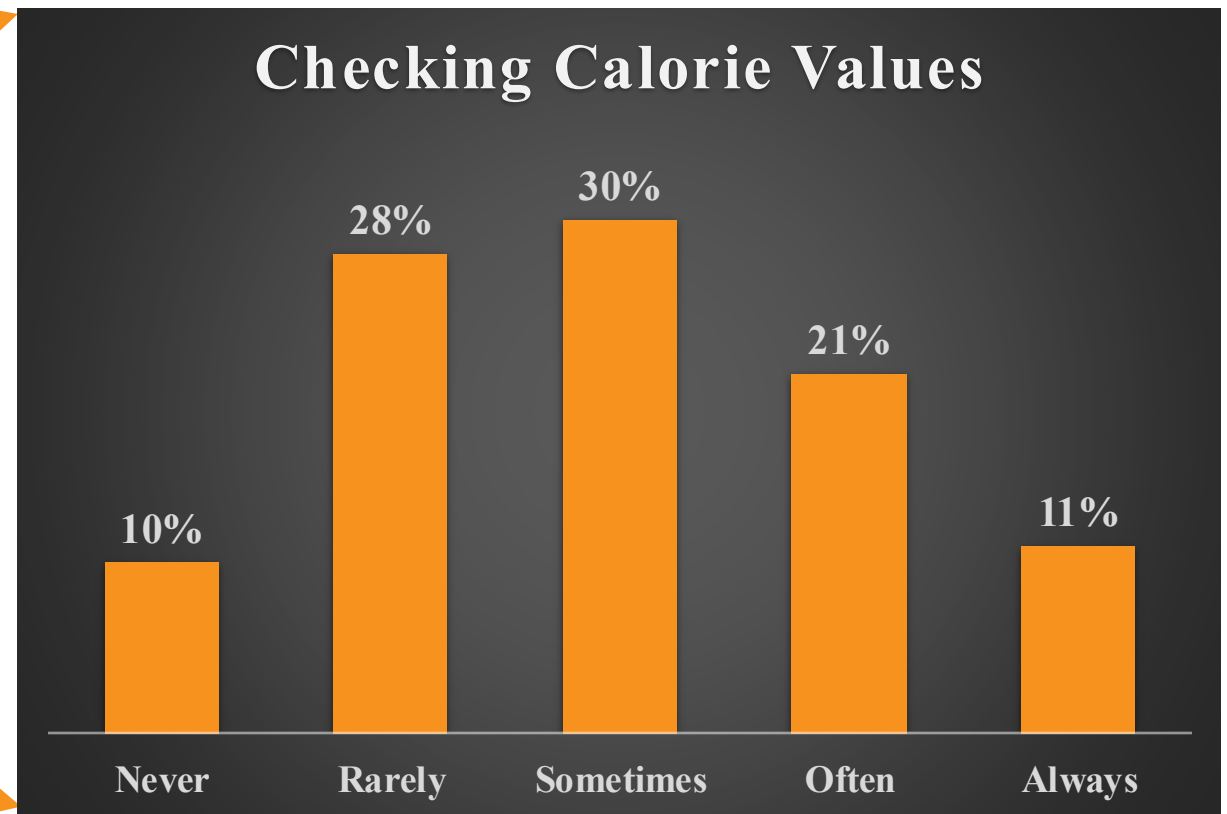
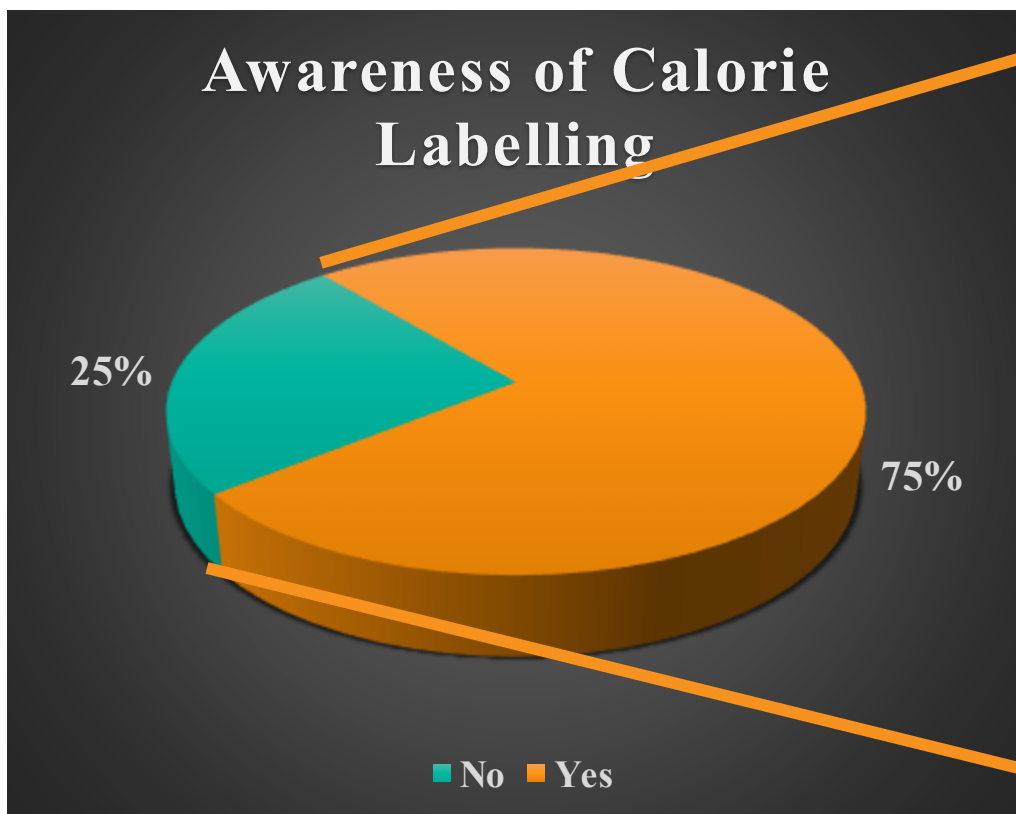


### Family Income Group



## Awareness of Calorie Values is High but..

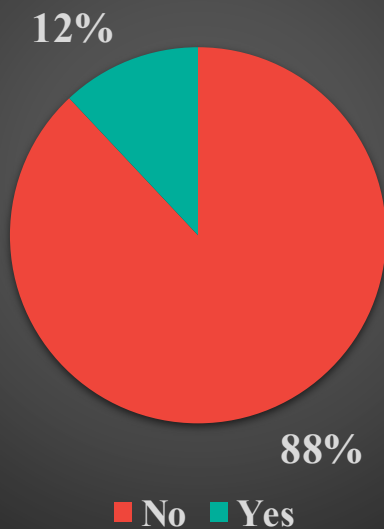
- ❖ 75% of the participants have the awareness about calorie Labelling
- ❖ However, there was no significant association found with gender, age, income level, location or occupation
- ❖ ~60% participants check calorie values rarely or sometimes during food ordering



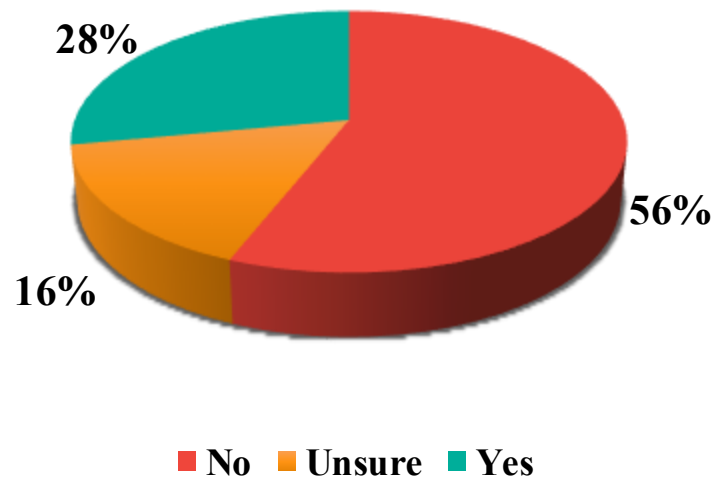
# Proper Knowledge on Calorie are still very low

- ❖ Only 12% people have awareness of daily calorie intake
- ❖ More than half of the participants also do not aware about their amount of calorie intake in day-to-day life
- ❖ Price followed by taste remains the leading factors in online food ordering habit

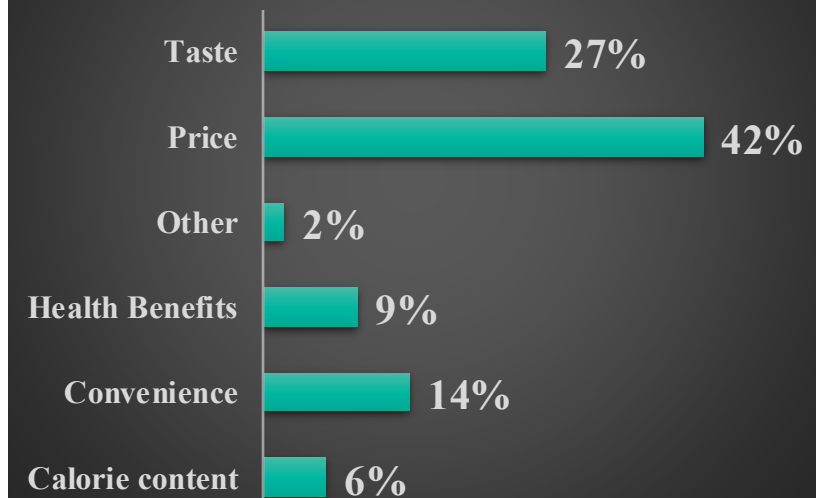
## Awareness in Daily intake



## Mandatory Calorie Info



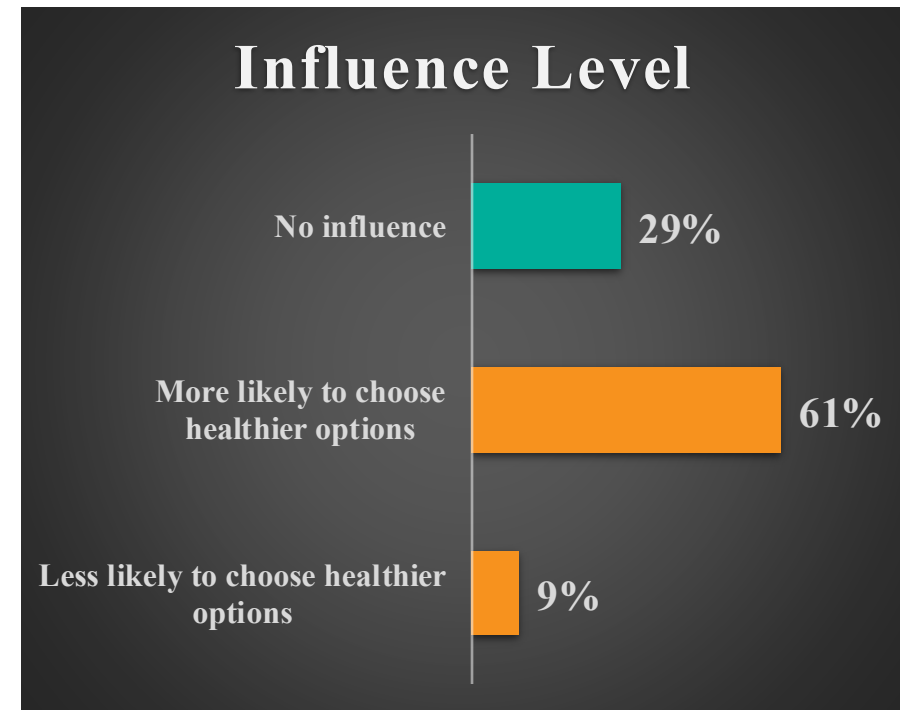
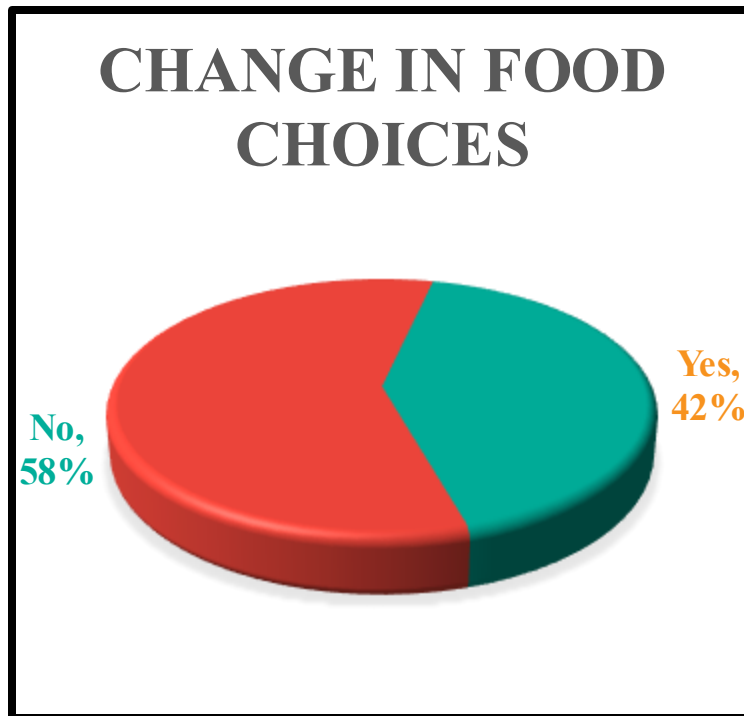
## What leads to Food Choice





# Whether Calorie Labelling influence Food Choices ?

- ❖ ~40% participants try to choose the food as per Calorie values in the menu
- ❖ ~60% participants choose healthier option after looking at calorie values
- ❖ However, there were no significant associations observed of the willingness to change with age, location, income level, place of residence, education or gender.

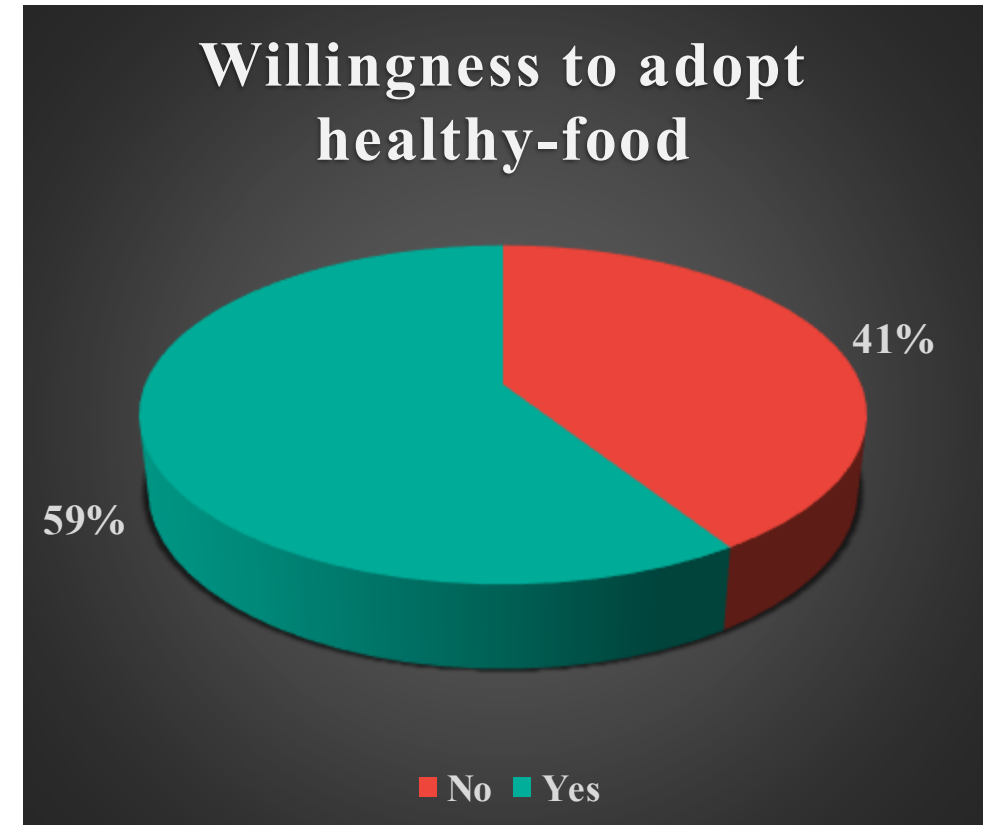


## Willingness to Adopt with Proper Knowledge

With respect to willingness to change food choices, the majority were willing to change their food choices considering they

- Get the right information
- At the right place

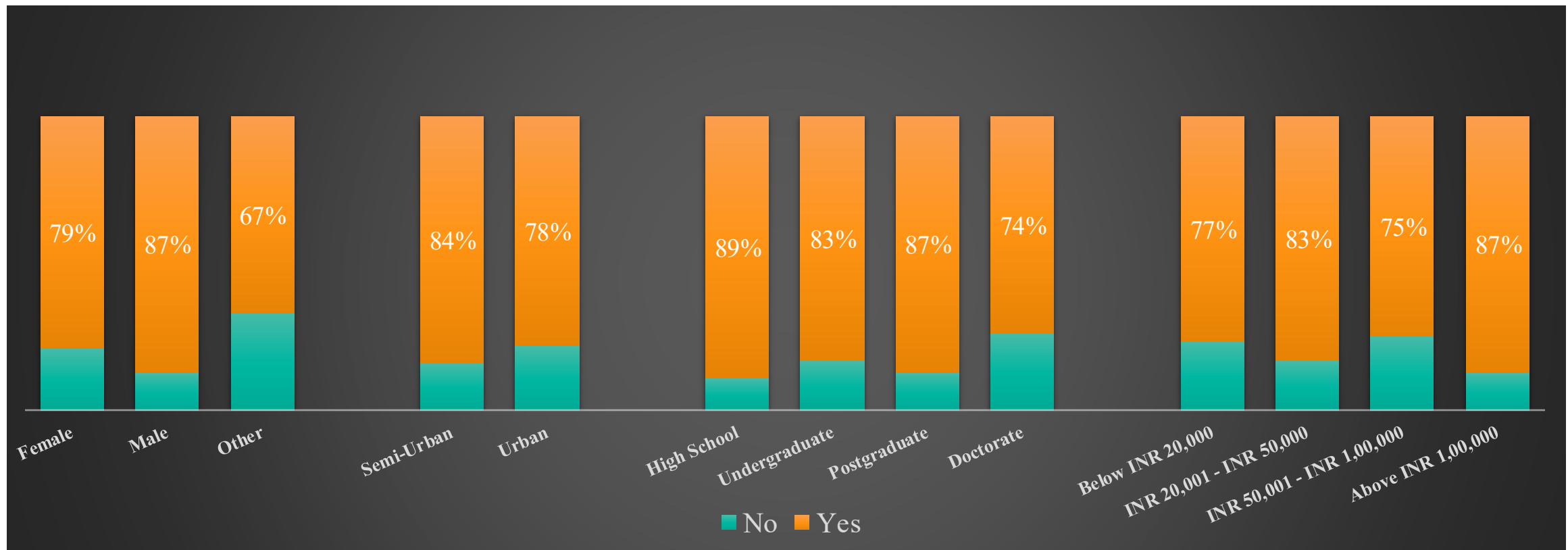
However, the willingness to change food choices was not related to age, gender, location, monthly income, education level or occupation.



# People's Support Over Calorie Labelling

As it can be observed, there is higher prevalence of positive support for calorie labelling over the categories.

**Almost every 4 out of 5 people in the survey wants calorie values to be highlighted across all food menus.**



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## Discussion

- ❖ Contrary to expectations, there appears to be not much association observed between the importance of the influence of calorie labels and socio-demographic factors
- ❖ Education was seen to be significantly associated with the calorie label representation. This may be because the higher the education, the more importance one attached to one's diet
- ❖ It is difficult to conclude on the basis of this data that calorie labels exert any definable influence on food choices
- ❖ There was no significant association observed between the quality of nutrition knowledge or willingness to change food choices and support for calorie labelling



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## Conclusion

- While the inclusion of calorie values in online food menus in India represents a step towards greater nutritional awareness, its effectiveness depends on proper implementation and consumer education.
- A balanced approach that considers both the benefits and limitations of calorie information, while respecting cultural contexts, will be crucial for its success in promoting healthier eating habits in India.

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# So, Going Ahead, What to do next ??



## Explore Long-Term Behavioural Changes

Future studies could investigate whether initial increases in healthy food choices due to calorie labelling are sustained over time and lead to consistent dietary changes, particularly among younger demographics and urban populations.



## Examine broader demographic influence

To capture a more comprehensive picture, research should include a wider demographic range, incorporating rural populations and lower-income groups to assess variations in calorie-awareness impact and nutritional literacy.



## Incorporate nutritional education campaigns:

Combining calorie labeling with targeted nutritional education may enhance the effectiveness of calorie displays, helping to bridge gaps in knowledge, especially for populations where awareness remains low

## Study platform-specific effects:



Analyzing how different food delivery platforms (e.g., Zomato, Swiggy) affect user behavior with calorie labeling may reveal platform-specific patterns and help tailor interventions accordingly.

## Assess additional labelling formats



Future work could evaluate the impact of different labeling formats (e.g., color-coded labels, health warnings, or daily percentage values) to identify the most effective strategies in prompting healthier choices.





THANK YOU

