

Consumer survey about millets

15,500 face to face interviews in
cities across 7 states in India



Smart Food
brief #6

NOTE: Millets are broadly defined to include sorghum

This is the largest consumer survey ever undertaken about consumer insights on millets and forms a benchmark for consumer changes and marketing efforts.

RESULTS

The survey showed that health and wellness were the most common factors influencing consumption of millets in urban areas, with 58% of the interviewees attributing this to consumption.

Largest reasons for consuming millets

1. 'I have a health problem' (nearly 30% or people stating this)
2. 'I want to lose weight' (15.1%)
3. 'I like the taste' (about 14.6%)

Identified knowledge gap by a target audience

- 91 % of respondents were very or reasonably health conscious
- However, only 40% were sure millets were healthy

- ⇒ The data indicates that the early adopters of millets are consumers with a health problem and so searching for solutions.
- ⇒ Second are the people who are health conscious and interested in healthy lifestyles, where the identified knowledge gap about millets being healthy indicates market potential.
- ⇒ However, to make a big impact it will be important to reach the mass markets.

The major reason the respondents did not eat (more) millets

1. 'It is not eaten at home', expressed by nearly 40% of the respondents
 - ⇒ This indicates the potential to have a multiplier affect of reaching many people if promotions can reach and influence the decision maker in the household.
2. 'Don't like the taste' expressed by nearly 22%
 - ⇒ Interestingly taste was observed to be a major reason why the respondents both did and did not eat millets, indicating that health awareness alone would not significantly boost millet consumption. Together, these insights showed the need for tasty products and simple recipes made from millets as well as changing the image of millets.
3. 'Price is high' (13%)
4. 'It takes a long time to cook' (8%)

RESULTS continued

The main sources of information about health and food are from social sources with about 85% of interviewed listing this.

1. Social media mentioned by 51%
 2. Friends and family mentioned by 34%
- ⇒ This shows an important outlet for governments and industry to use for promotions to reach consumers.

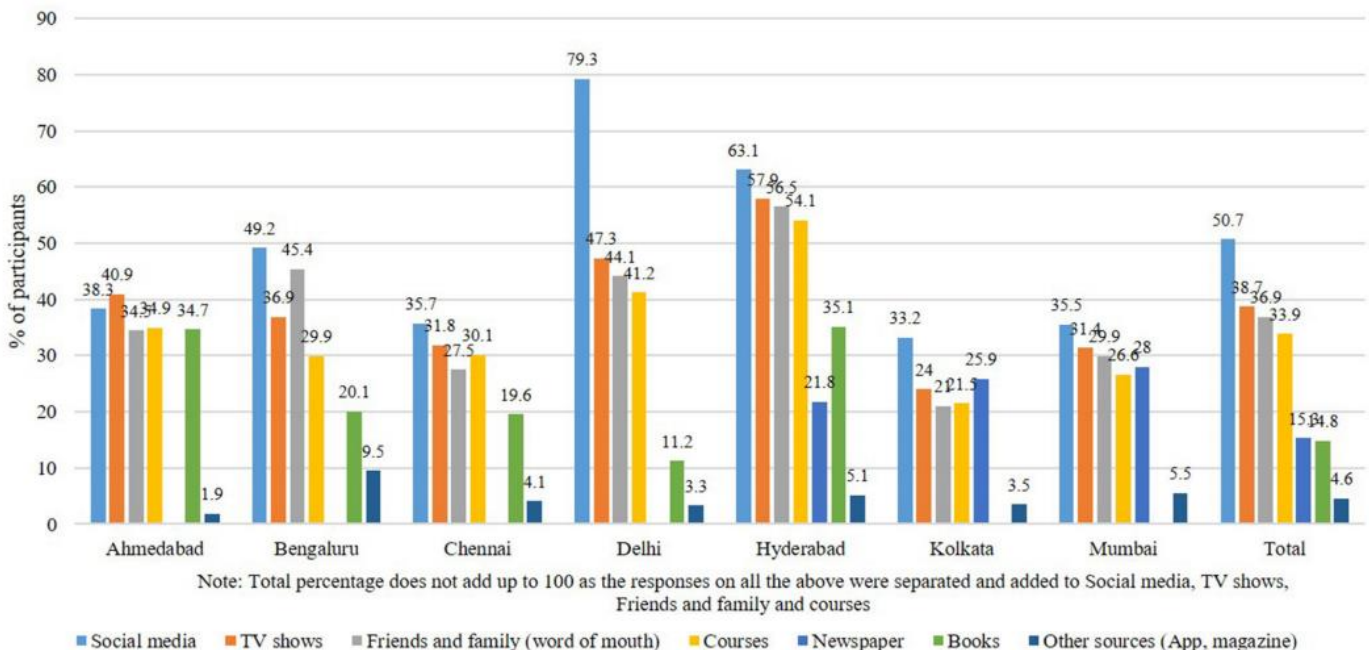
The most commonly eaten forms of millets

1. ready to eat products (46%)
 2. porridge consumed by (38%)
- ⇒ This represents an interest in modern convenient products as well as the easy to prepare traditional foods. This reflects market opportunities for convenience products while also being culturally sensitive.

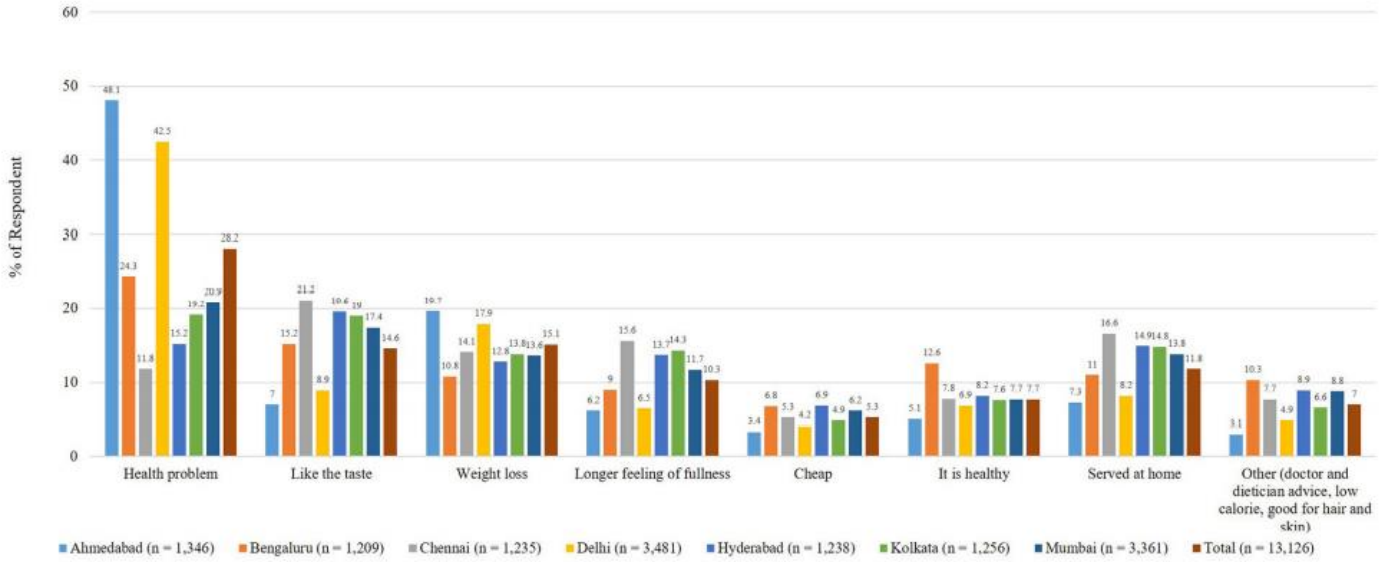
Frequency of consumption of millets

- a considerable proportion of consumers ate millets frequently (49.6% consumed 1 or more times per week)
 - However, there was also a reasonable proportion of people who had never or almost never consumed millets (34.9% consumed millets never or up to two times a year).
 - Bengaluru led in terms of consumption frequency. Delhi had the lowest consumption frequency of millets.
- ⇒ The findings imply a need to more actively promote the benefits of millets and to create awareness of various ways of cooking millets or creating millet products to satisfy taste preferences and change the perception of millets, which would in turn lead to an increase in their consumption.

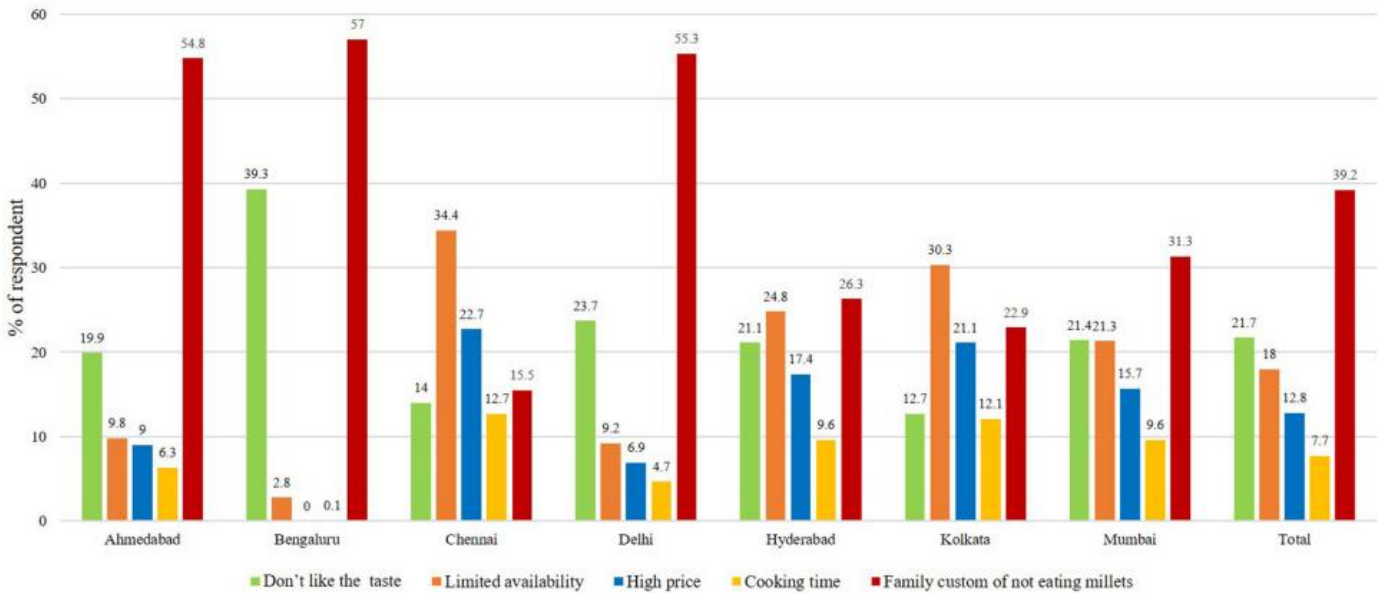
Sources of information about health and food



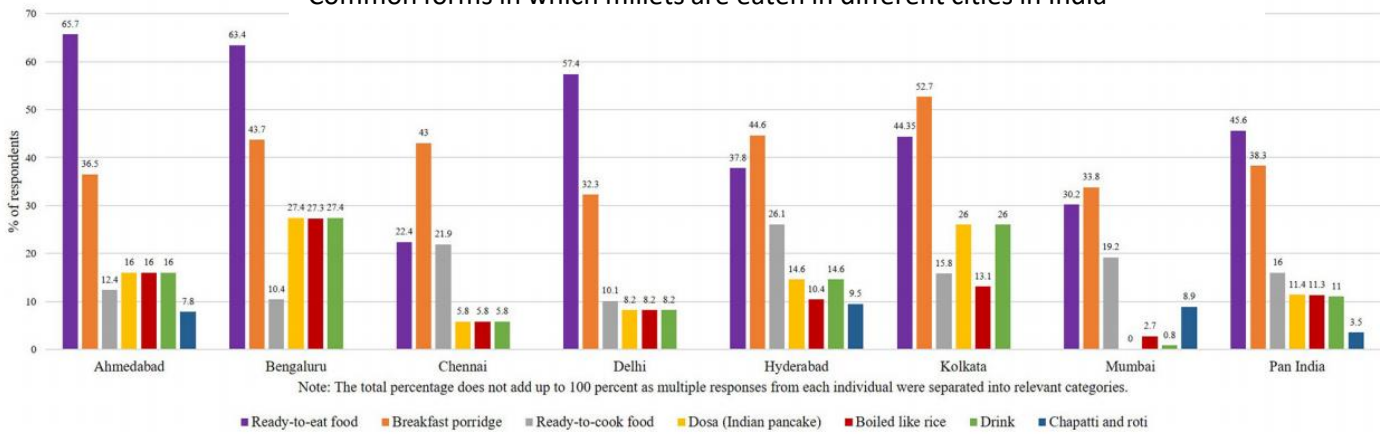
Respondents' reasons for consuming millets and sorghum in each city



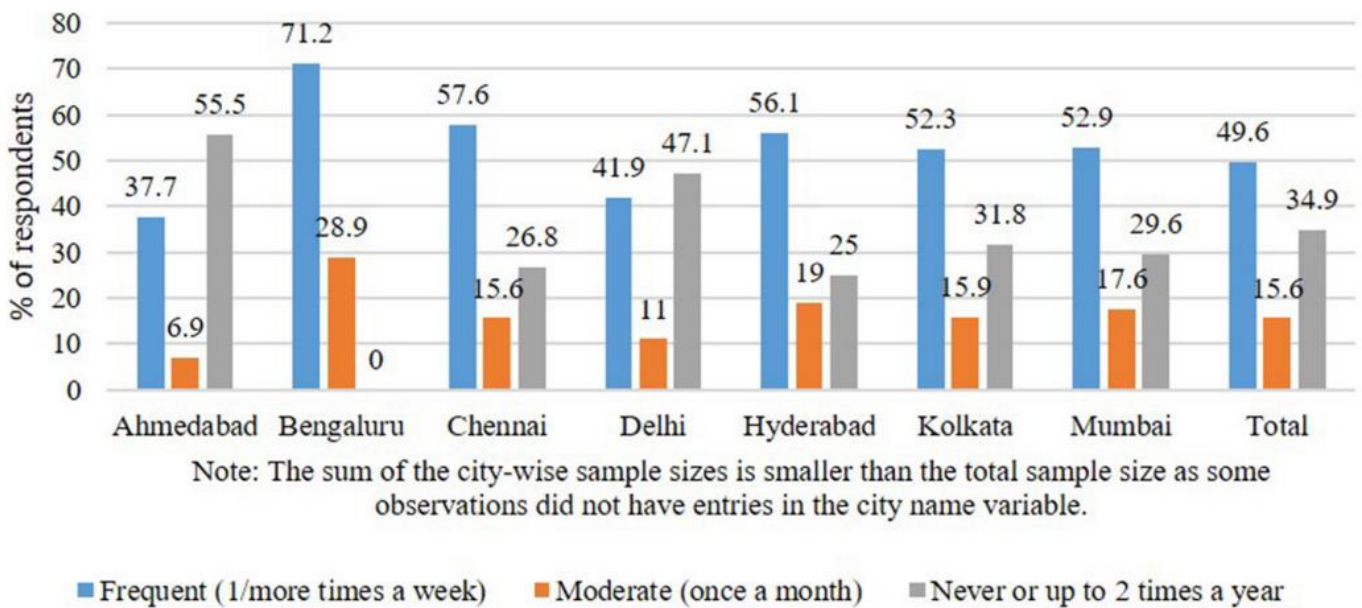
Stated reasons for respondents not consuming more millets/sorghum



Common forms in which millets are eaten in different cities in India



Frequency of consumption of millets and sorghum in the seven cities



ABOUT THE STUDY

A face-to-face survey was conducted about consumers' knowledge, perceptions, and consumption patterns, as well as the reasons for their practices and sources of information, on millets.

This was conducted in August 2017 and forms an important baseline for tracking consumer perceptions and effectiveness of marketing activities.

The methodology included:

- random convenience sampling in shopping malls
- 15,522 people interviewed
- In 7 cities in 7 states of South, West, North, and East India: Ahmedabad, Bengaluru, Chennai, Delhi, Hyderabad, Kolkata, Mumbai
- 9,453 were women and 5,686 were men, with a wide age range
- All data was also presented by city, age, gender and socioeconomic status
- qualitative and quantitative questions were asked without prompts or options to select; except the first question where a picture of three popular millets, finger millet, pearl millet, and sorghum, were used as a visual aid showing the crop and the grain with their names in English, Hindi, and the state language.

THE PUBLICATION

Kane-Potaka J., Anitha S., Tsusaka T. W., Botha R., Budumuru M., Upadhyay S, Kumar P., Malleesh K., Hunasgi R., Jalagam A. K. 2021, **Assessing millets and sorghum consumption behavior in urban India: a large-scale survey**, Frontiers in sustainable food systems

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This study is part of a Frontiers journal [special research topic](#) - Smart Food for Healthy, Sustainable and Resilient Food Systems.

OVERALL CONCLUSIONS

- ⇒ it is recognized that the market for millets can expand with appropriate **awareness campaigns** targeting different segments.
- ⇒ The findings of this study may be useful for policymakers as well as different stakeholders, e.g., food companies, government entities, nutritionists, development organizations, and researchers, who intend to promote consumption of millets.
- ⇒ The survey helps understand the motivation of consumers and how best to position millets in any campaigns while planning agriculture-based nutrition interventions to improve the market, consumption, and nutritional status.

FUTURE RESEARCH

- ⇒ As this survey was undertaken in urban shopping centers, future studies should obtain similar consumer data at **the rural and peri-urban** locations to compare various consumer segments and to develop better understanding of millet utilization.
- ⇒ Repeated studies should be conducted to track these changes over time and the influences on changed behavior.



“This data provides good insights and is a baseline that will be useful across India and the world when we prepare for exciting initiatives in the run-up to the International Year of Millets in 2023,”

Dr Suresh K Malhotra
Commissioner of Agriculture,
Government of India



“IIMR has been widely promoting the health benefits of millets and developing nutritious products. This survey further emphasizes consumer interest and the need to keep reaching out to spread the good news about millets and exciting new ways to eat them,”

Dr Vilas A Tonapi,
*Director, ICAR-Indian Institute of
Millets Research*



“Government policies can play a critical role to ensure more diversified and healthier diets, like millets, are available and affordable for all sections of society. Understanding the consumers and their desires and perceptions is critical in designing these policies,”

Prof. Prabhu Pingali
Chair, ICRISAT Governing Board.



“It is imperative for millet promoting initiatives to reach the masses as these crops offer a multitude of benefits. They help farmers build climate-resilience, are sustainable on the environment and offer a range of nutritional benefits, including addressing micronutrient deficiencies and helping manage lifestyle disorders like diabetes and others,”

Dr Jacqueline Hughes
Director General, ICRISAT



“As this survey was undertaken in urban shopping centers, future studies should obtain similar consumer data in rural and peri-urban areas to compare various consumer segments and to develop better understanding of millet utilization. Moreover, repeated studies should be conducted to track these changes over time and their influences on changing consumer behavior,”

Dr S Nedumaran
*Senior Scientist-Economist, ICRISAT,
and a co-author of the study*



“The data indicates that the early adopters of millets are consumers with a health problem and so they search for solutions. Second are the people who are health conscious and interested in healthy lifestyles. However, to make a big impact it will be important to reach the masses across markets,”

Dr S Anitha
*Senior Scientist-Nutrition, ICRISAT
and a co-author of the study*



“Interestingly, taste was observed to be another major reason why respondents both did and did not eat millets, indicating that health awareness alone will not be enough to influence the masses to consume millets. The report emphasized these insights to show the need for tasty products and simple recipes made from millets as well as the need for changing the image of millets,”

Ms. Joanna Kane-Potaka
The study's first author and Assistant Director General (External Relations) and Executive Director of the Smart Food initiative at ICRISAT.

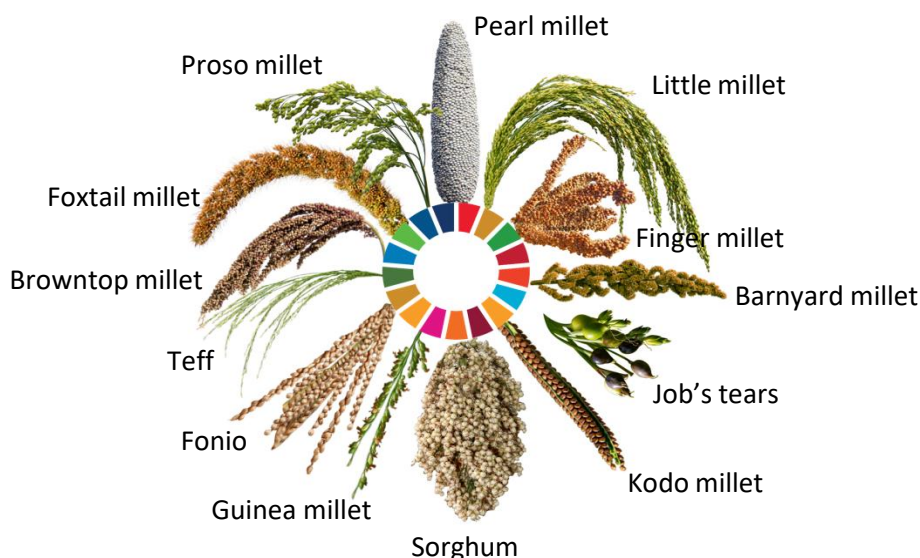
ABOUT MILLETS

'Millet' is a common term to categorize small-seeded grasses that are often called dryland cereals. There are 12 grasses most commonly referred to as millets. Sorghum is also considered a millet in some countries.

Millets are termed a **smart food** because they fit the criteria of being good for you, planet and farmer. Millets are highly nutritious and fulfil some of the biggest health needs, e.g.:

- **Finger millet has 3 times the amount of calcium in milk;**
- **Very high iron and zinc** and taking bioavailability into account can provide close to the recommended daily allowance of iron
- **Low glycemic (GI) index** and shown to reduce blood glucose levels, reduce the risk of type 2 diabetes and reduce of developing type 2 diabetes and were useful in managing type 2 diabetes
- **Reduces the overall level of cholesterol**
- **Have good levels of protein**
- **High fiber; Gluten free** and more.

Millets have a low carbon footprint, survive in high temperatures and with very little water. They are often the last crop standing in times of drought, are climate-smart and a good risk management strategy for farmers. They have multiple uses, from food, feed and fodder, to brewing and biofuels.



Good for you - the planet - the farmer®

Smart Food executive council:



INTERNATIONAL CROPS RESEARCH
INSTITUTE FOR THE SEMI-ARID TROPICS

