



Nutrition Awareness INDEX 2023

A study by **right to
protein**

Research conducted by **YouGov**



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Nutrition Awareness INDEX₂₀₂₃

A state-wise index assessing
awareness, affordability, and accessibility
of nutrition in India.

A study by
right to
protein

Research conducted by

YouGov[®]

EXECUTIVE SUMMARY

The Nutrition Awareness Index 2023 is a study aimed to understand urban India's understanding of nutrition. The Index assess awareness, affordability, and accessibility of nutrition across 20 states in India, with the highest Gross Domestic Product (GDP)¹. It aims to decode our knowledge of various food groups that are essential to a healthy diet, as explained by the National Health Portal². A standardized nutritional index could provide a gap for each state, according to its overall level of understanding of nutrition, which could then guide national policies.

Developed by 'Right To Protein', along with its drivers and supporters, the Index is created basis a detailed study conducted by YouGov where representative population groups were surveyed to derive an index and illustrate how people from different states perceive nutritional delivery and existing gaps.

The Nutrition Awareness Index 2023 brings forth an indicator of the country's nutritional status – hunger and food security, to help set targets and priorities to combat problems of malnutrition and raise awareness to improve human well-being. It aims to serve as an important tool to advance the vision of nutrition security in India – with regards to commitments, practices, and management. It will also provide insights into the production and distribution of healthy, affordable, accessible products; and how they influence consumer choices and behavior.

Although there is a wealth of data on individual indicators, such as energy consumption and micronutrient deficiencies, there is no one measure of overall nutrition awareness that could impact the country's nutritional status. Therefore, the concept of a Nutrition Awareness Index is of potential interest and application, as despite the progress made over the years, there is an opportunity to improve and place stronger commitments to improving food systems and enabling nutrition security. The Nutrition Awareness Index therefore has been devised to support policymakers, investors, international and non-governmental organizations (NGOs), the food and beverage industry, the agriculture sector, nutritionists, healthcare practitioners, thought leaders, and others to target the individual state-level gaps identified to tackle growing nutrition challenges and meet our nutritional commitments. This index has been tabulated for 20 states to combat awareness, access-affordability gaps, and support in improving human well-being and productivity.

'Right To Protein' invites you to share the Nutrition Awareness Index 2023 across your networks – and please do not hesitate to get in touch if you have any questions.

Contact us on: righttoprotein@gmail.com www.righttoprotein.com



Social media handles



@righttoprotein



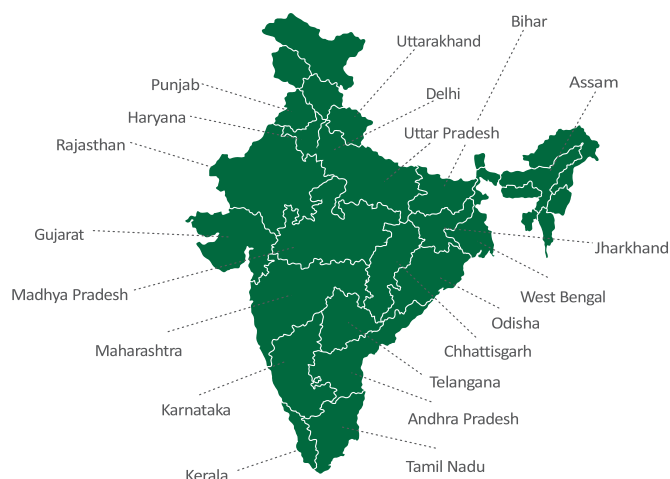
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General Manager, YouGov India

“This study has helped us see that there is still much to be desired in terms of overall quality of nutritional awareness at a national level in India. The need to improve the recognition of vegetarian sources of body building foods, improve the perception of animal protein food sources as more than mere body building foods, given their protective benefits, and increase acceptance of good fats as a necessary component of a balanced diet are some of the most notable areas in need of public education efforts.



Public education efforts, however, may benefit from incorporating state-specific nuances, for instance, only one-third of people in Assam identify pulses and legumes as a body building food, while over half of those in Uttar Pradesh and Uttarakhand do so, indicating a higher need for improved awareness in a State like Assam in this regard. Higher levels of vegetarianism may help explain why, for instance, only 28% in Rajasthan identify eggs as protective foods while 45% do so in West Bengal. Several such nuances have been uncovered which can help inform better targeted educational campaigns to increase consumption.”

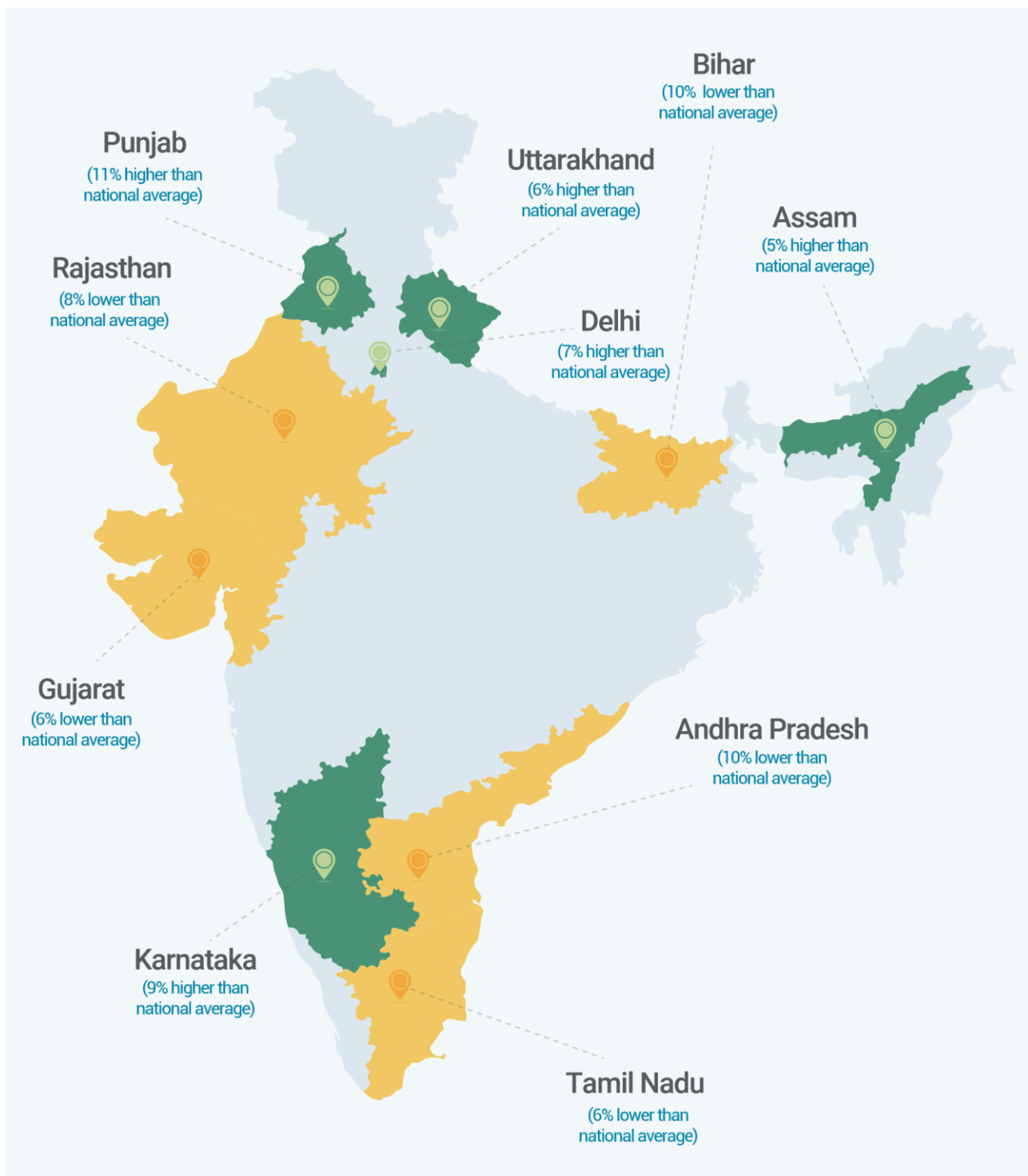
Nutritionist & Diabetes Educator, The Health Pantry, and supporter of the ‘Right To Protein’ campaign

the
**HEALTH
PANTRY**

“The Nutrition Awareness Index 2023 signifies a significant step towards fostering a healthier and more nourished India. By identifying states with lower nutritional awareness, affordability, and accessibility, we can strategically tailor our interventions to enhance education and consumption of vital nutrients. This approach is especially crucial in addressing regional variations, such as the diverse perspectives on body-building foods.”



NUTRITION AWARENESS INDEX 2023




Ranking by Awareness

States with the highest nutrition index score

States with the lowest nutrition index score

NUTRITION AWARENESS INDEX 2023



The Nutrition Awareness Index 2023 uses a dynamic quantitative ranking model constructed from the average scores of all the states. This was developed basis of a survey conducted with over 2,000 representatives of adult, urban internet users (18 years of age and above), who can read and understand English (and primarily NCCS A), across 20 states with the highest Gross Domestic Product (GDP) in 2022³, providing valuable insights into nutritional awareness and existing gaps.

This Index is a dynamic quantitative ranking model constructed from the average scores of all 20 states weighted by the relative share of each state's population numbers from the India Census 2011. The Index ranked 20 states by assigning a net score to each state, while aggregating the scores of people from that state. These scores were then used to derive an overall national average, which represents the base value of 100 as a benchmark score in the Index rankings, allowing us to understand the performance of different states on the parameters of Awareness and Accessibility-Affordability. For example, if the Index score for a state is 125, it means that this state garnered a score that is 25% higher than the All-Urban India average. Similarly, an index of 75 for any state means that this state garnered a score which is 25% lower than the All-Urban India average.

	Overall	Awareness	Access, Affordability
Andhra Pradesh	90	85	91
Assam	105	109	104
Bihar	90	70	94
Chhattisgarh	103	72	108
Delhi	107	122	105
Gujarat	94	68	99
Haryana	99	98	99
Jharkhand	97	87	99
Karnataka	109	117	107
Kerala	103	131	98
Madhya Pradesh	102	100	102
Maharashtra	102	114	100
Odisha	97	97	97
Punjab	111	124	109
Rajasthan	92	79	95
Tamil Nadu	94	80	96
Telangana	103	91	106
Uttar Pradesh	104	116	102
Uttarakhand	106	106	105
West Bengal	97	97	97

States with the highest nutrition index score

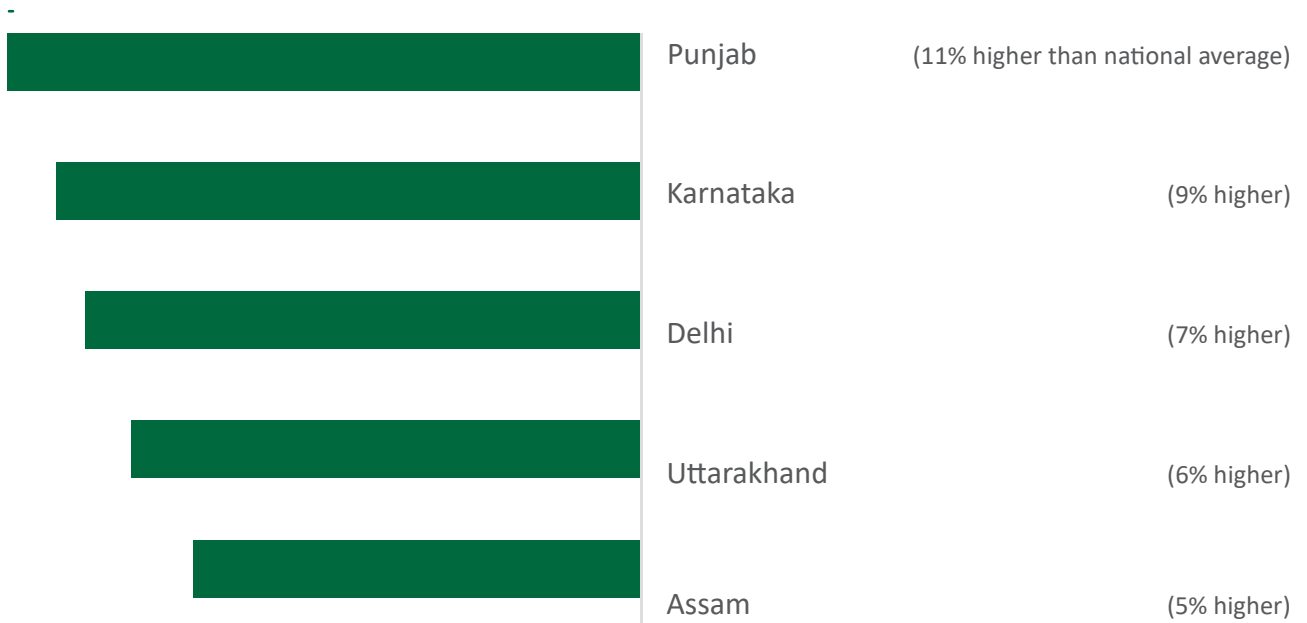
States with the lowest nutrition index score

States with overall nutrition index score

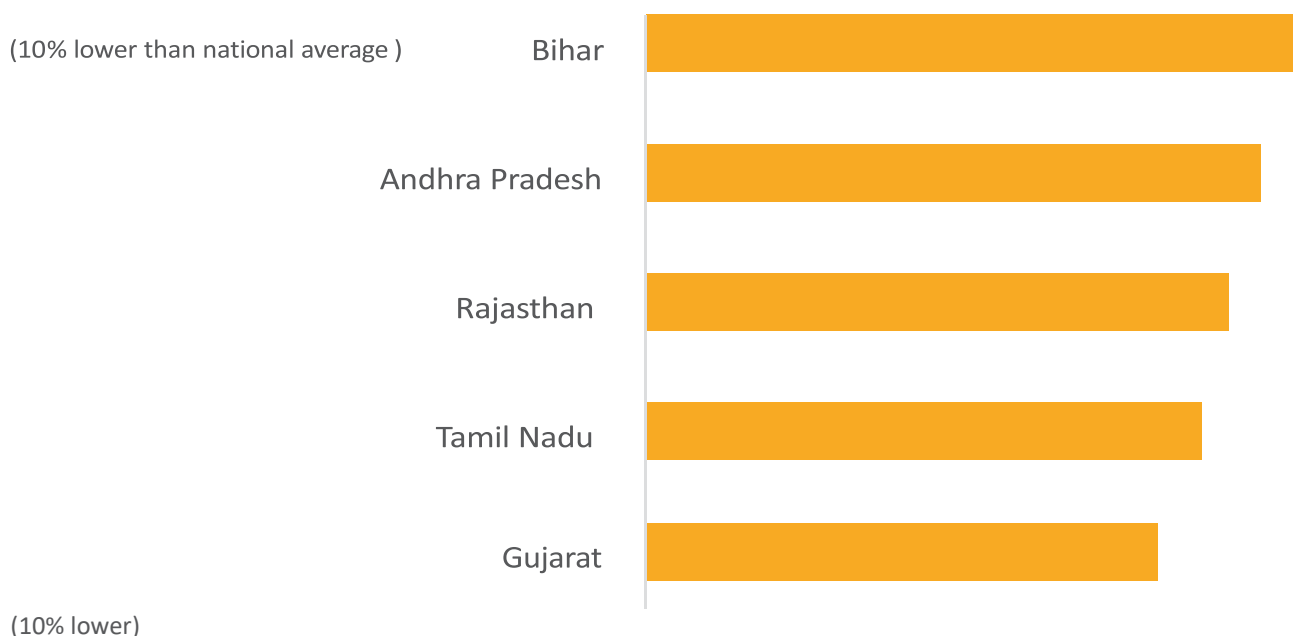
07

NUTRITION AWARENESS INDEX 2023

TOP 5 ranked states basis the national average



BOTTOM 5 ranked states basis the national average



(10% lower)

(8% lower)

(6% lower)

(6% lower)

DEEP DIVE INTO THE STATES OF THE NUTRITION AWARENESS INDEX 2023

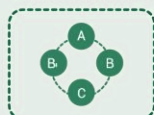
01

Punjab

Correctly identified as components of a Balanced Diet



Protein - 95%



Minerals - 88%



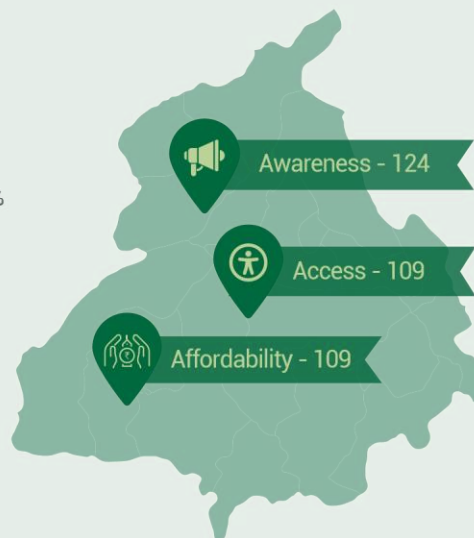
Carbohydrates - 85%



Vitamins - 95%



Fat - 62%



Punjab scores **11% higher** than the national average – this is an outcome of both higher levels of perceived affordability-access (**9% higher**) of different food groups and a relatively better awareness – in terms of the ability of people in this state to correctly identify foods (**24% better than average**). For instance, **79%** of people from Punjab identify eggs as a body building food, which is higher than other states such as Haryana (**61%**) and Gujarat (**59%**). Similarly, there is a higher recognition of milk as a protective food (**59%**) in Punjab which is higher than in states such as Bihar (**44%**) and Chhattisgarh (**45%**).

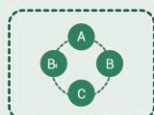
02

Karnataka

Correctly identified as components of a Balanced Diet



Protein - 98%



Minerals - 93%



Carbohydrates - 82%



Vitamins - 94%



Fat - 61%

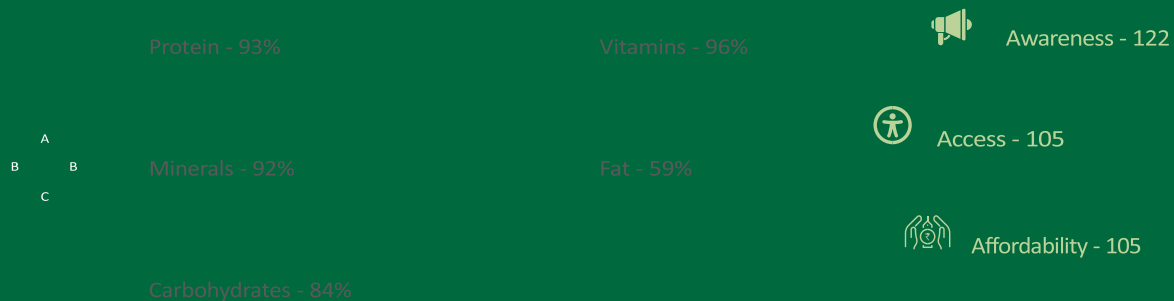


Karnataka is better placed than the average on both awareness and affordability-access. Participants from Karnataka correctly assessed vegetables and fruits as protective foods (**79%**) which is higher than some other states like Bihar (**59%**) or Odisha (**62%**). There is also notably higher recognition of millets as an energy rich (**37%**) than several other states like West Bengal (**20%**) and Odisha (**22%**).



Delhi

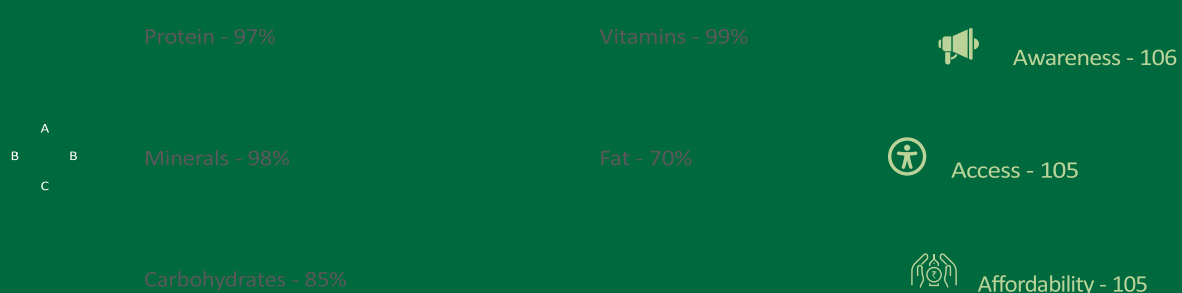
Correctly identified as components of a Balanced Diet



There is notable recognition of whole grain cereals (58%) and animal fats/vegetable oils (55%) as energy rich foods in Delhi. The recognition of meat as a protective food is also among the highest (41%) relative to other states.

Uttarakhand

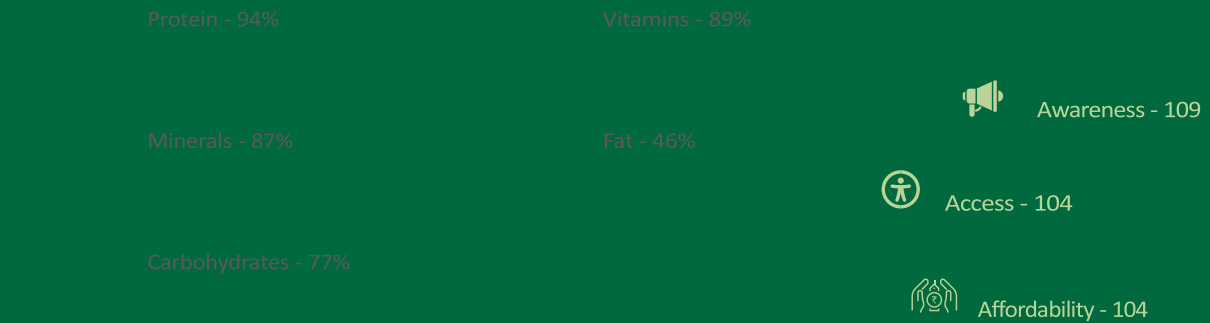
Correctly identified as components of a Balanced Diet



Uttarakhand has the highest recognition of fats as a part of a balanced diet (70%). Milk and milk products are identified as an energy rich source by 70% (which is also similar to levels observed in Uttar Pradesh (UP)-72% and Punjab-73%).

Assam

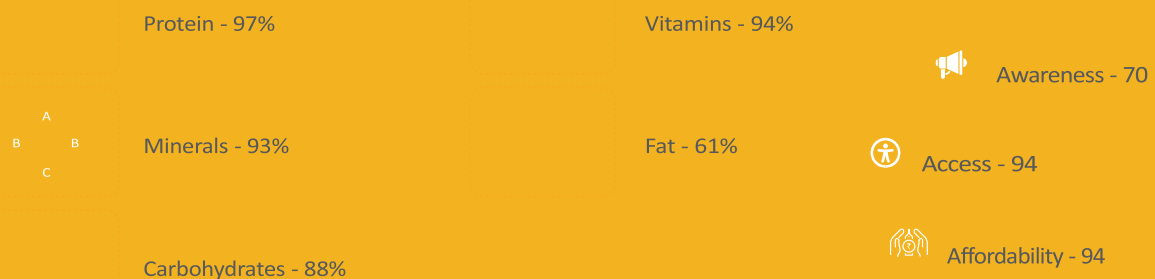
Correctly identified as components of a Balanced Diet



There is notable recognition of vegetables **(76%)** as a protective food and of flesh foods **(70%)** as sources of body building food in Assam.

Bihar

Correctly identified as components of a Balanced Diet



Bihar – Several other states like Punjab, Karnataka, Delhi etc. have higher recognition of whole grain cereals as energy rich sources than Bihar. Bihar also has the lowest recognition of nuts and oilseeds **(40%)** as an energy rich source.

02

Andhra Pradesh

Correctly identified as components of a Balanced Diet



Andhra Pradesh – Andhra Pradesh has the lowest recognition of pulses and legumes **(29%)** as body building foods. The identification of whole grain cereals and sugar and jaggery in Andhra Pradesh with energy rich foods is also observed to be the lowest among states.

03

Rajasthan

Correctly identified as components of a Balanced Diet



Rajasthan – The recognition of protective foods like eggs **(28%)**, vegetables **(60%)** and fruits **(60%)** are among the lowest of all states in Rajasthan.



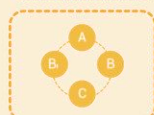
04

Tamil Nadu

Correctly identified as components of a Balanced Diet



Protein - 93%



Minerals - 82%



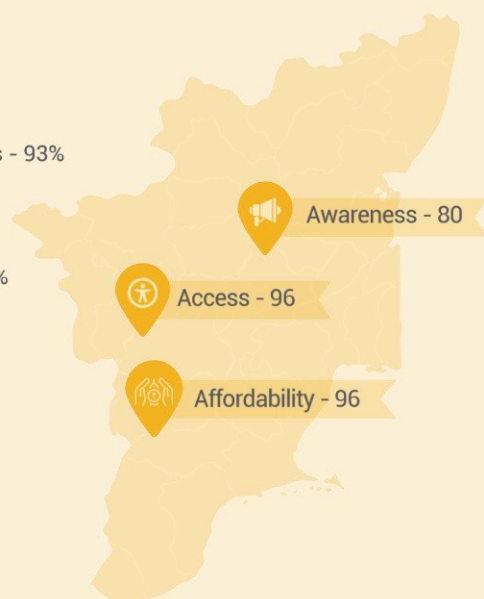
Carbohydrates - 70%



Vitamins - 93%



Fat - 56%



Tamil Nadu – The acknowledgement of nuts (**40%**) and milk (**52%**) as body building foods, sugar and jaggery (**21%**) as an energy source are relatively low in this state.

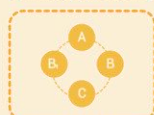
05

Gujarat

Correctly identified as components of a Balanced Diet



Protein - 86%



Minerals - 82%



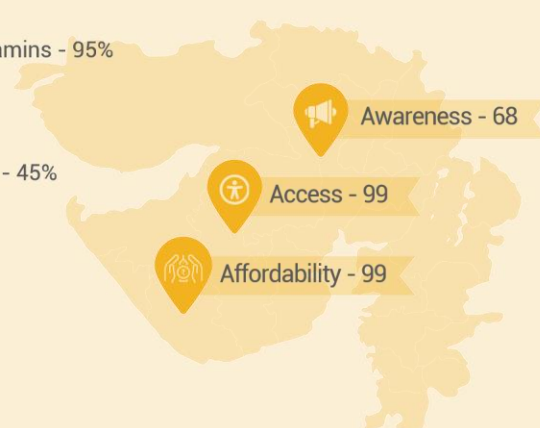
Carbohydrates - 69%



Vitamins - 95%



Fat - 45%



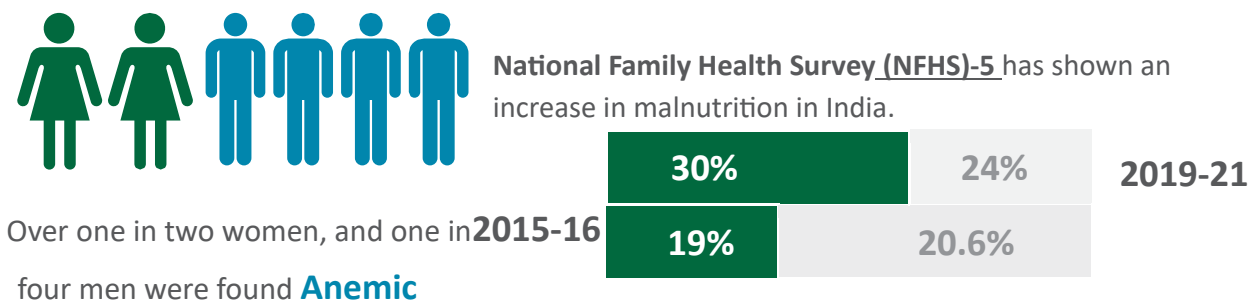
Gujarat – Awareness of body building foods seems to be particularly low in Gujarat with only **40%** acknowledging meat as a body building food. Around **51%** consider whole grain cereals as a body building food.

KEY INSIGHTS

A balanced diet is one which provides all the nutrients in required amounts and proper proportions. It can easily be achieved through a blend of the four basic food groups. The quantities of foods needed to meet the nutrient requirements vary with age, gender, physiological status, and physical activity. According to the National Institute of Nutrition ⁴, a balanced diet should provide around 50-60% of total calories from carbohydrates, preferably from complex carbohydrates, about 10-15% from proteins and 20-30% from both visible and invisible fat.



A balanced diet should consist of carbohydrates, proteins, fats, vitamins, and minerals in appropriate proportions. The National Family Health Survey (NFHS)-5 has shown an increase in malnutrition in India.



Of those surveyed, over one in two women and one in four men were found to be anemic. Further 30% of the men and 24% of the women surveyed were obese, up from 19% and 20.6% respectively in 2015-16, with more obese people in urban centers than in rural areas. Thus, it is essential that Indians eat a balanced diet, in addition to making other lifestyle changes to be healthy.

Consuming a balanced diet depends on three important levers:



1. Awareness

Creating a balanced diet requires an understanding of the proportions of various nutrients that need to be consumed daily. Furthermore, the citizen should also know the source of these nutrients; for example, what are the good sources of vitamins or what are vegetarian sources of proteins. Misidentification of nutrient sources can mislead the individual about the nutrient value that their food is providing.

The National Health Portal categorizes food based on its function :



Energy rich foods - (Carbohydrates and Fats)

Whole grain cereals, millets, vegetable oils, ghee, nuts and oilseeds and sugars.



Body building foods - (Proteins)

Pulses, nuts and oilseeds, milk and milk products, meat, fish and poultry.



Protective foods - (Vitamins and Minerals)

Green leafy vegetables, other vegetables, fruits, eggs, milk and milk products and flesh foods.

It is important to include all three types of food in appropriate quantities in one's diet.



2. Accessibility

Even if Indians are aware of their nutritional needs and sources of nutrients, they may not always have access to these sources. For example, goiter in northern parts of India is a well-known issue caused by a lack of access to iodine, which is normally found in seafood. The inclusion of iodized salt in the Indian diet through a national program has significantly reduced the incidence of goiter⁵. Similarly, there has been a strong emphasis on eating locally grown produce; however, with increasing urbanization and shrinking agricultural lands, getting access to good quality produce, particularly in urban centers is difficult. The urban working class may not get enough time to prepare and eat meals and may find it easier to order food or eat at outside eateries.



With increasing urbanization and shrinking agricultural lands, getting access to good quality produce, particularly in urban centers is difficult.



3. Affordability

Finally, those who are aware of and have access to nutrient sources might not be able to afford it.

810 million

people in India are being provided food through the public distribution system.

While the PDS is successful as one of the world's largest food distribution networks, its focus has been on food security, and not necessarily on nutritional security⁶. Thus, affording nutritious food is still a distant dream for many Indian families, but one that an aspirational India in the 75th year of independence should deliver.



Awareness Affordability Accessibility

The Nutrition Awareness Index 2023, therefore, sets out to assess the **awareness, affordability, and accessibility** of nutrition across 20 states in India, with the highest Gross Domestic Product (GDP)⁷ with representative population groups that highlight how different states perceive nutrition.

Here's what the Index found:



Nearly half of young Indians aged

(53%)



18-35 say access to nutrition is a challenge

Overall, ~70% of participants felt that they had access to nutritious food when and where they needed it. However, the data reveals that age co-relates with access and those of a younger age find it more difficult to access food when and where they need it. This is likely because 18–24-year-old participants may be away from home for educational or work purposes and may not have easy access to home-cooked, nutritious food. As people age and either form their own families or as their earnings increase, there seems to be better access or control over the availability of nutritious food. However, challenges in accessing nutritious food for young Indians should be a matter of serious concern.

Overall, 55% of those surveyed believe that they consume balanced meals. The 45% who were neutral or perceived that they didn't eat balanced meals cited high costs and lack of timely access as the top reasons for the inability to regularly eat nutritious food. In the age group of 18-35, this percentage increases up to 53% indicating a lack of access for India's younger population which form the backbone of the working population. This difficulty in accessing nutritious food in urban centers may also be a reason for the increased

obesity, as per NHFS surveys, in comparison to rural areas. Thus, eliminating access issues will be a key task for India's future nutritional security.

02

balanced meals

The findings of the analysis indicate an interesting trend. A significant portion, approximately **54% of the respondents, believe that they consume a well-balanced diet.** However, further examination reveals a concerning lack of awareness regarding nutritional sources among these individuals. This raises the possibility that a considerable number of the **54% who claim to have a balanced diet may not actually be practicing healthy eating habits.**

This discrepancy between perception and reality highlights the importance of education and awareness regarding nutrition. While people may believe they are making healthy choices, it is essential to bridge the gap between their perceptions and the actual nutritional value of their diets. By providing accurate information and promoting awareness, we can empower individuals to make informed choices and truly adopt a balanced and nourishing diet.

03

Over half of India is unaware of healthy fats

(54%)



When asked about the components of a balanced diet, there was a nearly universal acknowledgement of proteins, vitamins, and carbohydrates, but notably high levels of uncertainty over the inclusion of fats. Only 54% of participants agreed that fats are part of a balanced diet. This suggests that there is awareness of most components of a balanced diet, but reasonable doubt about fats. While avoiding eating fatty food to remain healthy is a popular notion, not all fats are bad for human health. Indeed, some fats are essential to maintain one's health, and their deficiency can result in disease⁸. There is therefore an opportunity to educate the public about the benefits of healthy fats and push for products that are sources of such fats.

04

unaware of the vegetarian sources of protein

Similarly, there appears to be confusion about the sources of protein - there is a good understanding of **milk, eggs, meat as a source of protein**, but confusion over vegetarian sources. There is a clear need to educate people about high-quality vegetarian protein sources such as pulses, soya, etc. Most respondents misconstrue fruits to be energy rich, while **85% of them did not identify with their protective nature indicating a further need for improved education.**

In summary, improvements can be made in all three aspects of nutrition - **increasing awareness, accessibility, and affordability**. This will ensure everyone is eating a balanced diet, a key determinant of a healthy population.

ACTIONABLE STEPS BASED ON FINDINGS & SUGGESTIONS

The findings show that all three underlying factors - awareness, accessibility, and affordability - can be further optimized in the Indian context. While most participants felt they were eating a balanced meal, the misidentification of nutrient sources and demographic data on accessibility suggest that more participants may not be consuming a balanced meal daily. Further, affordability seems to be a critical factor in obtaining a balanced diet.

A few suggestions for improvement that can be drawn based on the findings of this study:



EDUCATION ON BALANCED DIET

There must be an effort made to educate people about the nuances of good and bad dietary fat. Good dietary fat is still essential to one's diet and should be consumed appropriately. Particularly, the data reveals disparities across states in awareness of certain nutritional sources. Therefore, there is a need for a state-dependent awareness campaign to urgently improve and extend health and wellness programs by setting meaningful and quantifiable outcomes. It is also recommended to engage with a wide range of national and international stakeholders with specific expertise in nutrition-related topics during the design of their nutrition strategies, programs, and interventions, to maximize the positive impact on public health.



TRANSPARENCY IN LABELLING

Since there was confusion between matching nutrients and their sources, improved food labelling requirements may help enable balanced dietary intakes. This is particularly true for millet and vegetarian protein sources. Food and beverage manufacturers need to commit to providing comprehensive nutrition information on all product labels and commit to only using health and nutrition claims on products (including fortified foods) that are determined to be healthy by a relevant nutrient profiling system (NPS).



ACCESS TO NUTRITIOUS FOOD

This can be improved by reducing any information asymmetry in locating nutrient sources. A focused study on why younger age groups tend to find nutritious food inaccessible can help create policies to cater to this subsection of the population.



INCLUDING NUTRIENT-RICH FOOD IN PUBLIC DISTRIBUTION SYSTEMS

This can help change the mission for India from food security to nutritional security and can be a key driver of health for an aspirational India.



EMPHASIS ON 'BODY BUILDING' & 'IMMUNITY-BOOSTING' 'PROTECTIVE' FOODS

There needs to be a particular emphasis on the inclusion of body building and protective foods, as these seem to be the most unaffordable and inaccessible components of balanced diet.



POLICY ACTION ON ACCESSIBILITY & AFFORDABILITY

Adopting a clear policy on affordability and accessibility of balanced food products, by specifically addressing the needs of low-income consumers and/or those who lack physical access to nutritious food, across all markets, could be beneficial. The F&B industry can also support the policy initiatives with regular in-country analysis to identify and target consumers who are affected by socioeconomic inequities and other disparities. Action to ensure the accessibility of healthy food to these groups should be accompanied by an explanation of how the healthiness of products is based on objective nutrition criteria that align with international standards.

FURTHERING THE 'RIGHT TO PROTEIN'

As an awareness initiative, 'Right To Protein' has been working towards awareness on the role of protein in supporting good health, reducing malnutrition, and promoting sustainable development. With the Nutrition Awareness Index 2023, Right to Protein has taken a step towards identifying and addressing gap areas. In supporting the mission of protein awareness, the Nutrition Awareness Index by "Right To Protein" provides data-driven insights which will guide targeted campaigns, educational materials, and advocacy efforts. By highlighting the gaps and misconceptions surrounding protein, the initiative can now further contribute to a healthier and more informed society, aligning with its mission to raise awareness about the significance of protein in diets.

APPENDIX

Research Methodology

The survey was conducted using an online interview (~15 minutes long) administered in English to a sample from members of the YouGov India panel of nearly 200,000 individuals who have agreed to take part in surveys. The sample is largely representative of adult urban internet users (18 years of age and above), who can read and understand English and 80% of them belong to NCCS A. The results reflect the general responses of such an audience, which may or may not be in line with the actual awareness, affordability, or accessibility

levels of different types of foods in different states/regions. YouGov made every effort to provide representative information. However, all results are based on a sample survey and are therefore subject to the statistical errors normally associated with sampling. Further, care was taken while designing the survey instrument to minimize respondent bias. The questions were designed to avoid a leading tone, and respondents were given options such as “Don’t know/can’t say” and “Prefer not to answer” wherever necessary. Additionally, randomization and rotation were applied to options in most of the questions. Nevertheless, errors generally associated with self-administered survey methodology may still have applied.

12-15 minutes

Online interview
conducted by **YouGov**



Survey administered in **English**
to a sample from **YouGov India panel**
members who agreed to participate.



With a total of

2,063

participants,

the sample is largely representative
of **adult urban internet users**



18 years of age and above,
who can **read and understand English**
(and primarily NCCS A)

Demographic segmentation of the study by **Age**



Demographic segmentation of the study by **Gender**



Equal samples were taken from

20 Indian states

with the highest GDP in 2022,* ensuring
comparability of **data across states by applying**
demographic (age, gender) quota controls.



* Handbook of Statistics on Indian States

The overall approach: The primary focus of this study has been to have a look at how (people in) various states (the top 20 states based on GDP) of India are placed relative to each other in terms of awareness of and perceptions about functional categories. The overall sample size for this study was 2000, with a sample size of 100 per state. The below classification scheme was used to design a test to check people’s awareness of these three functional categories. Their perceptions of affordability and access to the same were also captured.

-
- Energy rich foods (Carbohydrates and fats) - Whole grain cereals, millets, vegetable oils, ghee, nuts, oilseeds, and sugars.
 - Body building foods (Proteins) - Pulses, nuts and oilseeds, milk and milk products, meat, fish, eggs, - and poultry.
 - Protective foods (Vitamins and minerals) - Green leafy vegetables, other vegetables, fruits, eggs, milk and milk products and flesh foods.

The Awareness test involved multiple-choice questions for each of the categories, with correct answers as per the above scheme rewarded and any others identified penalized with negative marks. The final average scores for each of the 20 states were used to compute an overall urban national average. Each state's contribution to the overall national urban average has been weighted/corrected for the state's contribution to the overall national urban population as per Census 2011 data. This overall urban national average score was used as a benchmark to index the scores of the states to derive an awareness index.

The affordability-access index scores for states involve perception questions on affordability and access for each of the three functional categories, averaged for each respondent. Like the awareness index, average data for states is derived and then an overall national average score is derived from the same and used as a benchmark to index the scores of the states to derive the affordability-access index. It is important to note affordability and access have only been measured from a consumer perception, claimed self-assessment standpoint in this online-only, self-administered survey. These should not be expected to be reflections of actual expenses/budget allocated to various categories/groups and just reflect their opinion of these groups of foods.

ABOUT YUGOV

YouGov is an international online research data and analytics technology group. Our mission is to offer unparalleled insight into what the world thinks. Our innovative solutions help the world's most recognized brands, media owners and agencies to plan, activate and track their marketing activities better. With operations in the UK, the Americas, Europe, the Middle East, India, and Asia Pacific, we have one of the world's largest research networks.

At the core of our platform is an ever-growing source of consumer data that has been amassed over our twenty years of operation. We call it Living Data. All of our products and services draw upon this detailed understanding of our 24+ million registered panel members to deliver accurate, actionable consumer insights. As innovators and pioneers of online market research, we have a strong reputation as a trusted source of accurate data and insights. Testament to this, YouGov data is regularly referenced by the global press, and we are the most quoted market research source in the world.

ABOUT RIGHT TO PROTEIN

Right To Protein is an awareness campaign to educate people about the importance of adequate protein consumption for better nutrition, health, and wellbeing. The campaign aspires to build public knowledge of different types of protein sources, to meet larger nutritional security goals. Right To Protein is supported by several like-minded organisations, institutions, academicians, professionals, and individuals. The campaign is exclusively driven by the U.S. Soybean Export Council (USSEC).

As a protein awareness campaign, 'Right To Protein' emphasizes the role of protein in supporting good health, reducing malnutrition, and promoting sustainable development. Right to Protein campaign also aims to encourage governments, businesses, and other organizations to prioritize protein production, distribution, and consumption in their policies and practices. This can include promoting sustainable agriculture and animal husbandry practices, supporting research and development in the field of protein science, and ensuring that people have access to a variety of affordable and nutritious protein sources. The campaign also raises awareness about the global burden of protein deficiency, a significant public health concern, particularly in developing nations. By promoting the Right to Protein, the goal is to improve nutrition security to improve health outcomes, reduce poverty and hunger, and support sustainable development.

The initiative is open for those who would like to join and/or contribute to any capacity, including providing knowledge, technical support or as promotion partners. If you share our vision, reach out to us via our social channels to know how you can help.



Contact us on: righttoprotein@gmail.com
www.righttoprotein.com



Social media handles



SOURCES & REFERENCES

¹<https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21417> ²<https://www.india.gov.in/national-health-portal?page=1>

³<https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21417>

⁴<https://www.nin.res.in/downloads/DietaryGuidelinesforNINwebsite.pdf>

⁵<https://www.nature.com/articles/ejcn2013119>

⁶<https://www.outlookindia.com/national/pds-from-food-security-to-nutrition-security-news-192976>

⁷<https://www.findeasy.in/top-indian-states-by-gdp/#:~:text=Among%20south%20Indian%20states%2C%20Telangana,GDP%20per%20capita%20at%20%243137.>

⁸<https://www.healthline.com/health/fat-deficiency> *

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