QUAKER.



BUILDING A HEALTHIER TOMORROW



A report on India's awareness of malnutrition and Quaker's mission to address the issue



JAGRUT KOTECHA

CEO, PepsiCo India and South Asia

At PepsiCo India, our unwavering commitment to fostering healthier communities is embodied in our guiding principle of "Unnati Ki Sajhedari" (Partnership of Progress). We firmly believe in the power of collaboration and partnership to create a brighter, more prosperous future. Through our brand Quaker, we are dedicated to promoting balanced nutrition to support an active lifestyle for all.

Malnutrition remains a formidable challenge in India, affecting millions of children and posing significant barriers to their physical growth, development, and overall well-being. In response to this critical issue, we launched the first phase of Quaker 'Bowl of Growth' program, an initiative aimed at improving nutrition, raising awareness, and providing essential education in Pune, Maharashtra.

The Quaker 'Bowl of Growth' program is a reflection of our commitments under the Positive Choices pillar of pep+ (PepsiCo Positive), which focuses on offering better nutrition and fostering healthy habits. This initiative reflects PepsiCo's global pledge to support underserved communities, underscoring our dedication to creating a sustainable future.

Looking ahead, we are excited about the potential to expand this program, reaching more communities and children in need. Our dedication to enhancing health and well-being remains steadfast, and we will continue to leverage consumer insights and holistic interventions to improve health outcomes.

Through Quaker and our broader pep+ framework, PepsiCo India is devoted to making choices that benefit both people and our planet. We are proud of the progress we have made and remain deeply committed to supporting the health and prosperity of communities across India.



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STATE OF MALNUTRITION IN INDIA

Nearly half of the world's malnourished children (suffering from wasting) under 5 years of age are in India



Top three states in India with high prevalence of Malnutrition



Maharashtra ~26%



Gujarat ~25%



Bihar

~23%

Wasting figures were used to denote malnourishment.

^21.8 million lives threatened by wasting in India (children under 5) as per UNICEF/WHO/World Bank Group – Joint Child Malnutrition Estimates 2023 edition; *National Family Health Survey - 5 (2019-2021)

UNDERSTANDING MALNUTRITION

Undernutrition (a type of malnutrition) refers to deficiencies or imbalances in a person's intake of energy and/or nutrients

TYPES OF UNDERNUTRITION







Stunting

Means a child is too short for their age, indicating persistent undernutrition.

Wasting

Means a child is too thin for their height, indicating acute undernutrition.

Underweight

Means a child is low weight for their age.

35% children are affected in India*

19% children are affected in India*

32% children are affected in India*

DR. AVULA LAXMAIAH

Former Senior Scientist, National Institute of Nutrition

Malnutrition among children is a major public health problem. The key causes of malnutrition may include insufficient access to and availability of nutritious foods, which are influenced by many factors, like poverty, food insecurity, lack of education, and ignorance. The low and middle-income countries bear the high burden of undernutrition. As per the WHO Report 2022, 149 million children under five were estimated to be stunted (too short for age), and 45 million were estimated to be wasted globally. India alone contributes one-third of stunted children and half of the wasted children to the global burden of undernutrition. Nearly half of the deaths among children under five years of age are linked to undernutrition. Generally, many people think that a full-plate meal can provide a balance of nutritious food, but even after consuming a full meal, the children show some nutritional deficiencies. It is a fact that just consuming a full meal will not provide balanced nutrients, especially for children.

Therefore, providing a diverse and balanced diet is very important for young children's growth and development. It is very important to address malnutrition with short-term measures like the provision of single or multiple micronutrient supplementation and in the long-term measures, it is essential to promote nutrition literacy, improve the purchasing power of families, and the availability and accessibility of nutritious food at affordable costs for all sections of the population.



AN EFFORT TO UNDERSTAND AWARENESS & ATTITUDES TOWARDS MALNUTRITION IN INDIA

Findings from Quaker & Indian Institute of Millets Research (IIMR)*



CONSUMER PROFILE & GEOGRAPHIC COVERAGE

Gender

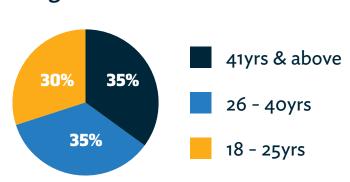


50%

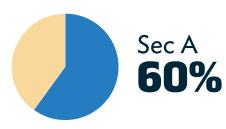


50%

Age



Socio-Economic Classification





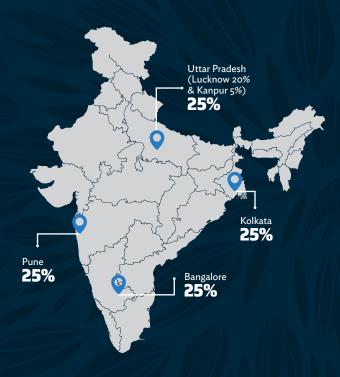
Graduate/

postgraduate:

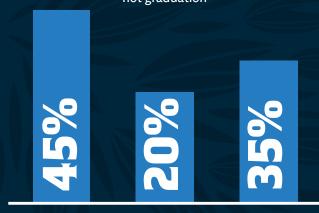
general or

professional

Location Education levels of respondents



College or vocational course (including Diploma) but not graduation Senior school certificate/ higher school certificate



*A report compiled by Euromonitor International for PepsiCo India Holdings Pvt. Ltd.Duration: July-Sept 2023 | Survey size: ~1000 |
Age group: 18 yrs – 41 yrs & above | Geographic Coverage: Pune, Bangalore, Kolkata, Uttar Pradesh





















68% RESPONDENTS

believe low income/poverty is key causes for malnutrition

68%
Low income/
poverty

68%Poor quality of diet

66%
Insufficient
access to food

60%Poor sanitation

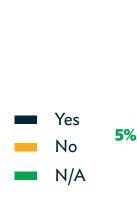
57% Inadequate health services

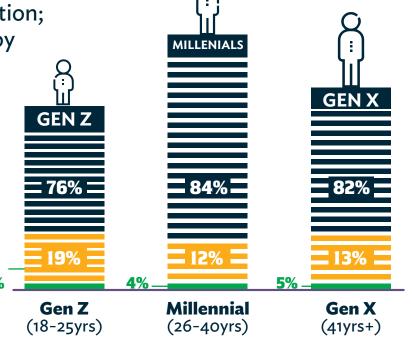
81% RESPONDENTS

showed concern regarding long-term effects of malnutrition; with higher concerns shown by Millennials & Gen X among all age groups

ACROSS AGE GROUPS

N: Gen Z=300; Millennial= 352; Gen X=352





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Kolkata, Uttar Pradesh

WHAT'S THE SOLUTION?
90%
RESPONDENTS

believe it is the responsibility of the country & its citizens to help address malnutrition as an issue



~80%

of respondents believe that malnutrition can be reversed if corrective measures are taken at an appropriate age.





~70%

of respondents believe educating people and raising awareness about the issue are the top ways to contribute in addressing a social cause.

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CAN MALNUTRITION BE REVERSED?

It is important to recognize that malnutrition is preventable and treatable. Therefore, there is an urgent need to have mechanisms in place for early detection of growth faltering and for taking corrective measures before the child progresses to severe grades of malnutrition.

Inadequate nutrition and repeated bouts of infection during the first 1000 days of a child's life can cause stunting, which has irreversible long-term effects on physical & mental development of children.

Consequently, early identification & management is crucial to stop malnutrition from becoming severe – leading to irreversible damage.*



https://www.who.int/publications/i/item/WHO-NMH-NHD-14.3; https://www.niti.gov.in/sites/default/files/2023-12/CMAM-report-NITI-Aayog.pdf

QUAKER

'BOWLOF GROWTH'

PROGRAM



C.D. GLIN

President of the PepsiCo Foundation & Global Head of Social Impact for PepsiCo

At the PepsiCo Foundation, we feed the potential of our communities and work in close collaboration with local partners to help combat food insecurity worldwide. Our efforts include delivering meals, helping food banks strengthen their operations, nd supporting farmers with regenerative and sustainable agriculture training. Food security is a global issue that demands innovative and adaptable solutions.

Building upon the learnings from a similar, successful program with malnourished children in Mexico, we partnered with Mamta HIMC to improve access to childhood nutrition in Maharashtra. Through this collaboration, we are making a significant impact on the health and well-being of children, ensuring they received the essential nutrients required for their growth and development.

By addressing food insecurity at a local level, we aim to help create sustainable and long-lasting change in the communities we serve.

QUAKER 'BOWL OF GROWTH'



PROGRAM OVERVIEW

A HOLISTIC PROGRAM TARGETTING MALNOURISHED CHILDREN FOCUSING ON 3 PILLARS

Nutrition*



Nutrition needs are addressed through 'Panjiri', a locally inspired

recipe for mildly malnourished children. It is crafted with Quaker Multigrain & Millet, specially designed to be enriched with 18 essential vitamins and minerals, ensuring it is both nutritious and tasty.

Awareness



Awareness is enhanced through specially curated thematic

engagement
sessions for children and
their parents/ caregivers.
These sessions aim to
disseminate and reinforce
key messages regarding the
significance of wholesome
nutrition, the role of millets
in a balanced diet, and the
prevention of malnutrition.
Additionally, a program
video was launched to
create awareness about
malnutrition and its impact
on communities.

Education



Education is advanced through structured workshops, which

are conducted daily, exerting a positive influence on thequality of life for both children and their caregivers. Complementing these efforts, Information, Education, and Communication (IEC) materials in the form of posters, leaflets, flipbooks, and an illustrated comic book have been introduced. This comic book serves as a tool to depict the importance of wholesome nutrition and further educate the community on maintaining a balanced diet.

*Quaker Multigrain & Millet is a part of Quaker Bowl of Growth initiative, to provide nutrition to children aged 3-5 years only. Does not claim to provide nutrition to infants. Not for commercial sale.

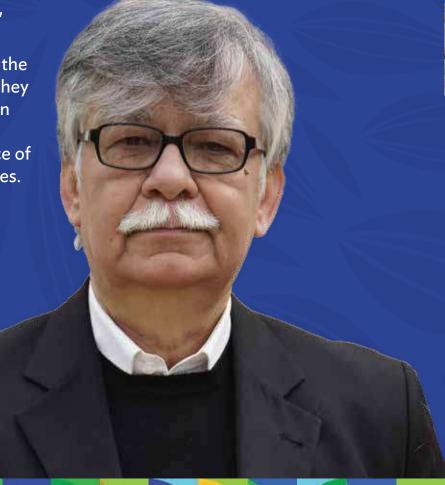
DR. SUNIL MEHRA

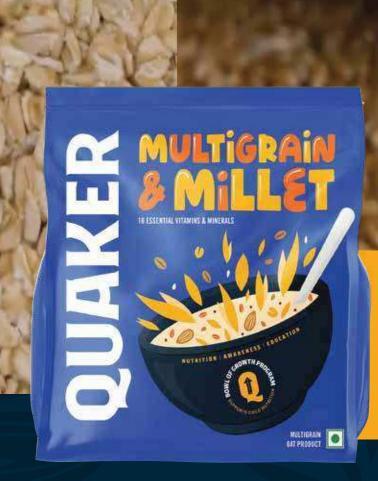
Executive Director, MAMTA - HIMC

Malnutrition is a critical challenge affecting millions in our country, with severe consequences for entire nation. This deep-rooted and complex issue requires robust, comprehensive solutions that address both immediate needs and long-term health of the communities.

At MAMTA, we are committed to strengthening public health, so we understand the necessity of nutrient-based interventions to create lasting change on a scale. Programs like the 'Bowl of Growth' are crucial because they take a multifaceted approach to address the root causes of malnutrition since they not only provide nutritious solution but also educate children and communities about the importance of balanced diets and healthy lifestyles.

Through 'Bowl of Growth' we raise awareness and offer practical solutions, empower families to make healthier choices which have a lasting impact on children's health and development. Thus, we believe nutrition-based programs build a foundation for long-term health and prosperity. By prioritizing these interventions, we can help communities break the vicious cycle of malnutrition so as to achieve their full potential.





WE CREATED A **SPECIALIZED QUAKER PRODUCT**

A NUTRITIOUS MIX OF GRAINS







WHEAT



BARLEY



S VITAMINS & MINERALS

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DR. B DAYAKAR RAO

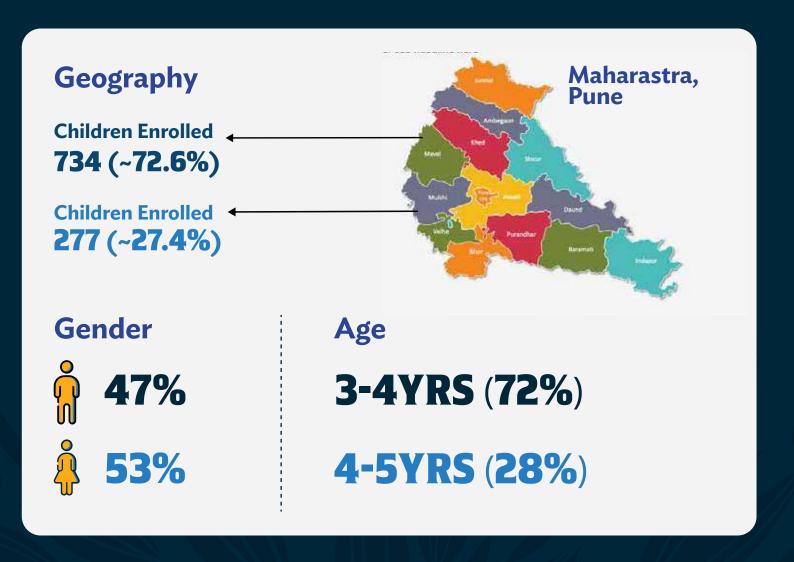
CEO Nutrihub, India Council of Agricultural Research-Indian Institute of Millets Research

At the Nutrihub, ICAR-Indian Institute of Millets Research (IIMR), we recognize the profound importance of millets in our diet. Millets are highly nutritious grains, packed with essential nutrients such as fibre, protein, vitamins, and minerals and their health benefits are extensive. As a sustainable alternative, millets play a significant role in addressing nutrition and food security issues, making them a vital component of a balanced diet. Additionally, their resilience to adverse climatic conditions also makes them an environmentally friendly choice, contributing to sustainable agricultural practices. Initiatives that promote millet consumption are crucial for enhancing public health and nutrition.

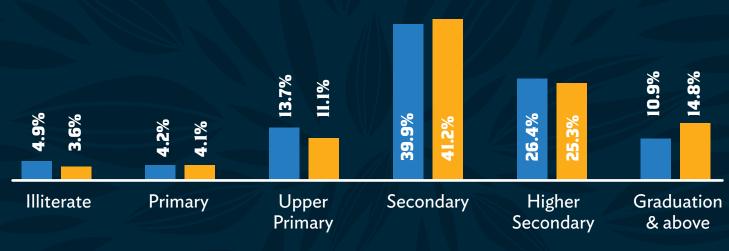
By raising awareness and encouraging the inclusion of millets in daily diets, we can make significant strides towards combating malnutrition and ensuring food security for future generations. We commend Quaker for their innovative approach to combating malnutrition in children. By developing a specialized multigrain product that combines oats, wheat, barley, and ragi, Quaker is making significant strides in providing essential nutrients to children. This product not only delivers the nutritional benefits of multiple grains but also aligns with the traditional 'Panjiri' recipe, which is locally relevant and widely accepted by both children and caregivers. This thoughtful integration ensures that children receive the right nutrition in a familiar and culturally appropriate format, supporting their growth and development effectively.



SAMPLE POPULATION: GEOGRAPHY & DEMOGRAPHICS



EDUCATION LEVEL OF PARENTS



EDUCATION LEVELS OF MOTHER

EDUCATION LEVELS OF FATHER

METHODOLOGY

A real-world study to address malnutrition in 3-5 years children (N=1000) in rural communities of Pune, Maharashtra

ORGANOLEPTIC & ACCEPTABILITY TRIAL



Organoleptic Trial (n=109)

Acceptability Trial (n=150)

MEDICAL SCREENING



Criteria: Mildly
Malnourished, 3-5 yrs
[z-score (WHZ)
between -1 and -2 &
at-risk Mid Upper Arm
Circumference values]
(n=2616)

PRODUCT INTERVENTION PHASE (6 MONTHS)



Provided specialized Quaker product in a local recipe format -'Panjiri' (n=1011)

Regular compliance monitoring, mid-line (3 Mth) & endline (6 Mth) anthropometric evaluations



EDUCATION AND AWARENESS



HEALTH EDUCATORS TRAINING

Health workers training



EDUCATION SESSIONS

Monthly education & engagement sessions for mothers/caregivers & children



ASSESSMENTS

Pre and post session knowledge assessment through questionnaires

DR. M.P. TAMBE

BJ Government Medical College

Proper nutrition is essential for the physical growth, cognitive development, and overall well-being of children. Malnutrition, caused by inadequate nutrient intake, can lead to severe health issues like stunted growth, weakened immunity, and impaired cognitive function. However, early intervention is crucial as it can reverse malnutrition and prevent long-term health consequences, supporting a child's full potential.

Nutrition-focused initiatives are vital for child health, providing relief from malnutrition and educating communities on balanced diets and healthy eating. The 'Bowl of Growth' program exemplifies the impact of collaborative efforts in addressing this issue and promoting healthier futures.

The BJ Government Medical College provided technical expertise, ensuring scientifically sound and effective interventions.

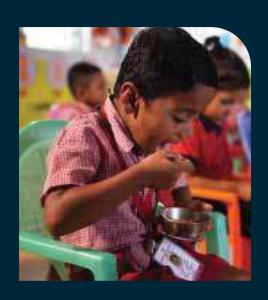
By prioritizing prevention, treatment, education, and awareness, this program demonstrates how we can empower families to make positive choices for their children's health, leading to healthier and more prosperous communities.



INTERVENTION IMPACT:

ACHIEVING MEANINGFUL IMPROVEMENTS

HIGH ADHERENCE - CHILDREN LOVED THE PANJIRI



~98%

of the children consistently ate at least three-quarters of the **Panjiri made** with 'Quaker Multigrain & Millet' on 60% or more of the days.

"My child had developed a strong preference for 'Panjiri', demanding it every morning and evening.
Convincing him was very challenging. Since started eating 'Panjiri', my child has not fallen ill.
He has become very active.
MAMTA-HIMC team has done a good job."

Ms. Shweta WagholeBeneficiary's Mother



INTERVENTION IMPACT

ACHIEVING MEANINGFUL IMPROVEMENTS

IMPROVED GROWTH PARAMETERS



~89%

of children in the program experienced improved or stable growth parameters

"The weight and height of my child have been increased since he is eating 'Panjiri'. His appetite has also improved. He has become very active now. Thank you MAMTA-HIMC for providing the 'Panjiri'."

Ms. Arati Waghmare - the mother of Aaditya Uttam Waghmare, AWC- Sakhar Karkhana, Bit- Mulshi

"My son Shri has been regularly consuming 'Panjiri' which has resulted in improved weight, physical activity and appetite. Thank you MAMTA HIMC"

Mr. Kishor Vitthal Divekar - the father of Shri Kishor Divekar, AWC- Nane 1, Bit- Nane



INCREASE IN KNOWLEDGE



SMARTER MOTHERS & CAREGIVERS, HEALTHIER FAMILIES:

Knowledge and behaviour measures improved dramatically; 21% of caregivers reporting good knowledge of hygiene & nutrition at the beginning of the program, increasing to 97% at the end

"The children enjoyed the taste of 'Pan Showed positive results. We also conduct awareness sessions and engagement action parents at the centre, establishing a unicommunity committed to our children's Monthly anthropometric measurement track the children's progress. I am deligious children transitioning from mild malnut to normal category due to positive impact of the

Colors on n Colors on my Plate

Finger Printing



intervel MAMT

Ms. Sa Angany Rajpuri

Recipe Demo



Diet Diversity Talk



Experience Sharin



IMPACT OF EDUCATION AND ENGAGEMENT SESSIONS

Mothers & caregivers are making a difference:







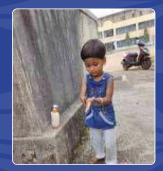
95.6%

of mothers & caregivers reported their children have a better appetite now

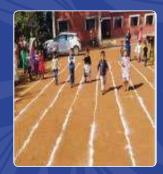
83.6%

mothers & caregivers started including millets in their child's diet **75.4%**

mothers & caregivers are now regularly monitoring their child's growth



Handwashing



Physical Activity



Recipe Demo



Diet Diversity Talk



No Fire Cooking



Experience Sharing

MR. JAMSING GIRASE

Deputy Chief Executive Officer, ICDS

The Zilha Parishad (ZP) Pune is dedicated to enhancing public health through solid government nutrition programs. These programs address malnutrition and promote healthy lifestyles for all, especially vulnerable populations. Zilha Parishad, Pune, implements essential programs such as Anganwadi Services for early childhood care and nutrition, the Integrated Child Development Services (ICDS) Scheme for comprehensive child development, and POSHAN Abhiyan for improving nutritional outcomes across various age groups.

In addition to these programs, we collaborated with the PepsiCo Foundation and MAMTA on the successful 'Bowl of Growth' program. This initiative addressed the needs of mildly malnourished children aged 3-5 years in Mawal and Mulshi blocks in Pune. The program provided daily servings of a nutritious supplement called 'Panjiri' to combat deficiencies commonly found in mildly malnourished children.

It also emphasized educating and raising awareness among parents about the importance of balanced nutrition for their children's growth and development.

The program's emphasis significantly improved the nutritional status of participating children, showcasing the effectiveness of a holistic approach to combating childhood malnutrition. By prioritizing government nutrition programs and successful initiatives like 'Bowl of Growth', Zilha Parishad Pune is confident in building a healthier and more prosperous future for the community.



A VISION FOR FUELING THE FUTURE

Quaker 'Bowl of Growth' Program brings

'FUEL THE FUTURE'

India's one of the first-ever social impact campus competition















'FUEL THE FUTURE' aims to bridge the malnutrition awareness and education gap in communities and bring a difference in their lives.

Quaker, a brand that stands for nutrition, aims to bring the young minds of India's Nutrition and Allied Science College students to be the changemakers, drive awareness and educate communities about malnutrition (undernutrition).

APPRECIATING OUR PARTNERS

We extend our gratitude to all partners of Quaker 'Bowl of Growth' Program



MAMTA-HIMC



ICDS, GOVT OF MAHARASHTRA



ZILHA PARISHAD



B J Government Medical College



We Feed Potential

PEPSICO FOUNDATION



POSHAN RIGHT, TOH FUTURE BRIGHT Message from our leader,

DR. PIETRO ANTONIO TATARANNI

MD, Chief Medical Officer & Senior Vice President, Life Sciences, PepsiCo

Malnutrition remains one of the most pressing global challenges, severely affecting children's growth, development, and overall health. Inadequate nutrition leads to stunted growth, cognitive impairments, and increased disease susceptibility, and can have a lasting impact on children & communities.

Addressing this issue requires a multi-faceted approach, including immediate nutritional interventions and long-term strategies to improve food security, education, and healthcare access. Collaborative efforts are essential to combat malnutrition and ensure a healthier future for all children.

We remain resolute in our ambitions for global food and nutrition security and are already executing programs aiming to address this issue. The 'Bowl of Growth' program is one such important step in our efforts with Quaker to support underserved communities in India through education and awareness of the issue of malnutrition, along with the importance of millet and other critical nutrients in a child's diet. By leveraging the nutritional power of millets and other grains, we aim to provide essential vitamins and minerals; while providing education and raising awareness, to support children's growth and development. Together, we can strive to build a brighter and healthier future for all.



'POSHAN RIGHT' TOH FUTURE BRIGHT'



EVERY CHILD DESERVES A NOURISHING START



NUTRITION | AWARENESS | EDUCATION

