

# MAHARASHTRA ENDLINE REPORT

NOURISHING SCHOOLS  
INDIA

August 2020

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# NOURISHING SCHOOLS

## ABOUT NOURISHING SCHOOLS FOUNDATION

Nourishing Schools Foundation's mission is to help children take charge of tackling malnutrition.

In partnership with various organisations, we have worked with over 230 schools in India on this, reaching over 60,000 children in Maharashtra, Rajasthan, Assam and Tamil Nadu. We have also collaborated with governments, such as the Government of Rajasthan and the Central Government's Eat Right India initiative.

Our intervention aims to develop young changemakers aged between 9-14 years who can take charge of improving their own and their communities' nutrition.

We provide toolkits to schools with games and activities for children between 4th to 9th grade. These activities help children learn about nutrition and how they can improve it e.g. by managing school gardens to access a diverse source of nutrients or building a handwashing station to prevent diarrhoea. Over two cycles of engaging with the toolkit, children solve problems in their schools and communities related to nutrition.



# OVERVIEW

## PROGRAMME CYCLE

Through partner organisations, the Nourishing Schools Foundation leverages schools as a hub to improve the nutrition of families and communities. The diagram below outlines the process that we follow with all the schools that we partner with for the programme.



## SURVEY METHODOLOGY

The sample size for this impact assessment consisted of 471 students who are studying in standards between 4th to 9th grade. These children are from 14 schools across three districts - Pune, Satara, and Sangli in Maharashtra, India. A random sampling method was used to determine the children who will participate in this study. A maximum of 20 students were chosen from each standard (i.e. 4th to 9th standard). Therefore from any given school, provided they have all the six standards, there were a maximum of 120 students chosen for the baseline survey. If it is a single-gendered school (i.e. only girls or only boys), then it will be 20 girls or boys from each standard. If it is co-educational, then it will be a maximum of 10 girls and 10 boys from each standard. The subsequent surveys (midline and endline) were conducted with the same students that were part of the baseline survey.

This report showcases the results of a complete programme cycle conducted with our partner Lend-A-Hand India (LAHI).

Lend-A-Hand India plays a vital role in making school education practical and relevant by partnering with grassroots non-profit organizations and local governments to provide job/life skills training, career counselling, and bridge loans for budding entrepreneurs starting their micro-enterprises. They aim for resource-poor youth to realize their full employment and entrepreneurial potential. Co-founded by Sunanda Mane, LAHI reaches over 800,000 young boys and girls across 8500+ schools in 23 states and union territories across India. Nourishing Schools has partnered with Lend-A-Hand India for developing and rolling out the toolkit.

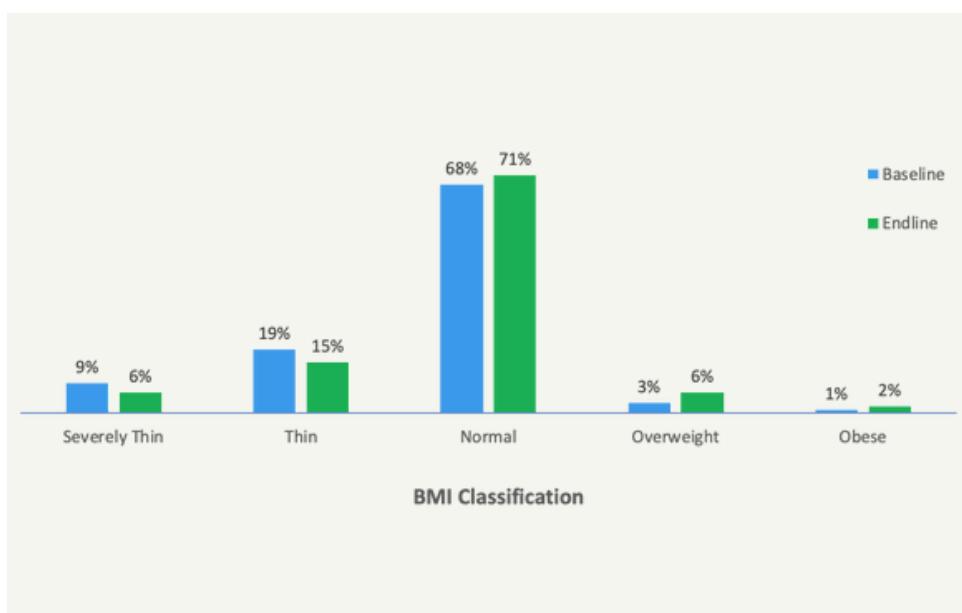


# KEY RESULTS

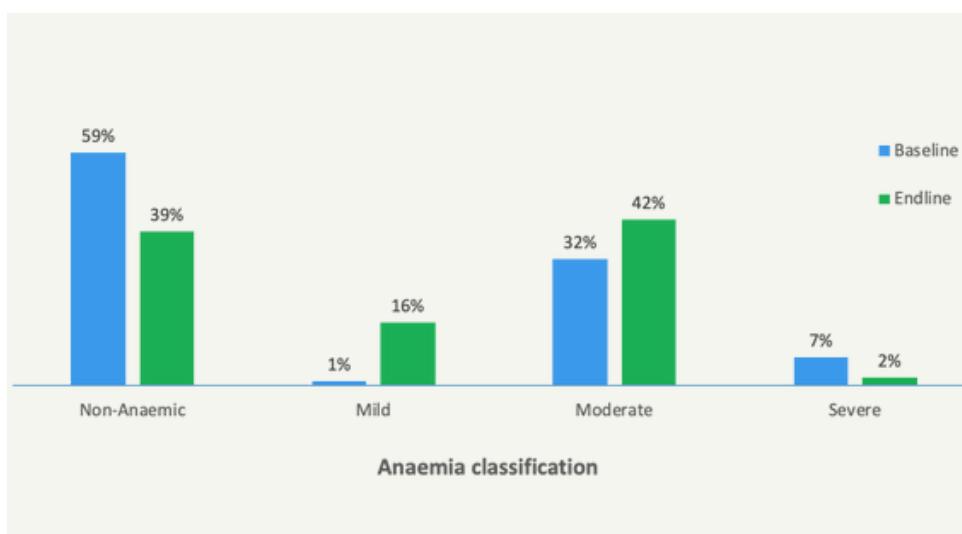
Nourishing Schools Foundation and Lend-A-Hand India (LAHI) conducted the endline survey in 14 schools across three districts, viz. Pune, Satara, and Sangli in Maharashtra (completed in July 2018). Results from this survey are compared with the results from the midline survey (completed in August 2016) and the baseline survey (completed in July 2014) before the introduction of the Nourishing Schools toolkit. Findings from 471 students covered in the second midline survey were compared with the same 471 students covered in the baseline survey.

The results shown below are changes observed between the baseline and endline survey.

## Nutritional Status



The two growing concerns especially with adolescents in India are undernourishment, and more recently, obesity<sup>1</sup>. The results in the chart on the left show an improvement in undernourishment. There is an overall increase in the percentage of children who fall in the normal Body Mass Index (BMI) category and a reduction in the percentage of children who are in the thin and severely thin categories. However, the percentage of children who are overweight and obese has doubled indicating the need for changes in their lifestyle.



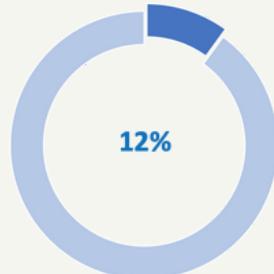
Despite policy changes and programme interventions, 53.0% of women and 22.7% of men aged between 15-49 years are anaemic in India. This chart shows the changes in anaemia levels in school children. While there is a 5% reduction in children who are severely anaemic, there is an overall increase in the percentage of students who are mildly and moderately anaemic. Assuming this is not tied to a medical condition, there are simple dietary practices that the toolkit recommends to children for a healthy lifestyle.

1. Adolescent Nutrition - Investing in an age of opportunity to break cycles of poverty and inequity  
<https://www.unicef.org/india/what-we-do/adolescent-nutrition>

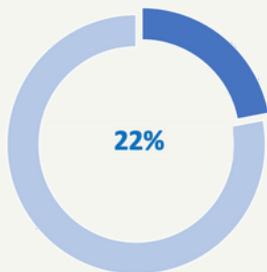
2. Ibid.

# KEY RESULTS

## Diet



Decrease in  
students who eat  
snacks 5-6 times  
outside of school

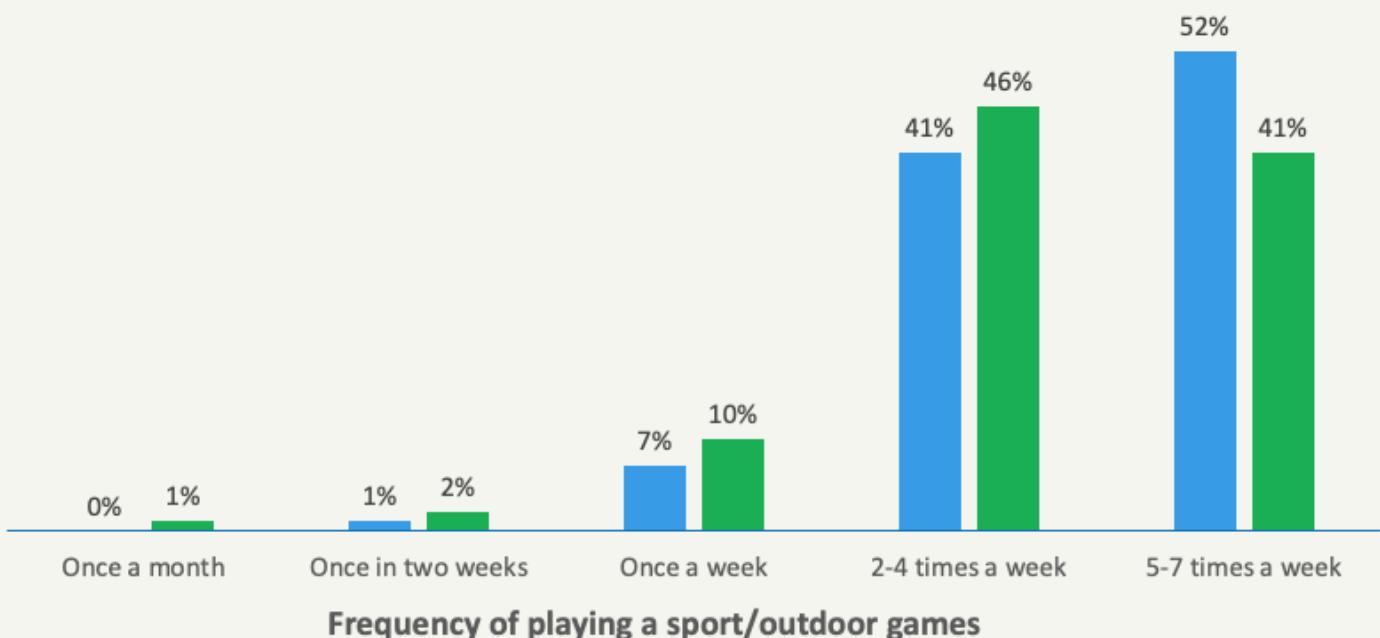


Increase in  
students who  
consume local  
herbs and greens

Note - The chart on the right represents the change after one cycle of exposure to the toolkit (i.e. from midline to endline)

## Physical Activity

■ Baseline  
■ Endline



Children and youth aged 5-17 should accumulate at least 60 minutes of moderate-to vigorous-intensity physical activity daily to improve cardiorespiratory and muscular fitness, bone health, and cardiovascular and metabolic health biomarkers.<sup>3</sup> This graph covers a subset of physical activity - the frequency of children playing outdoor games or a sport. The results show a consistent increase in the frequency at which children are playing sport or outdoor games across most categories, but also exhibit an 11% decrease in school children who are playing sport/outdoor games 5-7 times a week. The reasons for this should be explored with our partner schools.

3. Global Strategy on Diet, Physical Activity and Health- Physical activity and young people  
[https://www.who.int/dietphysicalactivity/factsheet\\_young\\_people/en/](https://www.who.int/dietphysicalactivity/factsheet_young_people/en/)

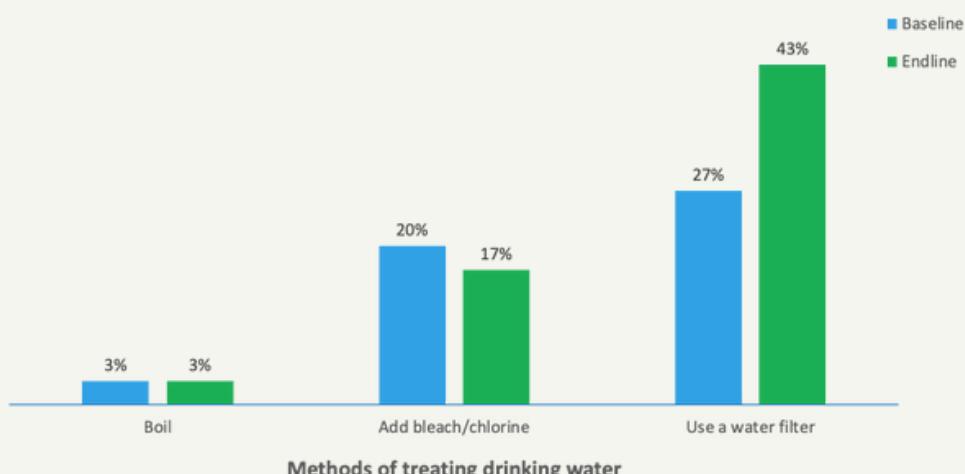


# KEY RESULTS

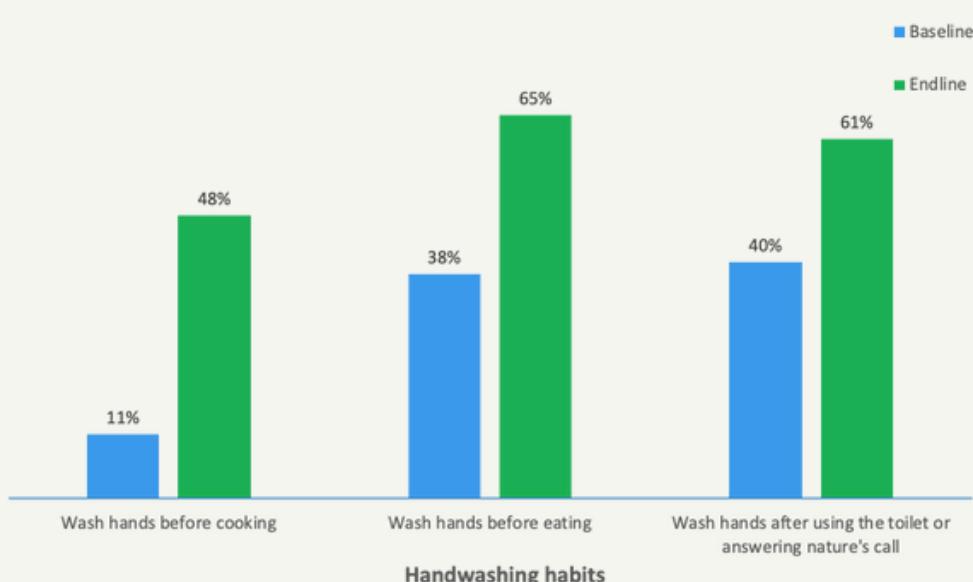
## Water, Sanitation and Hygiene



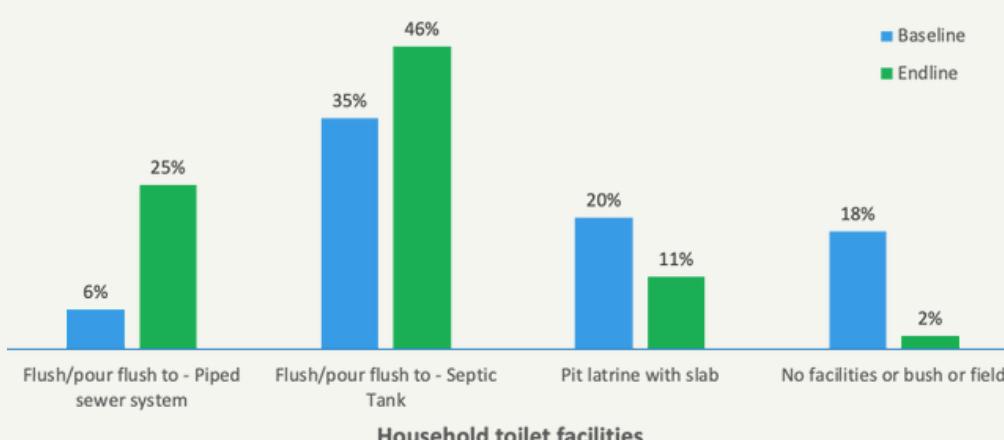
Household water treatment and purification have a direct impact on health. The World Health Organisation (WHO) has classified boiling, using a water filter and adding bleach/chlorine as adequate treatment methods to ensure safe drinking water.<sup>4</sup> The results show almost a doubling in the use of a water filter as a method.



Studies have shown the linkage between diseases like malaria and diarrhoea and hygiene practices.<sup>6</sup> The results in the graph on the right show the increased usage of soap for hand wash. A 37% increase of students who reported washing their hands with soap before cooking ensures that proper hygiene practices are maintained.



A toilet facility is considered to be adequate provided it is not shared between households and also separates human excreta from human contact.<sup>5</sup> In this context, the results show an improvement in sanitation facilities and a significant reduction in households practising open defecation.



4. Core questions on drinking-water and sanitation for household surveys  
[https://www.who.int/water\\_sanitation\\_health/monitoring/oms\\_brochure\\_core\\_questionsfinal24608.pdf](https://www.who.int/water_sanitation_health/monitoring/oms_brochure_core_questionsfinal24608.pdf)

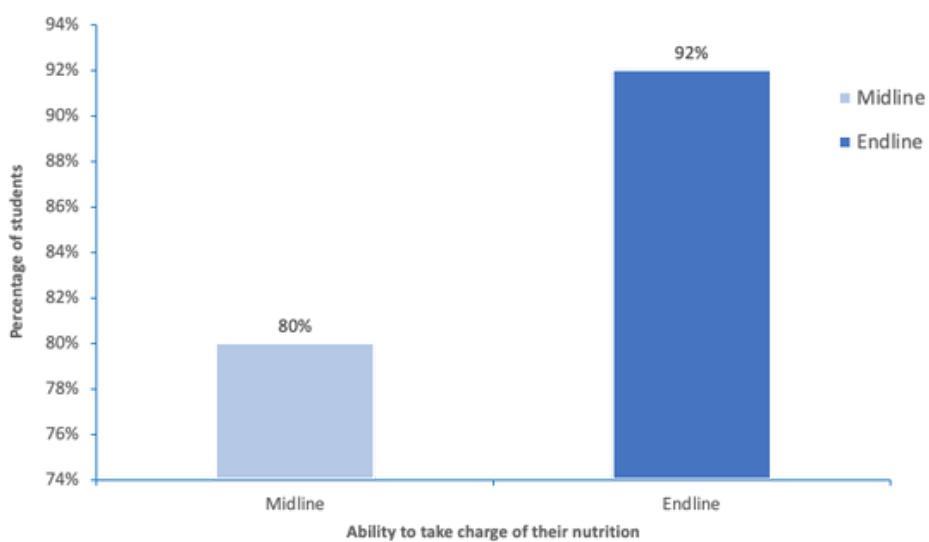
5. Ibid.

6. Jani, B., Sinha, A., & Jani, A. J. (2018). Tackling diarrhoea in India's children - Identifying variation in soap availability and use in Indian schools (Issue 3).

# CONCLUSION

The results from this study show areas where there have been significant improvement and areas that require attention. While this data is representative of only a subset of the larger population of schoolchildren, the aim of the programme is to develop children as changemakers who will spread the knowledge and awareness amongst themselves and the larger community.

Post the implementation of our toolkit, we asked the students whether they have developed the knowledge and abilities to take charge of their nutrition. The endline survey results show that 92% of students surveyed claim that they now have the ability to take charge of their nutrition.



The first step in bringing about a change in the community is this ability of students to make healthy living their top priority and to be confident about making a change.



Authored and reviewed by: Nourishing Schools Foundation team

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