

Adolescent Nutrition Screening in Urban Schools/Colleges

Context

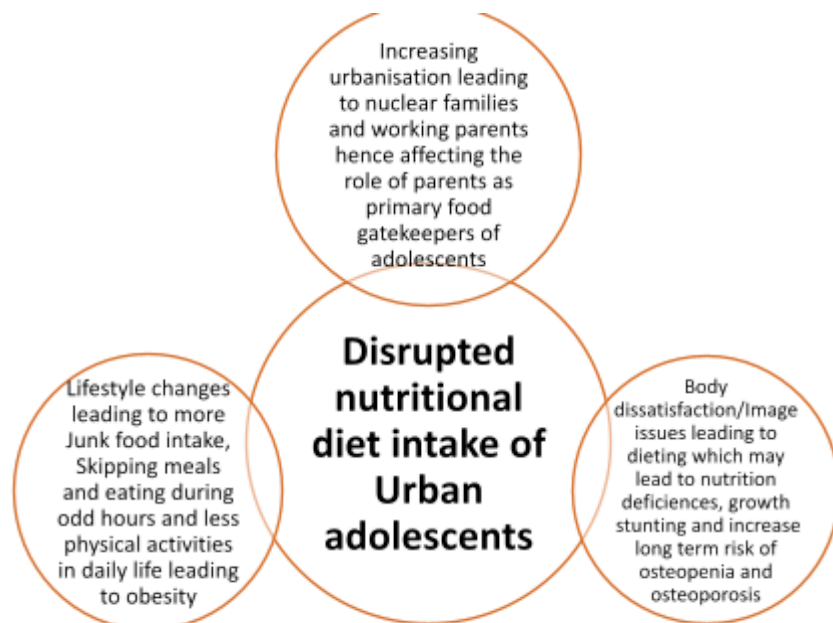
With ever increasing urbanisation of the cities and changing lifestyle habits of not only adults, but also adolescents, it plays a vital role in deciding their overall health and their health in the future. WHO defines as any persons belonging to the age group of 10 – 19 years are adolescents and in India over one – fifth of the entire population are adolescents. Many studies on eating habits and diets among adolescents have shown that it is often high in fats and refined carbohydrates and high intake of junk and fried foods that are generally low in nutrient value. Such eating habits could also lead to risks of developing chronic illnesses and other non-communicable diseases such as Heart attack, Obesity etc. One of the main contributors to illness around the world is a poor diet. All phases of life require a healthy diet, but children and teenagers have particular nutritional requirements. Rapid growth and development occur during childhood and adolescence. It's also the time when nutritional preferences and routines that could last a lifetime develop. Along with changing nutritional needs and advised eating habits, socio-ecological elements that influence children's and adolescents' diets also do so. While parents and other caregivers typically share meals with babies and young children, as children get older, exposures including the school food environment, advertising, and peer pressure become more significant.¹

The Problem

253 million adolescents (10 to 19 years old) live in India, and we are at a crossroads with them about whether to waste a generation's potential or nurture them so they may change the world. We all share a responsibility to make sure that adolescence is a time of opportunity because as teenagers thrive, so do their communities. Teenage years are a nutritionally precarious time because of the fast physical growth that raises nutrient needs. Adolescent-developed eating habits may be a factor in nutrition-related issues with long-term health effects. 40% of Indian females and 18% of Indian boys are anaemic. Adolescents' growth, infection resistance, cognitive development, and productivity at work are all negatively impacted by anaemia.²

In a study conducted on nutritional status of Adolescents in a school in Urban Baroda, it was found that 40% girls and 30% boys were missing a meal once or twice a

week, reasons being fasting or lack of time due to tuitions and other activities in their busy schedule,



¹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9152162/>

² <https://www.unicef.org/india/what-we-do/adolescent-nutrition>

lack of appetite or dislike to the food served. Many teachers in the study also felt that they paid more attention to their looks and wanting to remain slim whereas boys wanting to appear well- built hence affecting their eating habits.³

Sonal, an 18-year-old from the Gujarati village of Karaza in the Banaskantha region, would only eat potatoes and onions for all three of her meals. One of the causes of Sonal's anaemia and low haemoglobin levels of 8.8 gm/dl, as opposed to the recommended Hb of at least 11 gm/dl, was her lack of nutrient-rich food consumption.⁴ Among teenage students in rural areas in Gujarat, abnormal nutrition, including under- and overnutrition, is a serious rising issue. A separate, significant issue from obesity and thinness is stunting. It might be the sole or first sign of several chronic illnesses.⁵

In a case study done in Sabarkantha district in Gujarat on School adolescents, it was found there were two risk factors for NCDs, which was inadequate physical activity and unhealthy diet. In Addition to those not consuming fruits in the daily diet and not undertaking physical activity daily was also reported along with high BMI as one of the major risk factors.⁶ Another study done on the health profile of adolescents in Bhavnagar district, Vitamin A deficiency was present in 6.3% adolescents while Vitamin B complex deficiency signs were seen in 16.5% of them. The study also revealed that 67% girls were suffering from anaemia compared to 58.7% of boys and 13.9% of adolescents had visual impairment. These reasons show that there is an urgent need of attention towards the dietary intake and nutritional deficiencies among the adolescents of both genders.⁷

Solution

To conduct periodical “**Nutritional Health check-up camps**” in Urban Schools and Colleges in Gujarat and Maharashtra through setting up of booths in the campuses. These camps can be conducted periodically either half yearly or annually so as to measure the impact and nutritional status’ of each adolescent screened. A camp in each campus can be stationed for 3 days to ensure maximum student outreach.

Key Objectives

1. To conduct periodical health check-up camps in schools and colleges to determine the nutritional status of the students
2. To provide one on one nutritional counselling to the student and parents with a health report of each student tested, along with a care kit, recipe books and spread more awareness about the importance of a healthy diet and nutrition
3. To monitor the nutritional health progress of the beneficiaries through digital record maintenance

Implementation Plan

These camps will be conducted in the selected schools and colleges for a period of 3 days in each campus. The camps will have an expert nutritionist with an assistant laboratory technician team, testing each beneficiary’s BMI, Weight, Protein, Minerals, Body Fat Mass, Water level in the body.

³ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3905643/>

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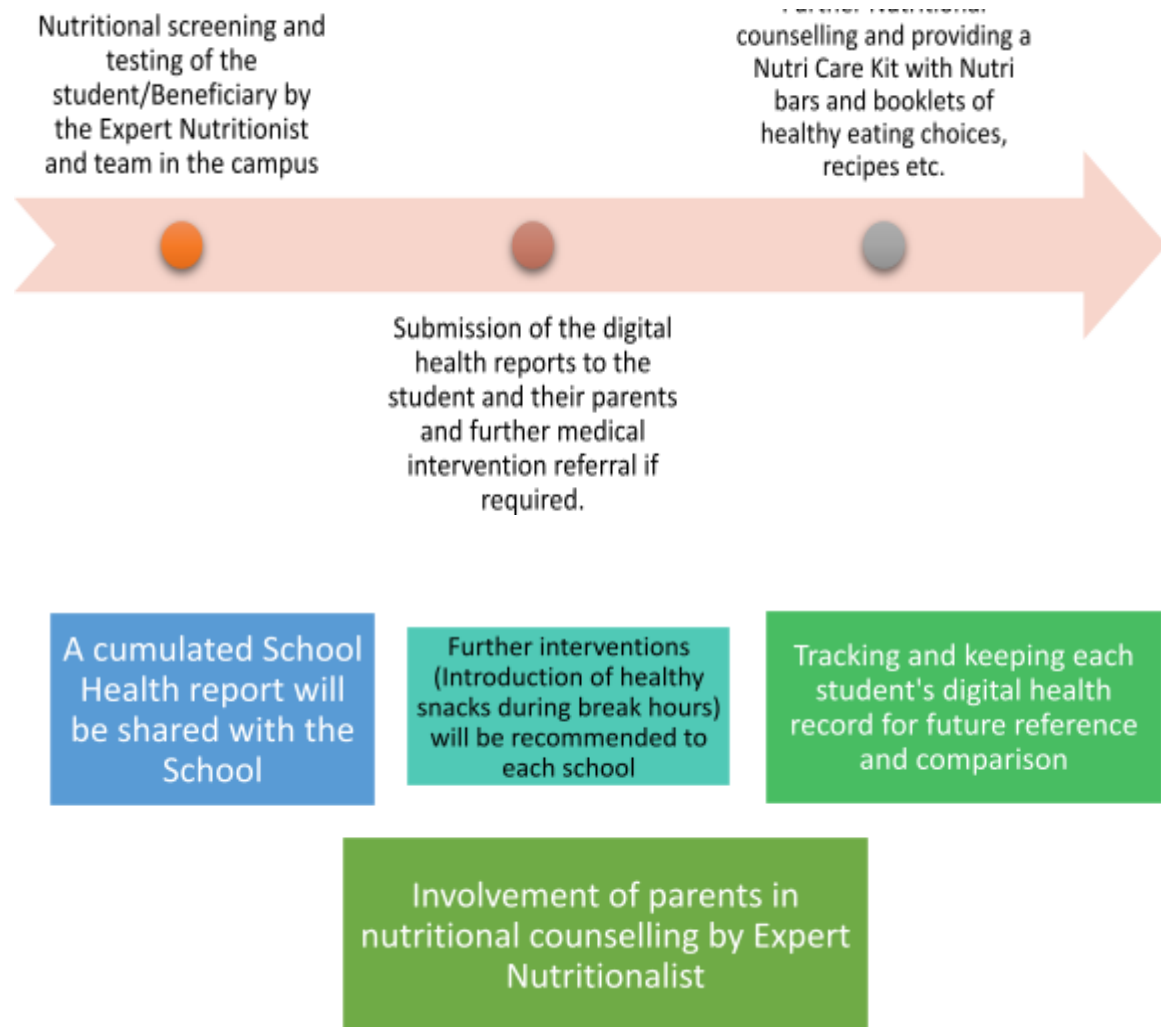
<https://swachhindia.ndtv.com/in-gujarat-1000-adolescent-girls-are-learning-about-nutrition-and-fighting-anaemia-40268/>

⁵ file:///C:/Users/Admin/Downloads/Nutritional_status_and_common_morbidities_among_sc.pdf

⁶ <https://iiphg.edu.in/images/pdfs/2019/Monograph-MacArthur.pdf>

⁷ <file:///C:/Users/Admin/Downloads/1916-7528-1-PB.pdf>

After the check-up, the nutritionist will further provide nutritional counselling to each beneficiary along with a care kit that will contain a booklet of healthy eating choices, benefits of healthy eating, and recipes along with nutrition bars. After the test, a detailed nutritional health report will be shared to each beneficiary. These reports will also be saved in the records so as to compare the health status of beneficiaries that already took the testing previously. In these camps, it will be encouraged for the parents to attend as well so that they are equally aware of their child's nutritional health.



Further, after the camp is taken place, a cumulative School health report will also be shared with the school Management and further interventions such as introduction of healthy food options at discounted prices or availability of health snacks during break time (periods) will also be designed and recommended accordingly.

Scale and Geography

Timeline and Duration

The project will be a recurring one to best measure the impact of the health status of each student. However, each camp's timeline will be as follows –

Phase	Duration	Description
School/College Outreach and mobilisation		In this phase, Schools and colleges will be approached by the team
Camps that will be conducted along with nutritional counselling	3 days in each school/college	The camp will be a 3 day one in each campus to ensure maximum coverage
Submission of cumulated health report of the school and students	1 week after the camps are over	Each student who was screened will have a detailed report along with a cumulative school report that will be submitted to the school management with curated recommendations
Follow up camps after the 1st camp	6 months post the 1 st camp or 1 year	A comparison of previous beneficiary's health will be tracked and recorded
Monthly Progress reports of all camps conducted to the donor	Monthly	These reports can also be followed by a closure cumulated report post exit of the project

Theory of Change

Input/ Activities	Outcome	Impact
Nutritional Health Check up camp in the school/college campuses of students by a team of an expert Nutritionist with a lab technician team	Better Awareness about one's nutritional health and well being Behaviour change towards nutritional and eating habits	Better learning and performance for children in academics post improving nutritional intake Reduction in risks to Non communicable diseases such as Cardiac arrest, Obesity, Diabetes etc. Contribution to SDG 3 (Good Health and Well being)

Monitoring Process and Key Deliverables

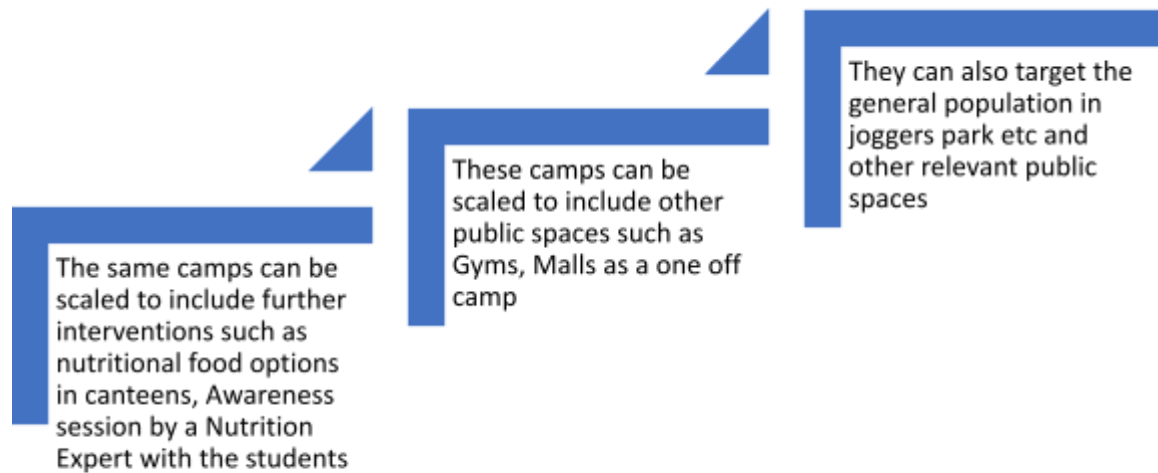
The camps will be monitored through

- ✓ Detailed student nutritional health report (Digital) so that the further camps in each school/college will have a comparison of previous and current health status.
- ✓ Similarly, the School Health report will also be monitored and progress in each camp can be tracked.

- ✓ Monthly Progress report to the Donor along with a cumulated closure report post project exit.

Scale up Plan/Replicability

These camps can be scaled up to a one time check up camp in public spaces mostly accessed by Adolescents such as Malls, Gyms etc.



Impact Communication

The Impact communication will be done through the following -

- Case Studies
- Social Media Presence