

REPORT  
ON  
THE HEALTH MONITORING AND NUTRITIONAL  
EDUCATION PROGRAM  
AT  
SHARDA EDUCATION SOCIETY'S  
ANAND VISHWA GURUKUL  
THANE (W)

BY



## Contents

ACKNOWLEDGMENT.....	3
PREFACE .....	4
THE PROGRAM .....	5
The List of Services included: .....	5
Session 1: Nutritional Assessment on 11 <sup>th</sup> July 2019 .....	6
Session 2: Medical Assessment on 9 <sup>th</sup> August 2019.....	7
Session 3: Dental Assessment on 10 <sup>th</sup> October 2019.....	8
Session 4: Eye Assessment on 10 <sup>th</sup> & 11 <sup>th</sup> December 2019 .....	9
Session 5: Nutritional Assessment on 9 <sup>th</sup> & 10 <sup>th</sup> January 2020 .....	10
Session 6: Medical Assessment on 9 <sup>th</sup> & 10 <sup>th</sup> January 2020.....	10
OBSERVATION & ANALYSIS.....	11
Nutritional Assessment.....	11
BMI and Fat % Improvement .....	12
Eye Assessment.....	13
Dental Assessment.....	14
Medical Assessment.....	15
CONCLUSION.....	17

## ACKNOWLEDGMENT

We, at Health Fiesta, sincerely thank **Mr. Pradeep Dhaval** and other Management members for providing us an opportunity for another academic year and making the Health Monitoring Program at Sharda Education Society's **Anand Vishwa Gurukul**, Thane possible.

We appreciate your continued trust and faith in Health Fiesta to cater to the students of the School to the best of our knowledge and abilities.

Our special thanks to the Principals of the School and Junior College, **Dr. Seema Hardikar** (Principal - Secondary Section and Junior College), **Ms. Deepika Talathi** (Vice-Principal - Secondary Section and Junior College) and **Ms. Vaidehi Kolambkar** (Principal – Pre-Primary and Primary Section) for their support and encouragement through the tenure of the Program.

We sincerely thank the **Canteen Team** for implementing the meal plan provided by us and constantly supporting us at regular intervals, pertaining to the canteen food and taking feedback from us about the quality of food provided in the School canteen.

We also wish to express our gratitude to all the Teachers, who have helped us immensely throughout our sessions at the School. Further, we extend our appreciation to the non-teaching staff members, who have rendered their helping hands at every point of our association with the School.

We are grateful to the students and their parents for co-operating with us in our endeavor.

We look forward to your long-term association with us in this mission of creating awareness about good diet, good health and a better way of life at **Anand Vishwa Gurukul**.

## PREFACE

Mahatma Gandhi once quoted – “It is Health that is Real Wealth, and not pieces of Gold and Silver! Health is not valued until sickness comes. It is perceived to be determined by the absence or presence of a disease or infirmity, but in reality overall health is achieved through a combination of physical, mental and social well-being. There are a lot of people in this world who spend latter half their lives taking care of their health and well-beingsince they neglected it in their early years.

**Health Fiesta** aims to create awareness about the importance of **REGULAR HEALTH MONITORING** through its programs at Educational Institutions. In today’s fast-moving, ever-changing world, health has become the most neglected facet of one’s life. We, at Health Fiesta, aim to address and evaluate reasons for health problems.

It is known that habits that get formed in childhood have a long term impact on health and well-being of the individual. Nutrition, a balanced diet and physical activity have a significant impact on children’s overall growth and development. Over the last few years, there has been prevalence of under nutrition and obesity amongst children and adults alike.

The main objective of our continued association with **ANAND VISHWA GURUKUL** is to create awareness and educate children and parents alike about:

1. Benefits of Good Health
2. Inculcating proper Eating Habits
3. Importance of Regular Health Monitoring
4. Precautionary measures at an early age

- Priyanka Bhalja,  
Chief Nutritionist,  
Health Fiesta

## **THE PROGRAM**

Health Fiesta conducted the '**Health Monitoring and Nutrition Education Program**' at **ANAND VISHWA GURUKUL**

**No of Students:** 1341

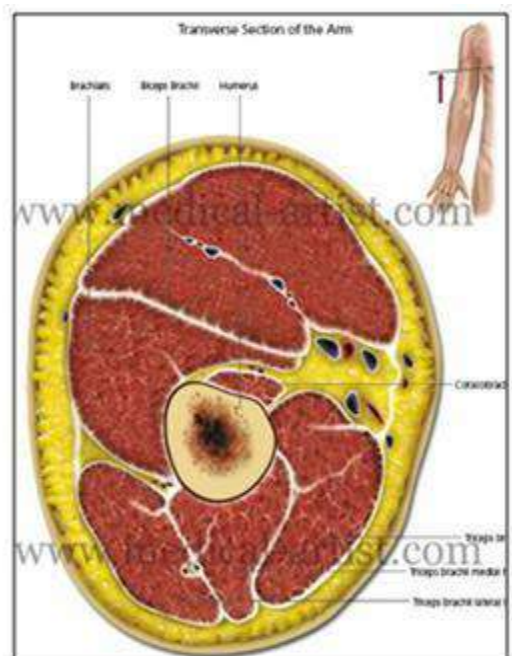
**Duration:** July 2019 - January 2020

### **The List of Services included:**

1. Medical Assessment: General and Systemic Examination by a Team of Doctors
2. Nutritional Assessment: Growth Monitoring and Complete Body Composition Analysis
3. Dental Assessment
4. Eye Assessment
5. Easy to Implement & Well-Balanced Meal Plans for Underweight and Overweight children
6. Regular Canteen Menu discussion with the Canteen team

## Session 1: Nutritional Assessment on 11<sup>th</sup> July 2019

- Body Composition was analyzed and recorded using a Body Composition Analyzer.
- Apart from Height, Weight, Body Mass Index, Body Composition also includes Fat Percentage, Resting Metabolism and the Subcutaneous Fat and Skeletal Muscle of the Trunk, Legs, Arms and Whole Body.
- The figure below is a transverse section of the arm showing the Skeletal Muscle in red and the Subcutaneous Fat in yellow. Subcutaneous Fat and Skeletal Muscle is similarly present in the entire body.
- Growth was Monitored using gender specific Growth Charts (Weight for Age, Height for Age, BMI for Age)



*Transverse section of the arm*

## Session 2: Medical Assessment on 9<sup>th</sup> August 2019

- Physical Examination – General (Temperature, Pulse, Respiratory Rate, Conjunctiva, Nails, Mucus Membrane, Skin, Throat, Nose, Ear, Tongue and Glands) was recorded.
- Physical Examination – Systemic (Respiratory System, Per Abdomen, Cardio Vascular System, Central Nervous System and Musculo-Skeletal System) was recorded.



*Medical Assessment*

### Session 3: Dental Assessment on 10<sup>th</sup> October 2019

- Dentists checked each student for tooth Decay, Root Canal, Irregular Crowded Teeth and overall Oral Hygiene.



*Dental Assessment*



## Session 4: Eye Assessment on 10<sup>th</sup> & 11<sup>th</sup> December 2019

- Optometrists checked each student for visual deficit using manual eye charts.
- The eye power was re-checked using an Auto Refractor Machine.



Eye Assessment

## Session 5: Nutritional Assessment on 9<sup>th</sup> & 10<sup>th</sup> January 2020

- The second session of the Nutritional Assessment was done as a follow up session to monitor and improve the nutritional status of the children.



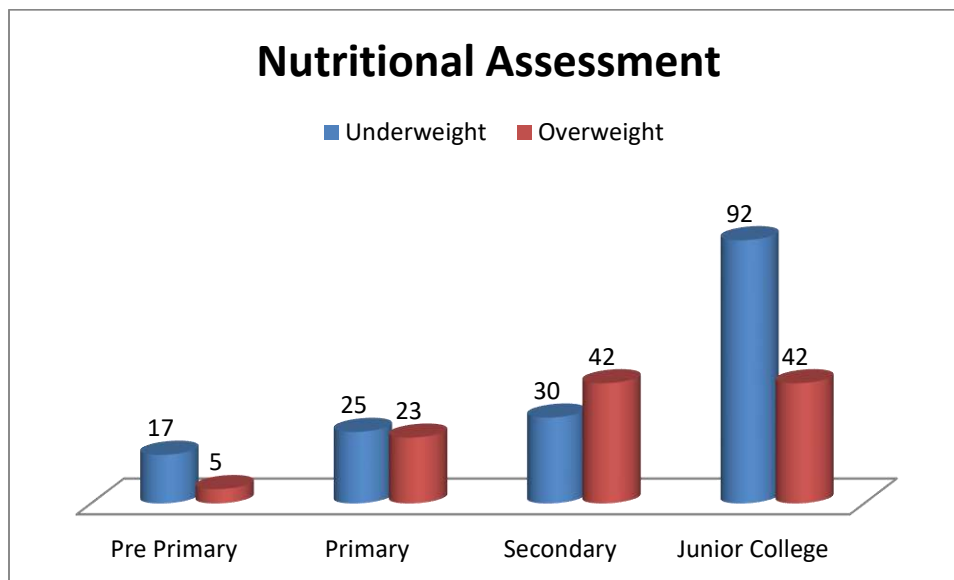
*Nutritional Assessment*

## Session 6: Medical Assessment on 9<sup>th</sup> & 10<sup>th</sup> January 2020

- The second session of the Medical assessment was done in order to check for any improvement in cases of children with deficiencies and to look out for any other medical problems.

## OBSERVATION & ANALYSIS

### Nutritional Assessment



#### *Changes / Observations*

- ✓ The student's growth is monitored based on their Weight-for-age percentile and BMI-for-age percentile.
- ✓ The Weight-for-age percentile categories are < 5, 5 to 10, 10 to 25, 25 to 50, 50 to 75, 75 to 90, 90 to 95 and > 95. The ideal range is between **25 to 75**.
- ✓ The BMI-for-age percentile categories < 5, 5 to 10, 10 to 25, 25 to 50, 50 to 75, 75 to 90, 90 to 95 and > 95. The ideal range is between **25 to 75**.
- ✓ Those with <5 percentiles are underweight. Those with >85 and >95 percentile are overweight and obese respectively.
- ✓ **This year, 12% of the students (164 students) were found to be underweight/in the underweight category.**  
In the last academic (2018-19), 17% of the students (228 students) were found to be underweight/in the underweight category.
- ✓ **This year, 8% of the students (112 students) were found to be overweight/in the overweight category.**  
In the last academic year (2018-19), 9% of the students (129 students) were found to be overweight or obese/in the overweight or obese category.

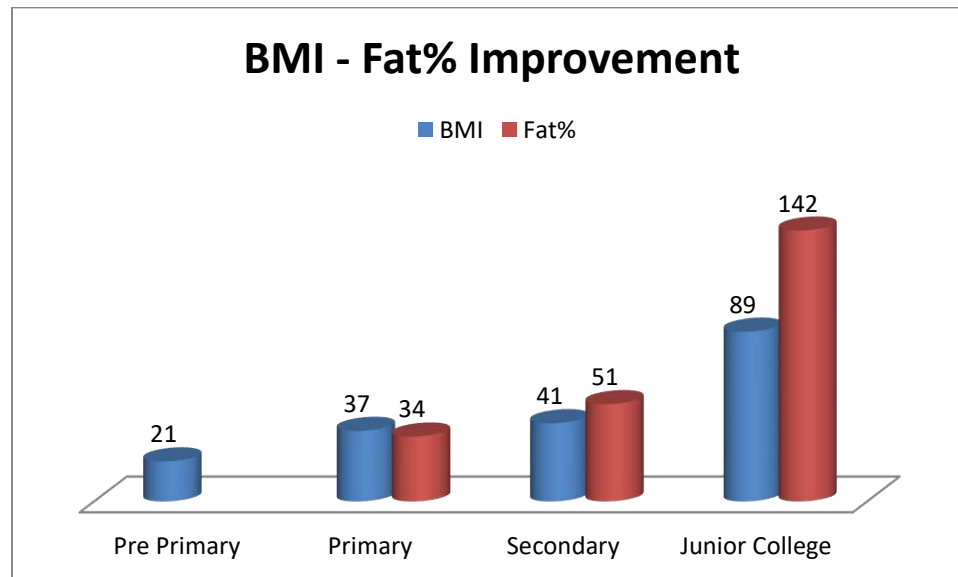
#### *Action by Health Fiesta*

- ✓ Healthy food options provided by the Seasonal Meal Plans helped in improving the students' eating habits – Canteen Menu
- ✓ Dietary habits were studied to formulate personalized diet plans for the Underweight and Overweight students.

- ✓ SMS had been sent to parents regarding the same.

SMS Content: *“Dear Parent, During the Nutritional Assessment, we found that your child does not lie in the normal BMI range (Underweight/Overweight). Regards, Anand Vishwa Gurukul – Health Fiesta.”*

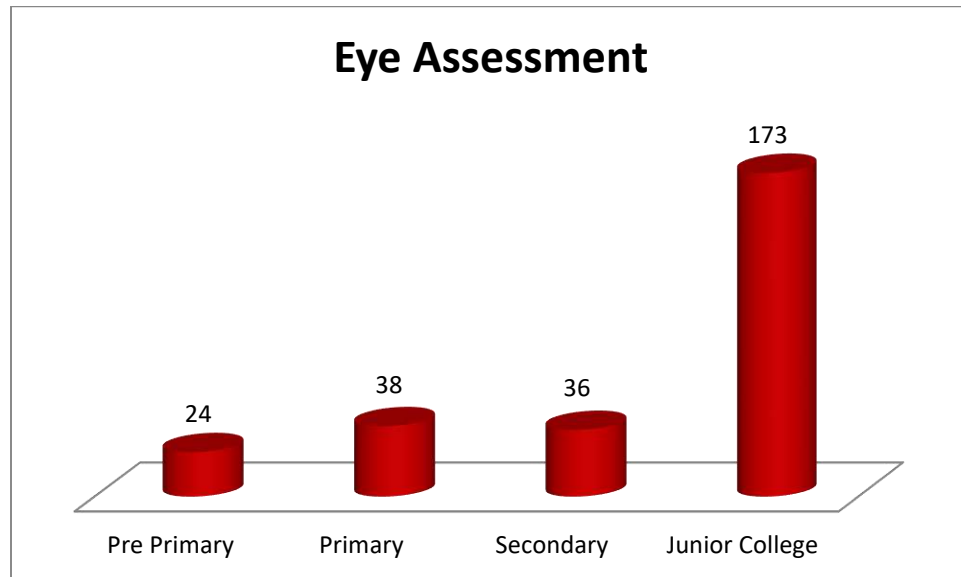
### BMI and Fat % Improvement



### Improvement Status

- ✓ On the basis of comparative analysis done for the Nutritional Assessments conducted in the entire year –
  - As a part of the improvement, we observed that many students had moved from the underweight category or the Overweight category to the Normal Range status. Also, there was improvement in Fat percentage that was seen in many students.
  - This year, there was improvement seen in BMI (Body Mass Index) of over **188 students (14%)**  
In the last academic year (2018-19), there was improvement seen in BMI (Body Mass Index) of over **171students (13%)**.
  - This year, there was improvement seen in the Fat percentage as well of over **227 students (17%)**  
In the last academic year (2017-18), there was improvement seen in the Fat percentage as well of over **197 students(14%)**

## Eye Assessment



### Observations

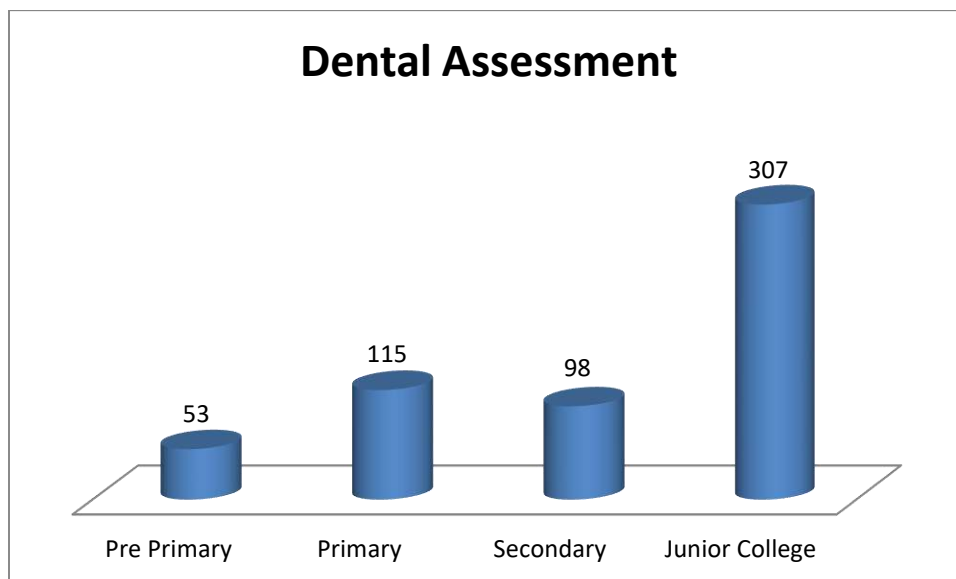
- ✓ This year, **20%** of the students were found to be vision deficit.  
In the last academic year (2018-19), **36%** of the students were found to be vision deficit.
- ✓ **80%** of the students did not have any visual deficit (were Normal).
- ✓ This year, **271 students** were detected with either low spherical power, high spherical power and/or with cylindrical power.  
In the last academic year (2018-19), **497 students** were detected with either low spherical power, high spherical power and/or with cylindrical power.

### Action by Health Fiesta

- ✓ These students have been advised to go for further follow-up treatment at the earliest.
- ✓ SMS was sent to the parents informing about their child's vision deficiency.

SMS Content: ***"Dear Parent, During the Eye Assessment, our optometrists found vision deficiency in your child. Kindly do the follow up for the same. Regards, Anand Vishwa Gurukul - Health Fiesta."***

## Dental Assessment



### Observations

- ✓ This year, **43% (573 students)** were required to get treatment done for root canal, extraction, irregular teeth (orthodontic) and other dental problems like dental decay & cavities.

In the last academic year (2018-19), **59% (805 students)** were required to get a treatment done for root canal, extraction, irregular teeth (orthodontic) and other dental problems like dental decay & cavities.

### Action by Health Fiesta

- ✓ These students were advised to get their dental treatment done at the earliest at their local dentist.
- ✓ SMS had been sent to parents regarding the same.

SMS Content: ***“Dear Parent, During the Dental Assessment, we found that your child has dental problems. Please do the follow up treatment with your Dentist. Regards, Anand Vishwa Gurukul – Health Fiesta.”***

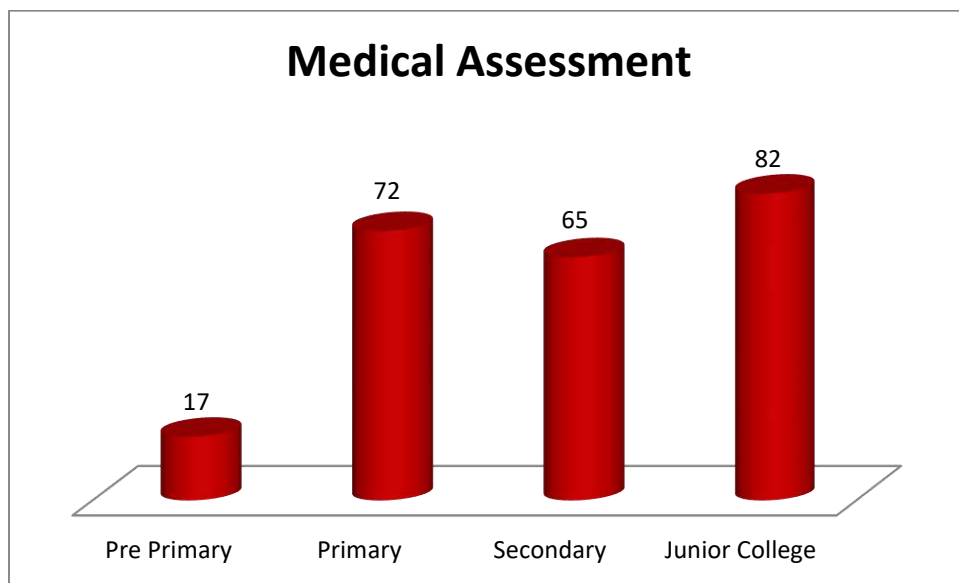
## Medical Assessment

During the Medical Assessment, the Doctors detect students having various medical conditions. Some of which, we have categorized and mentioned below.

- ***Immunity based medical conditions***
    - Enlarged tonsils
    - Cough / Cold / fever
    - Common Infection (Lymph node swelling, throat infection, ear discharge, throat pain)
    - Vitiligo / Eczema(Type of skin infection)
  
  - ***Nutritional based medical conditions***
    - Vitamin & Mineral Deficiencies
    - Anaemia
  
  - ***Lifestyle Related Hormonal Imbalance***
    - Dysmenorrhoea
    - PCOS
  
  - ***Hygiene related problem***
    - Impacted Ear wax
    - Deworming
    - Skin conditions - Molluscum, Tinea, acne etc
  
  - ***Abnormalities – needing further investigation***
    - Systolic murmur
    - Abdomen Pain
    - Deviated Nasal Septum
    - Irregular growth over tongue (only 1 case)
    - Milia (cyst, needs an dermatologist's opinion)
    - Speech Therapy
- 
- ✓ The most commonly faced problems were Cough, Cold and other Viral Infections, Dental Carries, Worms, Enlarged Tonsils, Ear Wax, Recurrent Sinusitis etc.
  - ✓ There were also few cases of skin problems like Tinea, White Patches on the skin, Vitiligo etc.
  - ✓ Other problems faced were Multi-Vitamin Deficiency, Calcium Deficiency, Anemia, Muscular/Abdominal/Ear Pain etc.
  - ✓ Immunity based medical conditions should be treated at the earliest in order to avoid aggravation of the same. Skin problems like acne, tinea, vitiligo, eczema should be treated with the help of a dermatologist opinion. Hygiene and cleanliness are also very important in the overall good health, well-being of the child.

- ✓ Nutritional based medication conditions include deficiencies which may be due to lack of intake of healthy foods. These deficiencies could be rectified through a balanced diet. For e.g. Calcium Deficiency can be rectified by having protein rich foods like Milk, Milk-based products etc.
- ✓ Lifestyle related hormonal imbalance and abnormalities (which need further investigation) should not be neglected as well. It is important that these cases are dealt with at the earliest and the necessary follow up treatments are done to avoid severe implications of the same.

The findings of the Medical Assessment in the Pre-Primary, Primary, Secondary & Junior College Section are represented below graphically, showing the number of cases found during the Medical Assessment -



*Number of Cases: Medical Assessment*

#### ***Action by Health Fiesta***

- ✓ Parents were called to inform in case of any urgent cases.
- ✓ The students were advised to get treatment done or measures taken for their respective identified problems.
- ✓ SMS were sent to all parents of students detected with any medical problem.

Sample SMS Content: For e.g. - ***“Dear Parent, During the Medical Assessment, we found that your child has cold. Please consult your family doctor. Regards, Anand Vishwa Gurukul – Health Fiesta.”***

**Please See: SMS was sent as per the medical condition.**



## CONCLUSION

A healthy outside starts from the inside. Consistent habits and a good lifestyle can take us places and keep us away from diseases, sicknesses or any ailments. As it is said that take care of your Body, it is the only place you live in for the maximum years. Prevention is better than cure. Our main aim, through the continued Health Monitoring Program at **ANAND VISHWA GURUKUL** has been to propagate the importance of Regular Health Monitoring. The analysis gives an overview of the Health and Nutritional Status of the School. It also includes a comparative observation of the findings of this year to the findings of the last year.

Each aspect of the Health Monitoring Program conducted in the School is derived as follows:

### **Medical Assessment**

Health and Hygiene need to be maintained at all times. A child is usually taken to a doctor when he/she is down with fever or cold. Deficiencies and low resistance to sickness are never accounted for. Hence, it is important to get the child checked for any kind of symptoms or problems. Conditions like Vitamin, Iron, Mineral deficiencies, worms, respiratory problems etc. are detected at an early stage. Skin problems also need to be addressed at an early stage so that it does not worsen. The bi-annual Medical Assessment prevents the conditions from aggravating further. Hence, it is advisable to monitor one's health on a regular basis, despite absence of external manifestation of any sickness or illness. It is important that these deficiencies, other medical problems are looked into at the earliest.

### **Nutritional Assessment**

Healthy foods need to occupy adequate space in our food plates. In our country, Nutrition is the most neglected aspect of a child's growth. The health of the child is determined by the physical outlook than through other factors like stamina and immunity. Healthy eating forms the very foundation of a person's healthy life, which is why we constantly emphasize on eating good food and the importance of exercise, during our Assessments. Body Mass Index (BMI) determines the height-weight ratio in an individual. Children with either low weight and low BMI or high weight and high BMI were identified. Awareness of health eating habits is tried to be brought about with the help of the Meal Plans, Nutrition Education Games and talk sessions. Hence, Regular Growth Charting should be done to understand the growth pattern of the child on a timely basis.

This year, the students in the underweight category have gone down in comparison to last year, which is a very good improvement. Also, the students in the overweight category have gone down in comparison

to last year, which is again a good improvement. Even then it is important that their food and nutrition is monitored closely. Also, there was good improvement seen in the BMI and FAT Percentage, while comparing the Nutritional Assessments.

Health Fiesta advises the students to eat healthy food, home-made food and avoid junk food, which have severe health consequences at a later age. It is important that children have a balanced meal to lead a healthy lifestyle. Further, they should involve in a lot of outdoor games (physical activity), which enhances their growth and development and helps maintain a good Nutritional status in their growing age.

### **Eye Check Up**

Eye/Vision complaints amongst children are quite common these days with the array of content available to be watched on TV or laptop or phones. Children these days are engrossed in watching pieces of entertainment which affects and strains the eyes in the long run. Headaches are another common complaint amongst adolescents, one of the reasons being vision problems. Conditions like cylindrical and spherical eye power were detected during the Eye Check Up. It is important to get spectacles done for students who have low or high power. Neglecting this could lead to severe vision deficits, which therefore need to be rectified at the earliest. This year, the percentage of students with vision deficit has gone down in comparison to the last year status, which is again good improvement.

### **Dental Check Up**

Oral health is really neglected in the growing up years. A dental checkup is done only when the child complains of any pain or discomfort. It will very important to ensure good oral health to avoid severe issues as they grow up/ There were a lot of students in the School who were detected with Dental conditions like cavities, tooth decay, orthodontic problems etc. It is important that these cases are dealt with at the earliest.

This year, the number of students with dental problems has gone down, which is very good improvement in comparison to the findings last year. But nevertheless, these cases need to be looked into and treatments need to be done at the earliest to avoid further aggravation.

Our aim and objective of conducting the Health Monitoring Program would be met in the real sense if the parents took our purpose of educating the importance of good Health and Nutrition to the next level by incorporating our suggestions in their day to day lives. Further, they should also get the required treatment done by following up with their respective Optometrists and Dentists.

The benefits of these programs would be effectively seen over a period of time with Regular Monitoring.

The dual efforts from Health Fiesta as well as the School, children and parents, have resulted in a positive association with the School.

We wish to carry this association forward and intend to continue being the Medical Centre of **ANAND VISHWA GURUKUL** for years to come.