## CHAPTER-I

## INTRODUCTION

### 1.1 Background of the Study

Nepal is the land locked country. It lies between India and china covering area of $1,47,181$ s.q. k.m. and population density is 157.30 . The population of the Nepal is 29391883. In (Nepal demographics profile 2011) among them 10161128 (34.6\%) are the children under 15 years. It is considered to be one of the least developed countries in the world. it's per capita income is only 240 US Dollor. It's annual growth rate of population is $2.24 \%$ and the growth rate of the GNP per capita is $2.2 \%$ Nepal ranks $143^{\text {rd }}$ position in the human development index. 38 percent of population lives below the poverty line and 85.8 p the percent population lives in rural areas. The main occupation of rural areas is agriculture $66.43 \%$ IMR of Nepal is 64.34/1000 CMR 91.2/1000 and indicate the 42.8 percent female and 65.5 percent male literate in Nepal where the life expectancy at birth of the Nepalese people is 60.8 years.

Nawalparasi is one of the district located in Lumbini zone as Terai Region. The administrative headquarters of the district is Parasi. The total numbers of schools of Nawalparasi are 696 and the total students are 99115. The number of students in primary level is 63443. In Rajahar VDC, it located near by the Mahindra Highway. There are 14 Schools in Rajahar VDC and 1917 students in primary level.

Health was said as free from hunger and survival in ancient period. The desire for soundness and safety in medieval period and free from pestilence. starvation and wars. Etymologically, health is derived from Anglo-Saxon meaning safe and sound everybody likes to pass his /her life in a healthy and comfortable way but may not know the ways of healthy living.

Different people have expressed their own views in different periods of time on health. Any way health is one of the most important factors for the fulfillment of human needs and improvements of the quality of life. A healthy person is
always cheerful and can do full days work without exhaustion. Even a poor man has on good health and can improve his living standard. The health of the people is considered to be the wealth of the nation unless people are healthy, the development of a nation and its people is quite impossible. Thus, it may be taken in to consideration from the pregnant period of mother to protect and promote the health of the child who will become a healthy citizen in future.

Nutrition is one of the must important environment factors in realizing the felt growth and development potentials of an individual and also plays a vital role in health because malnutrition leads to poor health and poor health leads of illness, good nutrition is essential for the growing children .we want to know a bit more about nutrition, It can be defined as science of food and least relationship to health. The word nutrient "food factor" is used specific dietary constituents such as proteins, vitamins and minerals. Dietetics is the practical application of the principles of nutrition. In includes the planning of meals for the well and the sick.
"The series of process by which an organism traces and assimilates food for promoting, growth and replacing womb out and injuries tissue" - Webster's Dictionary.

Good nutrition is fundamental right. Malnutrition remains a serious obstacle to survival, growth and development in Nepal. Malnutrition takes a variety of forms. In Nepal, the most common forms are protein energy malnutrition (PEM) loss of sight, anemia, iodine deficiency disorders and deficiencies of iron and vitamin A, each type of malnutrition breaks its own particular worse they often appear in combination.

In fact health is quite inseparable part of human life. So it is said that health is wealth of every body. But the level of health of people is determined by various factors like food we eat, water we drink. air we breathe, ways of treatment against different diseases, state to mind etc. This is why, we should be very careful to keep our body healthy.

Due to the lack of proper nutrition, child mortality rate is so high (91.2/1000 live birth). Normally 50.5 percent under five year children are student. 48.3 percent children are under weight for their height and 26.7 percent female are suffering from malnutrition. The high prevalence of child malnutrition and micronutrient deficiency is not only attributing to lack of resource i.e household food shortage but also the result of disease, environmental condition and inadequate care feeding practice. In other words, children suffer from food insecurity due to the lack of proper utilization of the available food. But children under five are not the hardest. On a global scale the five principle nutritional deficiency disease that are being accorded the highest priority action are Kwashiorkor, Marasmus, Nutritional, Anemia and Endemic goiter. These disease represent the tip of the 'iceberg' of malnutrition, a much larger population are effected 'hidden' malnutrition which is not easy to diagnose.

In general term, nutrition mean, highly nourished food. Nutrition is that eatable food which the body gain and utilize process. Nutritional materials ever help to growth and development of physical and metal task also. After ingestion the food digestion then absorption all content by digestive system then growth, development and rapier all cells and tissue of human and develop immunity power. In nutritional food all the contains are blankly mixed egg. Carbohydrate, protein, vitamin, mineral, fat, water etc.
"Nutrition may be defined as the science of food and its relationship to health, It is concerned primarily with the part played by nutrition's in body growth." Park and Park" "The series of process by which an organism taxes and assimilates food for promoting, growth and replacing womb out and injuries tissue." Webster's Dictionary.

The nutritional condition is very poor in Nepal. Many children are suffering from Anemia, loss of eye sight; many children are handicapped by birth the main cases of poor nutrition conditions are black of food, lack of awareness, bad food habits, social culture and myths etc.

In developing courtiers like Nepal, nutrition is both cause and effect of the fluctuation of health status of children having direct or indirect influence. Nutrition plays a vital role on human beings. The factors related to nutrition are social, emotional, economical, hereditarily and environmental which are associated with children on their health.

Nutritional status of the children of appropriate feeding knowledge of mother proper feeding and eco-socio status, engagement in other works like agricultural work, labour and official service and so on. Among various factors affecting the determination of good nutritional status of children caring and feeding practice play a vital role.

As we want to know a bit more about nutrition, it can be defined, "As the science of food and its relationship to health". It is concerned primarily with body growth, development and maintenance. The word nutrient or "Food factor" is used for specific dietary constituents such as proteins, vitamins and minerals. Dietetics is the practical application of the principles of nutrition. It includes the planning of meals for the well and the sick. Good nutrition means, "Maintaining a nutritional status that enables us to grow well and enjoy good health". The subject of nutrition is very expensive. Since our concern is with community aspect of nutrition, the subject will be dealt with in five section' dietary constituents, nutritional requirements. Assessments of nutritional status, nutritional problems in public health and nutritional programmers.

Through centuries, food has been recognized as important part for human beings. In health and disease spectrum. The history of man to a large extent has been a struggle to obtain food. Until the turn of the century the science of nutrition had a limited range. Protein, carbohydrates and fat had been recognized early in the $19^{\text {th }}$ century as energy-yielding foods and much attention was paid to their metabolism and contribution to energy requirements. The discovery of vitamins as the turn of the present century has "rediscovered" the science of nutrition, between the two world wars, research on protein gained momentum by about 1950, all the presently known vitamins and
essential amino acids had been discovered. Nutrition gained recognition as a specific discipline, with roots in physiology and biochemistry. In fact nutrition is regarded as a branch of physiology and taught as such to medical students.

In the global health strategy campaign of Health for All by 2000 AD: promotion of proper nutrition is one of the eight elements of primary Health care declared in Alma-ata in 1978 Ad. Nutritional indicators have been developed to monitor Health for All. Greater emphasis is now placed on integrating nutrition into primary health care systems whenever possible and formulation of national dietary goals to promote health and nutritional status of families and communities.

Generally, school is formal institute, where children learn good manners and become well adjusted citizen for the future. So there should be all round concern of the children in school, like provision of safe drinking water, playground, toilet, canteen, well ventilated rooms etc. generally, students remain six hours in school. The need of many services within this nutritional food and Tiffin practices. In many places, it is taken as secondary concern but its proper management is basic component of school health programmed if any school wants to promote the health of the school children, there must be proper knowledge of nutritional status and management of Tiffin. School should play valuable roles to pass a healthy life. So it is important to find out the existing. Tiffin practices. Which determine the gradation of their health and also the quality of Tiffin. Way of taking, place for eating etc. which can diagnose the nutritional status.

### 1.2 Statement of the Problem

Tiffin practice is the must important factors, which determines the level of health or children. But it is not found in practical life in many places. Schools administrative and teachers are unable to manage the proper provision of Tiffin Practice in the school. The schools do not have canteen and supply of pure drinking water, students attracted towards junky food because they give more priority to taste rather than nutritive value. In this regard teacher's knowledge,
attitude and practice must be positive on Tiffin practice and nutrition which determines the nutritional status of children. lack of awareness, economic crisis, technical support etc are main things so must of the school are unable to manage Tiffin in the school so students have either to bring from home, another side, mainly the areas for research work are measurement of height, weight, Tiffin room, light, Tiffin box, students cleanliness before and after Tiffin. In this context nutritional status and Tiffin Practices of primary school children in Nawalparasi District of Rajahar V D C is stated as the present problem.

### 1.3 Objectives of the Study

The main objective of the study to find out present nutritional status and Tiffin practices of primary school children in Rajahar VDC.

- To find out the existing Tiffin Practices of said population.
- To find out the average height and weight of five class students.
- To assess the nutritional status of class five students.
- To compare the nutritional status of boys and girls of the study area.


### 1.4 Significance of the Study

The Tiffin Practice is the most important factors of the children, which determines the nutritional status of school going children .In absence of wide knowledge and positive attitude and real behavior.

The main significance of the study is as follows.

- It will be guideline for students, teachers and school personal for developing awareness towards the concerned field.
- The fulfillment of the nutritional requirement of children.
- It also provides the nutritional status of the children relating anthropometric position compare with European standard.
- It finally may be useful to launch for similar (programs) studies in future (NGOs and INGOs)


### 1.5 Delimitation of the Study

Delimitations of the study are marked being concerned for time financial resource and material to make the study more valuable and reliable the delimitation of the study can be state as follows.

- The study will be conducted in primary school of Rajahar VDC in Nawalparasi District.
- Both public and private school will be selected in the study.
- The target group of study is class five children in primary school level.
- This study will be delimitated to measure height and weight of children.
- The respondents of this study are teachers and students.


### 1.6 Definition of the Terms Used

Nutrition: The process of providing and receiving food necessary health and grow nourishing.

Nutritional Status: Nutritional status is the condition of the body as it relates to consumption and utilization of food.

Tiffin: The food and drink brought from home or sell centre or shops breakfast to school.

Anthropometrical measurement: The measurement of height and Weight .
Attitude: It refers to the way of feeling thinking or behaving towards Tiffin.
Public school: The government aided school.
Private school: The school where all the management along with budget is managed from private sector.

Primary school: The school where is manage class 1-5.
Height: Height is vertical measurement of a structure of organ from bottom to top upright position.

Weight: Weight is the measurement of body mass.

PEM (Protein Energy Malnutrition) protein every malnutrition is the most serous nutritional problem. Its two main clinical forms are kwashiorkor and Marasmus.

Gomez's C lassification of PE M :- The Gomes's classification (weight for age) is expressed as a percentage of the standard weight for a given age which is calculated by the following formula.

Waterloo Classification: This classification is based on weight for height ratio and height for age. In this classification findings are compared with a local or international standard.

Malnutrition: Malnutrition is a state is which a prolonged lack of one or more nutrients retards physical development or causes specific disorders, e.g vitamin a deficiency night blindness, xerosis, xeropthalmia etc.

Stunting: The state of micronutrient in our body then there is not physically growth and development of our body chronically is called stunting.
Mortality Rate: pregnant and delivered mother who death in a year per thousand is called MMR

Infant mortality rate: The body of under on year who death in a year for new born baby in that year is called infant mortality rate.

Etymology: The study of the origin and history of words and their meanings.
Junky food: Food that is considered not to be good for one's health but many people eat because it is easy to prepare.

Questionnaire: A written or printed list of questions to be answered by a number of students and teachers especially as a part of survey.

Nutritional Survey: A certain area there is diagnosis and food the causes of nutritional problem and their solved issued is called nutritional survey.

## CHAPTER-II

## REVIEW OF RELATED LITERATURE

This study was based on Nutritional status and Tiffin practice of primary school children in Rajahar VDC of Nawalparasi District. The Researcher selected their topics on the basis of their deep study on materials in T.U library, Balkumari College Library, Lumbini Adarsh Degree College library and some published bulletin and journals, thesis abstract about health research.

### 2.1 Theoretical Background

Kerry Juridical, Larry K. Olsen and Charles R Baffin in their book Organization of School Health Program, considered on the topic food Sanitation cafeteria; the involvement of the federal government in school food services dates back 1935. A child nutrition Act has been passed is an attempt to safeguard the health of children and assist them in developing appropriate attitude towards nutrition. The US Department of agriculture, the governmental agency primarily responsible for overseeing federally mandated and supported nutrition program has established as a priority of food services the provision of meal that is naturally sound and balanced in expensive and fit for human consumption. Good nutrition promotes health and health affects teaching these students who are the recipients for sound school food program will have much more enjoyable and successful learning experience.

The Majority of school in United state Provide school learns lunch or Tiffin to students. The school dietician and school district's agent is the person primarily responsible for the protection of food. Longer highlighted the responsibility like storing germ free, ventilation and the humanity protection of lunch form invasion. by rodents, insects and bacterial contamination. This has suggested strong the highly perishable foods in freezer. Cleanliness of room ventilation. Cooking equipments are to be disinfected.

Chhetri in this book entitled 'School Health Program' has explained that there should be the provision of canteen and Tiffin as the student stay in the school fro long time. He has suggested managing Tiffin hall and avoiding junky food. The considering factors while managing cafeteria or Tiffin are careful purchasing. Proper storage system. Knowledge, attitude and practices of kitchen personnel and regular inspection explained by him (Kerry, 2001).

### 2.2 Empirical Literature

Baidhya in his research work entitled "A study need based master Degree in school Health education for Nepal" has stated that nutrition is the prime seventh out of fifteen health problems of Nepal. Nutrition education programmed is needed essential to improve the living standard of the people. (Baidhya, 1982)

Wagle Bishnu Prasad, in his research entitled a study on nutritional status of the under five year age children of Karhiya VDC has status that a higher prevalence of malnutrition had been found among the children where fathers were in labour force and service (Wagle, 2051)

Study conducted in Adarsa Dulari VDC, morang on knowledge, practice on Nutrition" stated that property is prime factor for proper utilization of nutrition items. They did not have knowledge regarding it (Dhakal, 2052)

Gautam, in his research book entitled "An analytical study on Nutritional status of primary school children of Tanahun District has mentioned that the majority of the students (67.78) take their foods 3 times a day. He states further the average standing height of boys and girls were found 108.60 and 107.57 cm respectively. (Gautam, 2053)

Bhujel, conducted a community healthy survey "Environmental condition and health problems in Kathmandu Metropolitan" ward no 9 and 34 land les people living on the both side of Bagmati river. Stated that 83.87 percent people taken occasionally vegetables, cereals fruits as foods, 12.9 percent regularly and 3.22 percent never taken. (Bhujel, 2059)
K. C. Anumodan on his research work entitled "Knowledge and Attitude of secondary school Teachers on Tiffin management programmed and its practices" stated that cent percent teachers have positive response in Tiffin practice and 20 percent school health teacher observed Tiffin of the students. 40 percent students have had Tiffin. He also noted that more than three quarters ( $80 \%$ ) respondents considered the need of different Tiffin time for different age group of students (KC, 2002)

Adhikari, (2061) on their field reports of Cambridge international boarding school about nutritional status of children and use of dry food. There were total 126 student among them 40 girls and 48 boys were in class tow to class ten. Their father occupations, 8.59 percent were involved in services, 29.54 percent were involved in business and 4.54 percent were unemployed 28.4 percent father were in higher education in sense that 46.2642 percent were in secondary level. 19.31 percent mothers were illiterate, 26.26 percent mother are literate. According to weight among 38 boys, 20.8 percent were suffered from mild malnutrition, 56.25 percent and 22.91 percent boys suffered from moderate and sever malnutrition respectively. According their weight among 40 girls, 15 percent, 56.5 percent and 26.5 percent were suffered from mild, moderate and sever malnutrition respectively. In the same way, according to height 22.91 percent, 5 percent and 41.66 percent boys were suffered from mild, moderate and sever malnutrition respectively and 65 percent girls were suffered from severe malnutrition.

In that study, eating behavior of the students 17.04 percent take food 4 times per day 53.4 percent take 3 times, 28.4 percent students take 2 times and 1.13 percent take one time per day, 64.77 percent students like to eat vegetables and peas, 17.04 percent like only peas, 14.77 like vegetable only an 3.4 percent students don't like vegetables and peas both.

CBS (2061/062) one of the burring problems is rapid population growth rate 2.1, TFR-4, IMR 64.4, under 5 year's mortality rate 91.2 . Among the under 5 years children about 60 percent of children are suffering from PEM and almost

10 present are suffering from third degree of malnutrition. Total population of under 5 children 34,78,069 (male 1765310 and female 1912759) infant 494813 (Male 252519 and female 242294)". The educational rate of female is 35.9 percent and male 55.5 percent the early marriage rate ( $10-14$ year is 0.96 percent). Average family member number is 6.42 and dependent populations are 87.72 percent (children $0-14$ years, 78.24 percent and over 60 year 9.48 percent) in Bardiya district.

Upreti in his research work entitled Tiffin practices of primary school of Banepa Municipality has explained that a majority of school (87.5\%) had no canteen all those teachers said that is was necessary at school he has further explained that 130 students were having Tiffin in the school ground 38 were having in the class room among 168 students and 5 students had no Tiffin at all (Upreti, 2004)

Nepal Demographic and Health Survey, (2006), height and weight data were collected in the sampled household population. A total of 5578 children under five were identified in the household. Information on height or weight was missing for three percentages of children one percentage had height or weight measures considered to out of the range for their ages. The final analysis of nutritional status is based on the remaining 5262 ( $94 \%$ ) children. The result is 49 percent of children are stunted and 20 percent are severely stunted. Thirteen percentages are wasted and 3 percent are severely wasted. The weight for age indicators shows that 39 percent children below 5 age are under weight 11 percent are severely under weight.

Thapa Krishan Bahadur in his research book entitled "A study on Nutritional status of the primary school children of Kathmandu Town Panchayat" has mentioned that the average weights of target population in the study area were 20.17 kg . for boys and 20.39 kg for girls. He further states 20.5 and 50 percent of the public school children are 35 percent of private primary school children are wasted and student respectively (Thapa, 2064)

Ministry of Health held nutritional program and services under sub health posts, health post, primary health centre, out reach clinic, hospital to 0-5 years old children. Growth monitoring services are provided only $0-3$ ages of children in child health program therapeutic treatment and health education services. Provided to the target group of ages (0-5 years) Also, to remove the micro- nutrition deficiency in children, HMG, NGos, NTAG provides national campaign program provides vitamin 'A' programs from 6-59 months of children two phases in a year by the health of FCHVs.

To compare mothers' assessments of nutritional status with anthropometric measures and gain further insights into mothers' reasons for their judgment. Design: Each mother was asked to assess the nutritional status of her child and 2 other children and to compare all 3. Rates for "hits" and "misses" between mothers' assessment and physical anthropometry were analyzed using the binomial test. The rationale for the mothers' assessments was explored through open-ended questions. Setting: A rural clinic in an indigenous area of Mexico. Participants: 31 mothers of children 1-5 years of age. Main Outcome Measures: Physical anthropometry and mothers' assessments. Results: A significant proportion (P less than or equal to 0.01 ) of mothers matched the anthropometry on weight for age and weight for height but not on height for age; only when assessing their own child, and when comparing weight for age of their own child with the first child used for comparison. Mothers based their assessment on the child's physical appearance, energy, eating behavior, and on their own performance as caregivers. Conclusions and Implications: Mothers' assessments were better than mere guesses. Their understanding of children's nutritional status in particular and health in general should be used to design more effective and sustainable communication messages, properly combining mothers' and health providers' constructs. It is also important to find ways to make mothers recognize stunting as a nutrition-related problem. (Journal of Nutrition Education and Behavior, 2009)

Association between nutritional status of adolescents and food consumption pattern. Design: Data on number of meals and snacks consumed daily were collected using structured questionnaires. Nutritional status was assessed as weight-for-age body mass index score less than fifth percentile of the National Center for Health Statistics/World Health Organization International Growth Reference. Setting: Cross-sectional studies of adolescents using multistage random sampling procedure. Participants: 401 adolescents from 32 secondary schools in Osun State, Nigeria. Analysis: Frequency counts, percentages, and cross-tabulation analysis were used to analyze data, analysis of variance was used to test the differences, as well as chi-square analysis. Level of significance was taken at 0.05 and 0.01 levels. Results: $66.1 \%$ of adolescents ate 3 meals daily; this percentage was higher among rural (75.4\%) than urban (61.4\%) children ( P less than 0.001 ). About $33.0 \%$ consumed snacks daily but to a varying degree, which was higher among urban than rural adolescents ( $\mathrm{P}=$ 0.002). Prevalence of underweight was $20.1 \%$, more common in rural ( $22.1 \%$ ) than urban adolescents (18.7\%). Underweight prevalence was highest among those who ate 3 meals and no snacks daily (28.6\%) and least among those who ate 3 meals and snacks twice daily ( $15.9 \%$ ). Conclusion: Snacks are important in food consumption among adolescents; when snacks are consumed in addition to 3 meals, they will improve the nutritional status of adolescents. (Journal of Nutrition Education and Behavior, 2010)

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addition to 3 meals, they will improve the nutritional status of adolescents. (Journal of Nutrition Education and Behavior, 2010)

A notable omission in studies of developmental links to early nutritional deficiencies is infant attachment. In those few studies investigating associations between infant nutrition and attachment, nutrition was defined solely by physical growth, and infants had moderate-severe growth retardation. In this study, we utilized multiple markers of infant nutrition. Our sample consisted of 172 12-month-old Peruvian infants and their mothers from low-income families, with a follow-up assessment on 77 infants at 18 months. Infants were not severely malnourished, but did have micronutrient deficiencies. Anthropometry, dietary intake, and iron status were used as measures of infant nutrition. Based on infant behavior in a structured laboratory situation, Q-sort techniques were used to rate three attachment markers: infant secure base behavior, interaction quality, and negative emotionality with mother. At 12 months, infant weight was positively related to interaction quality. At 18 months, infant iron status was positively related to secure base behavior. This pattern of findings remained even after statistically controlling for family socioeconomic status and maternal education. Our findings indicate that infant nutritional status is associated with markers of infant attachment and these associations are not restricted just to severely malnourished infants. (Infancy, 2011)
2.3 Conceptual Framework

## CHAPTER-III

## METHODOLOGY

### 3.1 Research Design

This study was made to assess the 'Impacts of Tiffin Practice on Nutritional Status of Primary School Children". The study was based on primary data, data collected from the field survey in primary school of Rajahar VDC with the help of Self Administrated Questionnaire (SAQ).

### 3.2 Population / Sources of Data

The study has been based in primary data. Data for this study were collected from the field survey in primary school of Rajahar VDC.

### 3.3 Sampling Procedure and Sample Size

In order conduct this study work, the researcher explained the head teachers about the purpose of researcher visit. Researcher took the help of concerned teachers to conduct for research work, likewise, researcher selected 140 students as sample for study. The schools were selected by census method and the teachers and students who selected by randomly.

### 3.4 Construction and Standardization of Tool and Instruments

## a) Weighting Machine

To measure the weight of selected students brought a weighting machine from Sita Medical Hall of faram. Researcher was going to find out standardization by weight in a one kilogram mass weight it was so reliable. Than all the heavy cloth and shoes were taken off.

## b) Height Measuring Tape

Bought a new height measuring tap available in market it was use to measure the height so class five students. First of all, I was bought a height measuring tape and than compare with old which was previously used to measure the
height. It was show equal new as well as old. So, it determines standardization of a new height measuring tape.

## c) Construction of Interview Schedule (Questionnaire)

The researcher had made different sets of questions for both teachers and students separately. Those questions were close and open ended and observations check list was used for this study.

### 3.5 Data Collection Procedure

In Data collection procedures, the researcher personally visited each of the selected schools and introduced herself to the headmaster of the school and explained aim of the visit. The researcher requested the headmaster to provide the class 5 students from the school, for which class was recorded from the school admission file. As mentioned in the sampling procedure to give equal representation to each school. 10 students were selected randomly. They were assembled and for an informal discussion before the collection of data.

All the students were oriented to the testing procedures before conduction test, so that they were well acquainted with the procedures of various test. All subjects were allowed two trials, so that the learning. Effect could be minimized before finally collecting data. After the explanation, demonstration and trail the anthropometric measures were taken and recorded with the help of school teacher. Height and weight were recorded to nearest centimeters and nearest K.G. respectively.

A set of questionnaire was designed to get information of socio-economic status of the selected sample group and the data were gathered through the responses of the subjects.

### 3.6 Data Analysis and Interpretation

The collected data has been properly checked before tabulating. The data analysis and interpretation are in descriptive form and based on simple static's like tables, percentage and pie chart. The collected data have been presenting by headings and subheading with clear explanation.

## CHAPTER-IV

## DATA ANALYSIS AND INTERPRETATION

This chapter is related to analysis and interpretation of the data gathered on teachers knowledge practice, and attitude and students knowledge and practice regarding "Impacts of Tiffin Practice on Nutritional Status of primary school children" Rajahar VDC of Nawalparasi District. The collected data had analyzed and interpreted with the help of simple statistical process i.e table, diagrams etc.

### 4.1 Knowledge, Attitude and Practices of Teacher towards Nutritional Status and Tiffin Practices

The researcher made the main aim of the interview schedule to find out the teacher knowledge attitude and practices on nutritional status and Tiffin practices in primary school. Following are the different lever of knowledge and attitudes regarding the topic.

### 4.1.1 Average No. of Students Per Class

In this study were found or class five student was $10-45$ per class.

### 4.1.2 Types of Tiffin which Students Bring School

All the students may have their own choice of Tiffin, which students had preferred were as follow in this study had choice are home made (which cook in own home ex. Roti, chana, bitten rice) and ready made (which cooked in factory that is called ready made (Chowchow, biscuit)

Table No. 1: Type of Tiffins which Students Bring in School

| S. N. | Tiffin Items | No of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Home made | 90 | 64.29 |
| 2 | Ready made | 50 | 35.71 |
| Total |  | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

The above table show that must of the student (64.29\%) bring home made Tiffin and ( $35.71 \%$ ) students bring ready made Tiffin in daily at school.

### 4.1.3 Tiffin Taking Place

The Tiffin taking place also plays vital role for good health.
Table No. 2 : Tiffin Taking Place

| Tiffin Taking Place | No. of Students | Percentage |
| :--- | :---: | :---: |
| Classroom | 20 | 14.29 |
| Ground | 100 | 71.43 |
| Canteen | 10 | 7.14 |
| Other place | 10 | 7.14 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

The above table indicates that only $14.29 \%$ students had Tiffin taking at the classroom. 71.43 percent taking ground, 7.14 percent had taken canteen and 7.14 percent had taken at other place.

### 4.1.4 Tiffin Time

Proper Tiffin time is necessary to maintain appropriate nutritional level. So in this regard, the researcher had prepared the questionnaire about Tiffin. All the respondents answered that they had taken their Tiffin around 1:00 pm. The brooding school managed to 30 Minuit and public school had managed to 45 min for Tiffin.

### 4.1.5 Manage of Canteen

Proper Tiffin canteen is necessary to good health and nutritional level in this area some school manage the canteen.

Table No. 3 : Manage of Canteen

| Manage the Canteen | No. of School | Percentage |
| :---: | :---: | :---: |
| Yes | 4 | 28.57 |
| No | 10 | 71.43 |
| Total | $\mathbf{1 4}$ | $\mathbf{1 0 0}$ |

The above table indicates that only 28.57 percent school had manage canteen and 71.42 percent school hadn't managed there canteen.

### 4.1.6 Before Taking Tiffin Hands Washing Practices

Hand should be washed with soap and water before taking food and after defection. It is necessary to prevent invisible germs for entering inside human body. In this study shows the situation of hands washing practices.

Table No. 4 : Before Taking Tiffin Hands Washing Practices

| Answer Mode | No of Students | Percentage |
| :--- | :---: | :---: |
| Yes | 80 | 57.14 |
| No | 60 | 42.86 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

The above table shows most of the student 57.14 percent were washed own hands before taking Tiffin and 42.86 percent were not washed hands before taking Tiffin.

### 4.1.7 Tiffin Supervision System

It is found that most of the schools do not have Tiffin supervision system where the students are taking hygienic Tiffin or not. Below table shows the Tiffin supervisor system.

Table No. 5 : Tiffin Supervision System

| S.N. | Is there Supervision System? | No. of School | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Yes | 3 | 21.43 |
| 2 | No | 11 | 78.57 |
| Total | $\mathbf{1 4}$ | $\mathbf{1 0 0}$ |  |

The above table indicates that only 21.43 percent schools had supervision system of Tiffin care in the study area and must of the school 78.57 percentage schools did not have such a supervision system.

### 4.1.8 Measurement of Height and Weight

In this study showed that none of the school had previously measured that height \& weight of their students. But they said that there was necessity of such measurement of school students. They even said that there was crucial role of Tiffin to maintain the nutritional status of students.

### 4.1.9 Way of Good Tiffin Management in the School

In the response of question for ways of good Tiffin management in the school, all of the teachers replied that there must be canteen, good place and manpower of Tiffin manager.

### 4.1.10 Hindering Factors for Tiffin Management in School

Tiffin management plays vital role in order to maintain good health of an individual. The knowledge and attitude of head teacher and teacher participation is must for it that is the key persons to motivate the parents. According to the teacher respondents, table no 6 shoes the hindering factors for Tiffin management in the school.

Table No. 6 : Hindering Factors for Tiffin Management in the School

| S.N | Problems | No. of Teacher | Percentage |
| :--- | :--- | :---: | :---: |
| $\mathbf{1}$ | Lack of Budget | 6 | 42.86 |
| 2 | Lack of Technical manpower and <br> facilities | 3 | 21.43 |
| 3 | Lack of Tiffin handling personal | 5 | 35.71 |
| Total |  |  |  |

Above the table No. 6 shows that 42.86 percent teacher said lack of budget was the main problem for Tiffin management. Like wise 21.43 percent teacher said lack of technical manpower and 35.71 percent said that due to the lack of Tiffin
handling practitioner. The figure No. 1 shows the hindering factors for Tiffin management.

## Figure No. 1 : Hindering Factors for Tiffin Management in the School

### 4.2 Students' K nowledge and Practice

The researcher had prepared 20 questionnaires for student as a tool for data collection. The questions were asked to 150 students of grade five of total 15 selected school of Rajahar VDC. The result of the respondents is as follow.

### 4.2.1. Composition of Students by Sex

The compassion of students by sex means the distribution of students as boys and girls. Table no 7 shows the composition of students by sex in the study area.

Table No. 7 : Composition of Students by Sex

| S. $\mathbf{N}$. | Sex | No of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Girls | 81 | 57.86 |
| 2 | Boys | 59 | 42.14 |
| Total |  |  | $\mathbf{1 4 0}$ |
| $\mathbf{1 0 0}$ |  |  |  |

Above table shows that most of the students were girls in the study area which represents 57.86 percentage and only 42.14 percentage were boys. It is the good enrollment of girls students in school in the context of Nepal where it is seemed very poor presence of women.

### 4.2.2 Family Members

Most of the students had members in their house it is shown in table no 9 as the respondents replied in the study area.

Table No. 8 : Family Members

| S. N. | Option | No of Family Members | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | $0-3$ | 5 | 3.57 |
| 2 | $4-6$ | 95 | 67.86 |
| 3 | $7-10$ | 32 | 22.86 |
| 4 | More than ten | 8 | 5.71 |
| Total |  |  |  |

Above table shows that 3.57 percent of students had 0-3 family members, 67.86 percent students had 4-6 family member 22.86 percent students had 7-10 family member and 5.71 percent had more than ten.

### 4.2.3. Educational Background of the Parents

The data pertaining to the educational background of the parents are analyzed in percentage and presented in the table no-9.

Table No. 9 : Educational Background of the Parents in Percentage

| Class | Father | Mother | Percentage Father | Percentage Mother |
| :--- | :---: | :---: | :---: | :---: |
| Illiterate | 56 | 66 | 40 | 47.14 |
| Literate | 44 | 40 | 31.43 | 28.57 |
| SLC | 23 | 21 | 16.43 | 15 |
| Above SLC | 17 | 13 | 12.14 | 9.29 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |

From table No. 9 we found that majority of the $40 \%$ father and $47.14 \%$ mother had illiterate, $31.43 \%$ father and $28.57 \%$ mother had illiterate, $16.43 \%$ father and $15 \%$ mother had SLC and $12.14 \%$ father and $9.29 \%$ mother had above SLC.

### 4.2.4 Occupation of the Parents

The researcher had asked the occupation of their father and mother separately. Table no 10 shows the result.

Table No. 10 : Occupation of Father

| S. N. | Occupation | No. of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Farmer | 41 | 29.29 |
| 2 | Officer | 14 | 10 |
| 3 | Businessmen | 28 | 20 |
| 4 | Other | 57 | 40.71 |
| Total |  | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

From the table No 10 researcher found the majority of the father $29.29 \%$ belong to the farmer where $10 \%$ officer, $20 \%$ businessmen and $40.71 \%$ other (other means labour and gone to foreign country).

Table No. 11 : Occupation of Mother

| S. N. | Occupation | No of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Farmer | 96 | 68.57 |
| 2 | Officer | 9 | 6.43 |
| 3 | Businessmen | 17 | 12.14 |
| 4 | Other | 18 | 12.86 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |  |

From the table no 11 the roisterer were found respondents mother $68.57 \%$ had farmer, $6.43 \%$ officer $12.14 \%$ businessman and $12.86 \%$ others (other means labour and gone to foreign country.

### 4.2.5 Farming Land

The students were form different area and there condition of farming land show the result table no. 12

Table No. 12 : Farming Land

| S. N. | Have your farming Land | No of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Yes | 110 | 78.57 |
| 2 | No | 30 | 21.43 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |  |

According to the table no 12 it is revealed that (78.57\%) of student had farming land and $21.43 \%$ respondents did not have own forming land.

The percentage of farming land presented graphically in fig. 2
Figure No. 2 : Farming Land

### 4.2.6 Condition of Toilet

Toilet is the most importance part of the good heath so the sent percent of respondents have toilet in own house. Its main course the Rajahar VDC is the open defection area 2068.

### 4.2.7 Condition of Drinking Water

In this study the students had given different answer in the question of condition of drinking water. Table no 13 indicates the reply of them.

Table No. 13 : Condition of Drinking Water

| S. N. | Options | No. of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Direct use | 103 | 73.57 |
| 2 | Boil | 9 | 6.43 |
| 3 | Filter | 28 | 20 |
| 4 | Other | 0 | 0 |
| Total |  | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

Above table shows that most of the students drink direct tap use i.e. $73.57 \%$, like wise $6.43 \%$ drink boiled and $20 \%$ drink filtered.

### 4.2.8 Food Taking Frequency Per Day

The respondents had given different answer to the same question. Table no 14 shows the result.

Table No. 14 : Food Taking Frequency Per Day

| S. N. | Food Taking Frequency | No of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Two times | 3 | 2.14 |
| 2 | Three times | 92 | 65.71 |
| 3 | Four times | 44 | 31.43 |
| 4 | More than four times | 1 | 0.71 |
| Total |  |  |  |

The above table shows that most of students had taken food three times per day that indicates $65.71 \%$ and only $31.43 \%$ students had four times per day. Likewise $2.14 \%$ had taken times and only 0.71 \% had taken more than four time. In per day this can be under stood more detail in the following figure no 3

## Figure No. 3 : Food Taking Frequency Per Day

### 4.2.9 Condition of Like Green Vegetables

Green vegetables are must importance things our health in this study area found this types result which show the table no 15 .

Table No. 15 : Condition of Like Green Vegetable

| S. N. | Do you like green Veg. | No of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Yes | 74 | 52.86 |
| 2 | No | 66 | 47.14 |
| Total |  | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

Above table shows that most of the students liked green vegetable that indicates $52.86 \%$ and only $47.14 \%$ student did not like green vegetables. Which student didn't like vegetable they were liked Dal or Gedagudi etc.

### 4.2.10 Condition of Hands Wash before Eating

In this study 100 percentage students were washed hands before eating but they are used only water.

### 4.2.11 Knowledge about Height and Weight

The study found that most of the students $62 \%$ have not taken their height and weight currently. Those who had taken also did not know their standard. Only $37.24 \%$ students had known their standard.

### 4.2.12 Students having Tiffin Daily

Hygienic Tiffin needs daily meeting the requirements it determines the health level of an individual. The table no 16 shows the students having daily Tiffin in their school.

Table No. 16 : Students Having Tiffin Daily

| S.N. | Having Tiffin Daily? | No of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Daily | 41 | 29.29 |
| 2 | Never | 29 | 20.71 |
| 3 | Sometimes | 70 | 50 |
| Total |  | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

The above table show that must of the students bring sometime in school i.e 50 percent, $29.29 \%$ students bring daily and $20.71 \%$ student don't bring Tiffin in their school due to their nearby house. It means they go to house during Tiffin time. This data can be clearer under this pie chat.

Figure No. 4 : Students Having Tiffin Daily

### 4.2.13 Daily Tiffin Items

Different students have given their different answer in the question of daily Tiffin item. The table no 17 shows its answer.

Table No. 17 : Daily Tiffin Item

| S.N. | Tiffin Item | No. of Students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | Home made | 75 | 53.57 |
| 2 | Ready made | 65 | 46.43 |
| Total |  |  |  |

The Above table shows that must of the students had use the home made Tiffin and only percent student had used ready made Tiffin generally the home made Tiffin is better our health. This data can be clearer under this bar diagram.

Figure No. 5 : Daily Tiffin Items

### 4.2.14 Tiffin Time

Proper Tiffin time is necessary to maintain appropriate nutritional level. So in this regard, the all the respondents answered that they had taken (5) school had canteen but they didn't had good management.

### 4.2.15 Cleanness of Tiffin Bowl

Proper cleanliness of Tiffin bowl is necessary from health paint of view, In this regard all the respondents answered that they washed own Tiffin bowl daily at home.

### 4.2.16 Condition of Nail

Nail is also one the most important determinates for healthy living way of an individual. In this regard table no 18 shows the result.

Table No. 18 : Condition of Nail

| Do you Cut your Nail Regularly | No of Student | Percentage |
| :--- | :---: | :---: |
| Yes | 121 | 86.43 |
| No | 19 | 13.57 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

The above table No. 18 shows that $86.43 \%$ students cut own nail regularly and $13.57 \%$ student didn't cut own nail regularly.

### 4.2.17 Purpose of Nail Cutting

The respondents answer that they cut of own nail regularly. The table no 19 show its answer.

Table No. 19 : Purpose of Nail Cut

| Purpose | No of Students | Percentage |
| :--- | :---: | :---: |
| To be beyond from the punishment | 64 | 45.72 |
| To be safe from disease | 76 | 54.28 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

Above the table show that $54.28 \%$ student had cut own nail regularly to safe from disease and $45.72 \%$ student cut own nail to be beyond from the punishment.

### 4.2.18 Cloth Washing Frequency Per Week

The respondents had given different answer to the same question table no 20 shows the result.

Table No. 20 : Cloth Washing Frequency

| S.N | Cloth Washing Frequency | No of students | Percentage |
| :--- | :--- | :---: | :---: |
| 1 | One time | 55 | 39.29 |
| 2 | Two time | 59 | 42.14 |
| 3 | Three time | 24 | 17.14 |
| 4 | Any time | 2 | 1.43 |
| Total |  |  |  |

Above table shows that $39.29 \%$ students had washed own cloth one time in per week, $42.14 \%$ had two time, $70.14 \%$ had three time and only $1.43 \%$ had wash any time in per week. The figure No. 6 shows the cloth washing per week.

## Figure No. 6 : Cloth Washing Frequency

### 4.3 Student Observation Check List

The researcher had selected 140 students for the study of Nutritional status and Tiffin practices of Nawalparasi district of class five from 10 selected public and private schools. Rajahar VDC different measurement was taken along with observation checklist. The result of the observation is as follow.

### 4.3.1 Average Height of Boys and Girls

Must of the students were from age group 9-14 years in grade five. There average height is as follow.

Table No. 21 : Average Height of Boys and Girls

| Sex | Average Height in cm |
| :--- | :---: |
| Boys | 39.64 cm |
| Girls | 52.9 cm |

Above the table shows that average height of girls is 52.9 cm and boys average height is 39.64 cm found comparatively girls were height more than boys.

### 4.3.2 Average Weight of the Boys and Girls

It is must essential to know regular measurement of height weight etc of the school going children. In this regard, the researcher had taken the weight of the students of study area by the help of weight machine. The result is as follow.

Table No. 22 : Average Weight of the Boys and Girls

| Sex | Average Weight in K.G. |
| :--- | :---: |
| Boys | 33.18 K.G. |
| Girls | 41.23 K.G. |

Table no 22 shows that the average weight of boys had $33.18 \mathrm{k} . \mathrm{g}$ and girl had 41.23 k.g girls weight had more than boys.

### 4.3.3 Facial Appearance

The researcher had observed the facial appearance of the students of study area. The result is as follow.

Table No. 23 : Facial Appearance of Students

| Statement | No of Students | Percentage |
| :--- | :---: | :---: |
| Cheerful | 56 | 40 |
| Normal | 70 | 50 |
| Sad | 14 | 10 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

Table no 23 shows that most of the students belong to normally ranges i.e $50 \%$ like wise $40 \%$ are cheerful and 10 percent are seemed sad during the observation period. The cause behind their sadness was headache and stomach pain according to their reply.

### 4.3.4 Eye Colour of the Students

All the students were seemed having black eye color in the study area.

### 4.3.5 Oral Hygiene of the Students

The oral hygiene of the student their teeth was observed table 24 show the result.

Table No. 24 : Oral Hygiene of the Students

| Statement | No of Students | Percentage |
| :--- | :---: | :---: |
| Brushed | 127 | 90.72 |
| No brushed | 13 | 9.28 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

The above table shows that most of the students (90.71\%) have brushed their teeth. The researcher had asked the brushing time per day; the respondents said that they had brushed their teeth once a day early in the morning.

### 4.3.6 Condition of Nail

Nail is also one of the most important determinants for healthy living way of an individual.

Table No. 25 : Condition of Nail

| Statement | No of students | Percentage |
| :--- | :---: | :---: |
| Trimmed | 97 | 69.28 |
| Not trimmed | 43 | 30.72 |
| Total | $\mathbf{1 4 0}$ | $\mathbf{1 0 0}$ |

The above table shows that must of the students (69.28\%) are seemed trimming their nail and only 30.72 percent were not. The figure no 7 shows the more detail.

Figure No. 7 : Condition of Nail

### 4.3.7 Gomez Classification

Table No. 26 : Gomez Classification

| Grades PEM | Percentage <br> Value | No of <br> Boys | Percentage | No of <br> Girl | Percentage |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Normal | Above 90 | 8 | 5.71 | 9 | 6.42 |
| Mild 1st degree | $76-90$ | 30 | 21.42 | 24 | 17.14 |
| Moderate 2nd <br> degree | $60-75$ | 22 | 15.71 | 31 | 22.14 |
| Severe 3rd degree | Below 60 | 6 | 4.28 | 10 | 7.4 |
| Total |  | $\mathbf{6 6}$ | $\mathbf{4 7}$ | $\mathbf{7 4}$ | $\mathbf{5 3}$ |

Above the table shows that $5.7 \%$ boys and $6.42 \%$ girls were normal $21.42 \%$ boys and $17.14 \%$ girls were mild, $15.17 \%$ boys and $22.14 \%$ girls were moderate and $4.28 \%$ boys and $7.14 \%$ girls weight were found in this research
4.3.8 Waterloo Classification

Table No. 27 : Waterloo classification

| S. <br> $\mathbf{N .}$ | Level Nutrition <br> Status | Per. Values | No of <br> Boys | Percentage | No of <br> Girl | Percentage |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| 1 | Normal | Above 90\% | 42 | $30 \%$ | 46 | $32.85 \%$ |
| 2 | Acute Stunted | $80-90 \%$ | 19 | $13.57 \%$ | 33 | $32.57 \%$ |
| 3 | Moderate <br> Stunted | $70-80$ | - | - | - | - |
| 4 | Sever stunted | Below 70 | - | - | - | - |
|  | Total |  | 61 | 43.53 | 79 | 65.42 |

Above the table shows that $30 \%$ boys and $32.85 \%$ girls were normal, and $13.57 \%$ boys and $23.57 \%$ girls were found Acute stunted.

## CHAPTER-V

## SUMMARY, FINDING, CONCLUSION AND RECOMMENDATIONS

### 5.1 Summary

Today's children are the responsible citizen of the nation in future. It the child's condition is good in the areas like health, Education, Economic, social, Culture etc. Then they can offer better contribution for the nation (NPC 1993).

Health is one of the most important factors for the fulfillment of human needs and improvement of the quality of life A healthy person is always cheerful and can do full days work without exhaustion. Even a poor man having on good health can improve his living standard. The health of the people is considered to be the wealth of the nation unless. People are healthy, the development of a nation and it's people is quite impossible, thus, it many be taken into consideration from the pregnant period of mother to protect and promote the health of the child who will become a health citizen in future.

In Nepal, high percentage of people are suffering from poverty, lack of education, lack of health services facilities and lack of proper knowledge to take their health care. This is gradually causing a greater nutrition problem in children which seems most necessary to eliminate as soon as possible. By Keeping view to the above mentioned problem, researcher selected Rajahar VDC as the study area. Because, yet in researcher knowledge, no micro research has been done on this matter of primary schools system, Therefore the topics emphasis on "Impacts of Tiffin Practice on Nutritional status of primary School Children" of Rajahar Total VDC of Nawalparasi district

The Subjects selected for the present study were from the primary school students of Rajahar VDC.A list of Rajahar VDC was obtained from the Sorot Kendra of Amarapuri. The primary schools of Rajahar VDC which were 10 the researcher selected the all school or census method. Strength of the subject varied from school to school and class to class. Therefore to give equal representation of each school 10 students were selected 140 as a sample so that
the sample size of the study was 25 students. While sampling the 10 students from each school the number of girls and boys students falls short, so the sample size of the boy students was 59 and the sample size of the girl students was 81 .

The questionnaire was administered by the researcher himself. A standard weighing machine and standard measurement tape were used to measure the weight and height of the children. The weight and height were recorded in kilos and centimeter respectively.

The collected data were tabulated and analyzed in terms of frequencies and percentage to find out the significance level of the weight and height of the children of primary school of Rajahar VDC and to assess and compare the nutritional status of students the data was presented in various tables showing percentage of the degree of malnutrition.

### 5.2 Finding

Data analysis and interpretation following out comes were found.

1. The study showed the class five of students is $10-45$ per class.
2. More than 85.71 percent students were from farmer's background.
3. $64.28 \%$ students had brought Tiffin home made.
4. $100 \%$ schools had their Tiffin time around 1:00 pm
5. During Tiffin feeding time $71 \%$ students took in ground and $14.28 \%$ took class room and only $7.14 \%$ took had their canteen.
6. The study showed the $28.57 \%$ had managed the canteen and $71.42 \%$ had not manage the canteen.
7. About Tiffin supervision system $21.42 \%$ teacher respondents said yes and $78.57 \%$ said that there not but $100 \%$ teacher said positively about the supervision system.
8. The study where is no manage the measurement of height and weight.
9. $42.15 \%$ said that lack of budget $21.42 \%$ lack of technical manpower end facilities and $35.71 \%$ lack of Tiffin handling personnel about the hindering factors for Tiffin management in the school.
10. $57 \%$ students had $0-3$ family members. $67.85 \%$ had $4-6,22.85 \%$ had $7-10$ and $5.7 \%$ students had more than ten family members in their house.
11. $40 \%$ students father had illiterate and $31.42 \%$ had literate, $23 \%$ had slc and $12.14 \%$ had above.
$12.66 \%$ student mother had illiterate $28.71 \%$ literate $15 \%$ had slc and $9.28 \%$ had above SLC.
12. Most of the student father $40.71 \%$ had gone to foreign and $29.28 \%$ had farmer Just 20\% had business man and $10 \%$ had officer.
13. $68.57 \%$ students mother had farmer $6.42 \%$ had officer, $12.14 \%$ had businessman and $12.85 \%$ other or gone to form.
14. Must of the students $78.57 \%$ had own farming land and $21.42 \%$ students had not own farming land.
15. $11 \%$ student had failed in own house.
16. Most of the students were found direct use to drinking water. (73.57\%.)
17. Most of the students were taken their food three times. (65.7\%).
18. $52.85 \%$ students like green vegetable and $47.14 \%$ students don't
19. Most of the student (62\%) has not taken their height and weight currently.
20. $29.28 \%$ student having Tiffin in daily, $20.71 \%$ had never having and $50 \%$ students having sometimes in school time.
21. $11 \%$ students said that they washed their Tiffin box daily.
22. $86.42 \%$ students had cut own nail regularly and $13.57 \%$ students did not cut.
23. $45.71 \%$ student said cut own nail regularly to be beyond from the punishment and $54.28 \%$ student said to be safe from disease.
24. Must of the students (42.14\%)) said that they washed own school dress two time.
25. The average height of boys and girls were 39.64 cm and 52.9 cm respectively.
26. The average weight of boys and girls were 33.18 kg and 41.23 respectively.
27. Must of the students were seemed in homes condition (50\%) $40 \%$ cheerful and $10 \%$ sad.
28. $90.71 \%$ students were found brushing their teeth.
29. $69.28 \%$ students had trimmed their nail.

### 5.3 Conclusion

The researcher has drawn followings conclusion on the basis of result of the finding.

1. All the respondents had accepted that Tiffin should compulsory in School to maintain their proper nutritional status but there were no provision for it.
2. Only 4 School found that manage the canteen but they were not so good for health.
3. Most of the students were brought their Tiffin from home.
4. It is found that most of the students took their Tiffin in the ground.
5. Most of the students were from the family member 4-6.
6. There was $21.42 \%$ only supervision system whether they were taking hygienic Tiffin or not. But the all teachers said that they had eaten three times per day.
7. The Tiffin time was around 1:00 pm but public school manages 45 min and provost school was managing 30 min . only.
8. Most of the students were seemed normal appearance.
9. Most of the students were found brushed their teeth once a day early in the morning.
10. Above 69 percent student were found trimming their nail.
11. Among boys and girls, Girls had more height and weight in a average.
12. The attitude of students was positive but didn't find in behavior.

### 5.4. Recommendation

Health is one of the fundamental human rights. In this regards, the nation should be build up positive plans and polices at proper time. On the basis of above findings and conclusions, the researcher has given following recommendation to the concerned and authorized people to act up on the better Tiffin practices to maintain proper nutritional status of school going children in the study area.

1. Daily supervision is necessary about whether the students are taking hygienic Tiffin or not.
2. School should manage proper canteen so that students don't go outside from the school boundary.
3. There should be proper provision of Tiffin hall instead of taking in classroom or on the playground.
4. There should be proper facility of drinking water and all students should wash their hands before and outer Tiffin.
5. All the students should be encouraged to bring Tiffin from their home so that it can more hygienic and also less expensive.
6. Parent Teacher Association (PTA) should be formed where all students and school related problems should be discussed time to time whit conclusion.
7. Proper reward and punishment is necessary regarding good Tiffin habits.
8. There should be taken students height and weight measurement of can find out their present condition with comparison of post.
9. School administration should play vital role fro proper plans and policies regarding good management of Tiffin in school.
10. Students should be discouraged from taking junk food along with its disadvantages.
11. Further research work should be carried out by research contra. NGOs, INGOs and GDs,

## 12. Recommendation for the Further Study

i) Similar study should be made to the other field of the country in a wider coverage.
ii) There should be conducted a case study on influence of advertisement in school going children regarding verities of Tiffin.

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## Appendix - A

## Questionnaire for the Students

Name:
School:
Class:
Child Age:
Address:
Sex:

1. How many members are there in your family?
a. 0-3 [ ]
b. 4-6 [ ]
c. $7-10$ [ ]
d. More then ten [ ]
2. What is the educational background of your parents.
a. Father [ ]
b. Mother [ ]
3. What is the occupation of your father?
a. Farmer [ ]
b. Officer [ ]
c. Businessman [ ]
d. Other [ ]
4. What is the occupation of your mother?
a. Farmer [ ]
b. Officer [ ]
c. Business [ ]
d. Other [ ]
5. Do you have your own farming land?
a. Yes
[ ]
b. No [ ]
6. Do you have toilet in your house?
a. Yes
[ ]
b. No [ ]
7. How do you treat your drinking water?
a. Direct use
b. Boil
c. Filter
d. Other [ ]
8. How many time do you take food per day?
a. Two times [ ]
b. Three times [ ]
c. Four times [ ]
d. More than four time [
9. Do you like to eat green leafy vegetables?
a. Yes
[ ]
b. No [ ]
10. Do you wash your hands before eating?
a. Yes [ ]
b. No [ ]
11. Have you taken your body weight and height currently?
a. Yes [ ]
b. No [ ]
12. If yes what is your height and weight?
a. Height [ ]
b. Weight [
]
13. Do you bring Tiffin daily in school?
a. Daily [ ]
b. Sometimes [ ]
d. Never [ ]
14. What type of Tiffin do you like most?
a. Home made [ ]
b. Ready made [ ]
15. At what time do you eat Tiffin?
a. At 12.30 pm
b. At 01.00 pm
c. At 02.00 pm
d. Anytime
16. Does your guardian or you wash your Tiffin boul daily at home?
a. Yes [ ]
b. No [
]
17. Is there canteen in you school?
a. Yes [ ]
b. No [ ]
18. Do you cut your nail regularly?
a. Yes [ ]
b. No [ ]
19. What many time do you wash your cloth per weeks?
a. Two times [ ]
b. One time[ ]
c. Three times [ ]
d. Any time [ ]
20. Why do you cut your nail regularly?
a. To be beyond from the punishment [ ]
b. To be safe from disease [ ]

## Questionnaire for the Teachers

Name:
Date:
Teaching subject :
Name of school :
Teaching experiences in year :

1. How many students are there in class five?
2. From which profession the students are must?
a. Farmers [ ]
b. Officers [ ]
c. Businessman [ ]
d. Other [ ]
3. Mostly what types of Tiffin do the students bring in school?
a. Home made [ ]
b. Ready made [ ]
4. Where the students are fed Tiffin?
a. Classroom [ ]
b. Ground [ ]
c. Canteen [ ]
d. Other place [ ]
5. What is the Tiffin time for the students?
6. Is there canteen in your school?
a. yes [ ]
b. No [ ]
7. Do the students wash their hands before and after Tiffin?
a. yes [
b. No [
]
8. Is there supervision system whether the students are taking Tiffin in a hygienic way
or not?
a. yes [ ]
b. No [ ]
9. If not why? $\qquad$
10. Was there taken any measurement of Height, and Weight test before this?
a. yes [ ]
b. No [ ]
11. What do you think about measuring of height and weight of students whether is necessary or not?
a. Its necessary
b. It is not necessar
12. If necessary why? $\qquad$
13. If not why? $\qquad$
14. What should be done for good Tiffin management in the school?
15. What are the hindering factors for the Tiffin management?

Appendix- B
Students Observation Check List

| S.N. | Particulars | Boys | Girls |
| :--- | :--- | :--- | :---: |
| 1 | Height |  |  |
| 2 | Weight |  |  |
| 3 | Facial Appearance |  |  |
| 4 | Eye Color |  |  |
| 5 | Hygiene |  |  |
| 6 | Oral |  |  |
| 7 | Nail |  |  |
| 8 | Cloth |  |  |

## Appendix- C

## Gomez Classification

Weight for age $\%=$

Based on weight for age suggested by Gomez are presented in the table.
Gomez's classification for Malnutrition of Weight for age.

| Weight for age\% | Grades (PEM) |
| :--- | :--- |
| $90+$ | Normal |
| $76-90$ | Mild(I ${ }^{\text {st }}$ degree) |
| $60-75$ | Modernize $\left(2^{\text {nd }}\right.$ degree $)$ |
| Below 60 | severe $\left(3^{\text {rd }}\right.$ degree $)$ |

## Waterloo Classification

Waterloo classification is a simple classification of malnutrition status in term of the percent of height for age and weight for height. This can be used for categorizing children as normal, stunted and wasted by the calculation of following formula:

## Waterloo are presented in table:-

| Percentage value | Level of Nutrition Status |
| :--- | :--- |
| Above 90\% | Normal |
| $80-90 \%$ | Acute Stunted |
| $70-80 \%$ | Moderate Stunted |
| Below 70 | Sever Stunted |

Appendix- D
Anthropometric Measurement of Children
Gomez's Classification

| Boys Height \& Weight |  | Girls Height \& Weight |  |
| :---: | :---: | :---: | :---: |
| Height | Weight | Height | Weight |
| 96.71 | 57.5 | 85.58 | 76.01 |
| 81.93 | 82.98 | 93.79 | 70.53 |
| 88.23 | 85.11 | 97.4 | 83.93 |
| 86.24 | 85.86 | 105.33 | 85.55 |
| 90.24 | 61.33 | 89.84 | 78.34 |
| 93.61 | 91.99 | 98.73 | 86.73 |
| 90.15 | 82.26 | 91.22 | 73.41 |
| 90.24 | 85.1 | 103.66 | 61.55 |
| 94.91 | 66.47 | 89.84 | 64.35 |
| 90.15 | 57.89 | 93.29 | 65.24 |
| 90.24 | 71.12 | 98.13 | 71.19 |
| 93.61 | 75.79 | 97.4 | 72.97 |
| 87.76 | 68.08 | 88.87 | 72.94 |
| 95.48 | 73.56 | 89.46 | 55.95 |
| 85.93 | 90.58 | 93.3 | 75.49 |
| 85.93 | 70.56 | 86.89 | 86.73 |
| 89.9 | 62.41 | 86.09 | 100.34 |
| 81.55 | 104.71 | 91.22 | 75.49 |
| 90.15 | 73.18 | 95.23 | 81.14 |
| 91.6 | 78.41 | 98.74 | 78.34 |
| 90.15 | 70.92 | 95.23 | 66.74 |
| 90.52 | 81.02 | 90.38 | 56.94 |
| 90.52 | 73.75 | 91.22 | 69.94 |
| 93.61 | 77.56 | 95.23 | 81.53 |
| 86.89 | 71.12 | 89.46 | 100.34 |
| 93.58 | 94.83 | 97.4 | 62.71 |
| 92.65 | 52.15 | 101.6 | 62.79 |
| 90.24 | 81.02 | 96.3 | 85.1 |
| 91.53 | 88.92 | 89.46 | 50.32 |
| 91.57 | 78.41 | 96.75 | 80.65 |
| 84.89 | 85.1 | 92.16 | 78.39 |
| 84.89 | 79.43 | 89.84 | 68.01 |
| 91.11 | 86.25 | 91.22 | 64.35 |
| 88.23 | 78.41 | 93.57 | 53.16 |
| 94.08 | 62.41 | 85.69 | 69.94 |
| 90.35 | 86.25 | 94.67 | 61.55 |
| 88.24 | 76.59 | 91.22 | 55.35 |
| 98.7 | 68.08 | 109.48 | 69.94 |
| 90.15 | 82.97 | 86.89 | 95.13 |
| 94.08 | 64.1 | 86.89 | 87.8 |


| 88 | 87.71 | 87.76 | 60.39 |
| :---: | :---: | :---: | :---: |
| 96.22 | 78.41 | 95.45 | 87.8 |
| 95.01 | 54.88 | 93.29 | 76.01 |
| 93.61 | 79.43 | 97.4 | 57.87 |
| 88.38 | 94.83 | 102 | 50.35 |
| 81.09 | 90.78 | 89.84 | 67.75 |
| 96.77 | 82.79 | 105.04 | 56.44 |
| 90.24 | 73.59 | 89.11 | 105.68 |
| 89.84 | 90.78 | 88.44 | 78.39 |
| 92.65 | 57.5 | 87.76 | 77.86 |
| 91.57 | 81.02 | 93.79 | 67.15 |
| 96.77 | 67.86 | 93.79 | 62.71 |
| 89.84 | 62.72 | 89.46 | 62.85 |
| 101.6 | 76.59 | 98.46 | 75.64 |
| 86.89 | 62.72 | 89.85 | 78.61 |
| 92.16 | 54.88 | 89.84 | 57.87 |
| 90.15 | 62.72 | 83.77 | 72.97 |
| 91.23 | 69.65 | 85.58 | 92.33 |
| 90.24 | 70.68 | 96.75 | 79.73 |
| 90.32 | 95.06 | 95.23 | 78.34 |
|  |  | 96.75 | 78.34 |
|  |  | 96.75 | 83.93 |
|  |  | 103.66 | 65.08 |
|  |  | 94.33 | 75.4 |
|  |  | 98.74 | 75.54 |
|  |  | 84.31 | 62.29 |
|  |  | 87.2 | 61.55 |
|  |  | 89.84 | 70.92 |
|  |  | 93.29 | 95.13 |
|  |  | 94.67 | 81.14 |
|  |  | 91.22 | 102.43 |
|  |  | 93.66 | 106.75 |
|  |  | 106.06 | 72.74 |
|  |  | 100.34 | 90.85 |
|  |  | 81.89 | 69.14 |
|  |  | 80.77 | 61.55 |
|  |  | 87.76 | 70.5 |
|  |  | 81.63 | 71 |
|  |  | 85.93 | 57.87 |
|  |  | 83.77 | 56.65 |

Appendix- E
Measurement of Height and Weight Photographs

Thank You

