# FOOD HABITS AND ITS IMPACTS ON HEALTH OF DOM COMMUNITY IN DHARAN MUNICIPALITY SUNSARI

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A Thesis

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> TRIBHUVAN UNIVERSITY FACULTY OF EDUCATION JANTA MULTIPLE CAMPUS ITAHARI SUNSARI NOV., 2014

## **DECLARATION LETTER**

I hereby declare that this thesis has not been submitted for candidature for any other degree.

Bharat Shakya

2071/08/10 (Date)



Ref:

Date :

#### **RECOMENDATION LETTER**

This thesis entitled **"Food habits and its impacts on health of Dom Community in Dharan Municipality**" submitted by Bharat Shakya for the partial fulfillment for the requirement of the Master's degree in Health Education under my supervision. Therefore, it is recommended for viva voice.

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## **APPROVAL SHEET**

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## ABSTRACT

This thesis entitles "Food Habits of Dom Community and its impacts on their Health" has been carried out to find out socio- demographic characters, identify the food habits of Dom Community of the study area and health condition of Dom Community. The researcher has used the Dom community as the sample population and has chosen the 50 Dom families of Dharan Municipality using purposive sampling. Similarly the researcher has collected data from interview and analyzed descriptively. At last, Findings and conclusion has been drawn and the researcher has recommended and suggested the points. This thesis is structured into five parts. First part deals with the introduction of the title and its theoretical ground. Second part reviews the related literature of the relevant work. Third part deals with the methodology of the study. Fourth part deals with analysis and interpretation of data. Fifth part deals with summary, findings conclusions and recommendations.

In this research, it was found that most of Dom people take food two to three times a day. It is found that 70 percent Dom people were suffering from different type of weakness of body. Average quantity of rice taken in launch is 280 gm. They prefer teabiscuits, noodles or bitten rice as their breakfast. 60% of Dom never consumes milk and snacks. They have to eat meat daily in dinner. Most of Dom people (66%) used junk food, they aren't conscious about their food habits. 24 percent Dom people home is dirty. Only 28 percent Dom people drink filter water.

There is clear indication of the study that the time to get food and the items used while getting food both are not sure and fixed. There seems direct impact of food habits in health condition of the Dom people. Other risks like accidents, psychological harassments and over work are adverse reality to their health.

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## ABBREVIATION

BMI	:	Body Mass Index
CMR	:	Child Mortality Rate
DOHS	:	Department of Health Service
HOD	:	Head of Department
ILO	:	International labour organization
IMR	:	Infant Mortality Rate
MOHP	:	Ministry of Health and Population
NDHS	:	Nepal Demography and Health Survey
NFHS	:	Nepal Family Health Survey
PEM	:	Protein Energy Malnutrition
STD	:	Sexual Transmitted Diseases
USI	:	Universal Salt Iodization
UN	:	United Nation
UNDP	:	United Nation Development Program
VDC	:	Village Development Committee
WHO	:	World Health Organization

#### **CHAPTER - ONE**

#### **INTRODUCTION OF THE STUDY**

#### **1.1 Background of the study**

Knowledge regarding the food habits for human would be provided by many disciplines. The social scientists, anthropologists, sociologists, psychologists and cultural geographers have been concerned with human's culture, social activities and food habits. A number of factors influence the food habits. These include, among others, educational and economic level of the community, availability, cost of foods and social and cultural practices. Once the food habits are established, they are handed down from generation to generation

Human's basic drive for food to satisfy his/her hunger. Food was intimately woven into the physical, economic, psychological, intellectual and social life of human. It was a part of his culture and it would be filled with many different meaning and symbols for all individuals at various ages and stages of their maturity.

Nepal is a sovereign country, lies on the lap of highest mountains also having the highest peak, located between  $26^{0}22'$  to  $30^{0}27'$  north altitude and  $80^{0}4'$  to  $88^{0}12'$  east longitude. (karki, 1983). It is divided into 3 ecological belts, mountain, Hill and Terai. Terai covers 17% land of total area and holds 44% of National population. Hill covers 60% land and holds 56% of National population and Mountain (1600ft to 29000ft). Perpetually snowy region covers 23% land. All different types of climates are round in Nepal, Tropical in Terai region, temperate and sub tropical in Hill and Alpine in Mountain (Aryal, et. all, 1983)

Nepal was politically divided into 75 districts and 14 Zones. For the point of development, it is divided in 5 development regions. Its population, according to the national census of 2068 is 26,494,504 and the growth rate was 1.35%, which was normal growth rate in the world. According to the national census of 2001, 13% population was composed of Dalit community, out of which 61% comprises Dalit in the hilly region and 39% the Dalits in the Terai. Some were the claim of World Bank and DFID as well. Again, Samata Foundation brought into focus the information that Madhesi Dalit comprise 31.14% of the total Dalit population of the country (Samata

policy:2, 2069). Out of the population of Madhesi Dalit, the population of Dom is 8,931. It was 0.04% of the total population and 0.28% of the Dalit population (World Bank and BFID, 2006). Later on, the national Census of 2011 reported the Dom population to be 13,268 which was 0.05% of the total population of the nation (Central statistics Deportment 2012). 31% of the total population is below poverty line. Though very much prosperous in natural resources, Nepal lags behind in human development. It was due to poverty, superstitions, lack of education and other social evils; there are a number of health related problems in the Nepalese societies.

Dharan Municipality spreads between  $26^{\circ} 46'30"$  north to  $26^{\circ} 52'30"$  Northern altitude and  $87^{\circ}14'14"$  East to  $87^{\circ}14'27"$  East longitude. Its total area is 2112 hectare.(Municipality record 2068)

Geographically Dharan is bordered by Seuti Khola in the east, Sardu Khola in the west, Bhedetar VDC and Panchakanya VDC in the north and Charkoshe Jhadi /Jungle in the south. This municipality is located at the height of 305-700 m from sea level. (Municipality record 2068)

According to the national census of 2068 the population of Dharan Municipality is 116,181, where Male are 54,599 (46.99%) and female are 61582 (53.01%). There are 27750 houses. Dharan's density of population is 55 per hectare.

In the present time, our country, Nepal, was going through a transitional period. The people are not able to see developmental work in the nation according to their expectation. It was because of the political turmoil. The commoners, here are still the victims of superstitious thoughts and conservative ideas. They suffer from severe health problems because of lack of education and other social problems. Since they lack knowledge about health, they can't even make proper use of the fruits and vegetables available in their houses. As a result, children suffer from malnutrition. The health problem in the society is also due to various problems of women in the society. They have to eat lunch or dinners only after all the family members have eaten. They have to clean their husbands' legs by pouring water. The newly born babies are not fed beestings; the mother don't breastfeed the babies even for six months; the babies were bottle-fed; during menstruation, the females were forced to stay at a certain place

outside the house despite urgencies of the child. Therefore, because of these superstitions, health condition of the people was deteriorating in the Nepalese societies.

Human beings need nutritious food and balanced diet in order to live a healthy and sound social life. However, there is not proper eating custom in our society due to lack of education, ignorance, and change in time. As a result, the youths are crazy about junk food, fast food, and plastic food. It has a bad impact in their health condition. The junk food and fast food have a bad impact on them though they were lacking of nutrients. On the other hand, in the household also fatly, specious fish, meat and vegetables are preferred, which cause high blood pressure, heart disease, respiratory problem, digestive problem and kidney problem, Such illness may sometimes result with death too. So, it is an urgent need for the people to fellow good health and lives a healthy life.

This study would focus on the eating habits of Dom Community and its impact on their health. The Dom has been brought to Dharan for the purpose of sanitation as the locals have a hesitation for this work. The Dom had been employed, in Dharan for this work for about 40 years. In the present time, the people belonging to other communities than Dom were found to be engaged in the sanitation of toilets, drains, roads, bathrooms and deposited garbage on the roads and streets. They even dispose this all garbage. In Dharan there were about 50 families involved in sanitation work. Among there were 38 permanent employees in Dharan Municipality and the rest work for the sanitation of schools, colleges, hospitals and offices. Since they always work with garbage and even risky things like broken glasses, sharp weapons, hells, etc are handled by them, they are always under risky circumstances. And even, they are more prone to health break down. Those, who are always serious about our health and sanitation, are not found to have been paid attention to study and analyze the health condition of the Dom who, despite all the challenges, has sacrificed themselves for the sanitation of our surroundings and their sound health. This study tries and discovers the actual health status of these Dom people.

Eating habits influence the health of the people in Nepal. The children below five years of age don't have weight and height according to their age. Again, height and weight don't match UNICEF reports, in 2010 A.D. that still half of the children were dwarf. The initial report of Population and Health Survey of Nepal- 2011 presents that only 80% of the Nepalese families used iodized salt. Even now the children below five years

of age were facing countless problems concerning health. According to the initial report of NDHS, in 2011, 29% of the children below 5, have no weight according to their age, 11% have no weight according to their height and 41% have no height according to their age. It shows that there was no proper improvement in the nutrients for the children. Again, it is because of iodine the children suffer from invisible goiter and insufficient mental growth. Among the children below five years of age, 46% have anemia in which 27% have mild and 19% have moderate type. Similarly, only 88% of the children below two months and 70% of the children below six months receive, exclusive breast feeding, only 87% of the children below two years have received all sorts of vaccines.

A young healthy Nepali requires energy of 2256 calories. However, it was found that only 1845 calories was supplied (WHO). Generally the Nepalese eat four times a day (snacks/light food two times and main food two times). The food they eat mainly carries Carbohydrate. Other nutrients were generally lacking there.

#### **1.2 Statement of the Problem**

In Nepal, even today a number of children die of malnutrition. It was also due to lack of education. Every year the people become the victim of diarrhea, cholera, dysentery and other communicable diseases because of improper eating habit. According to the population and Health survey of Nepal -2011, children suffer a lot from invisible goiter, and lack of mental development. 46% of the children below 5 suffer from anemia (27% mild and 19% moderate) only 88% of the children below 2 months of age, and 70% children below 6 months receive exclusive breastfeeding. (NDHS-2011)

People belonging to Dom Community were found to be uneducated in large number, but they themselves can't do so for them. So, their health condition, sanitation status and eating habits were focused in this research work. Mainly, this study focuses on the following problems/ questions:

- 1.2.1 What would be the condition of the eating habit of the Dom?
- 1.2.2 How has affected their health by their food habits?
- 1.2.3 Has their job / Job nature affected their health?

Food habit depends on the food provider i.e. usual place of getting food. Moreover it depends on consumer's food behavior. This includes habit of timely cleanness, intake of hygienic type of food stuff in appropriate time and amount. In other words the root cause of developing good food habit depends on the child himself followed by his feeding environment.

The title of the study based on when, how and what the child, younger and elder age Dom community would be used to get food. It was clear that food habit was directly related to the health condition of all age of Dom people under study. Information gathered during this study would be made available to those concerned and suggest for the solution of the health problems faced by those people.

#### 1.3 Objectives of The Study

The general or overall objective of this study was to relate the food habit of Dom community with his health condition. Specifically, the following objectives were set to accomplish the objectives of the study. At the end of the study researcher will be able to find the following fact.

- 1.3.1 To find out socio demographic characteristics
- 1.3.2 To identify the food practice of Dom community in the study area.
- 1.3.3 To find out the health status of the Dom community.

#### **1.4 Significance of the Study**

This research work would study the eating habits of the Dom Community of Dharan Municipality and it would be helpful for them to improve their health condition. It will objectively study their eating custom and help them improve their habit if they were found the following inappropriate way. This study will educate the Dom Community the importance of balanced diet. If the food is not healthful, it will have, hundreds of bad effects. The food with fat and oil, fried and specious food items cause many illness Cancer, Ulcer, high blood pressure, heart diseases etc. were caused by these types of food. Eating fruits is good for health, so people should be encouraged to eat fruits. Food is the foundation of sound or worse, health, so the food people eat should be healthful and appropriate General, the children are not found to be taking fruits, rather they were mostly found to be taking noodles, Kurkure, lays and so on. They don't care BMI, PEM

and high, weight and other aspects of their health. The significances of this study were listed below:

- 1.4.1 The result of the study would be useful to state the eating habits of the Dom Community
- 1.4.2 The result of the study would help the Doms to improve their eating habit, if there are any weaknesses.
- 1.4.3 The result of the study would be useful for the people to suggest the Dom on the improvement
- 1.4.4 The result of the study would be useful to solve the problems of the illnesses caused due to poor eating habit
- 1.4.5 The result of study would be useful as the references for the other researchers

#### 1.5 Delimitation of the study

A single study hardly becomes exhaustive. Each study was based upon certain area. The coverage of the study depends on time, financial resource and materials required in this background the delimitations of this study can be listed as follows.

- 1.5.1 The study would be carried out among 50 Dom people of Dharan municipality.
- 1.5.2 The respondents of the study were Dom cast people.
- 1.5.3 Actual information about families, income, food patterns, availability of food and their utilization might not be given accurately.
- 1.5.4 The research carried out about Nutritional disorders Macronutrient and micronutrient of Dom people.

#### 1.6 Operational definition of Important Terms Used

- Anaemia: A condition of the reduction in the number of red blood cells or the amount of hemoglobin in the circulating blood causing reduced oxygen carrying capacity of the blood.
- **Antibody:** A protein substance present in the blood serum, produced in response to a reaction with a specific antigen or a substance formed in the blood to fight against disease.

- **Allergy:** The foods generally find allergic with the children are wheat, milk, certain fruit juices and egg, fish and meat etc.
- **Body Mass Index:** It is an index for estimating obesity, obtained by dividing the body weight in kilogram by height of the body in square meters.
- **Dom Community:** According to S.B. Sahni's Dictionary the meaning of Dome is Rounded Roof. The Community persons who are usually active in sanitation work like toilet, drain, bathroom, Bamboo work etc. In this community include the cast Dom, basfor, marik, harijan etc.

Diarrhoea: Frequent passage of loose or watery motions.

- **Enzyme:** A complex protein substance produced by the living cells which speed up the chemical reaction of the substance for which it often works specifically, and so acts as a catalyst. The substance acts upon by an enzyme is called substrate
- Folic acid: Allowance for folic acid is in terms of free folate (L. Casein activity) present in foods. RDA of folate in pregnancy will be 300  $\mu$  g in addition to normal requirement of 100  $\mu$  g. Since such high levels of folate cannot be obtained, therapeutic supplementation becomes necessary in pregnancy. Folic acid requirement can be expressed on the basis of body weight also, i.e., 3  $\mu$  g.
- **Food Habits:** The term food habits (or eating habits) refers to why and how people eat, which foods they eat, and with whom they eat, as well as the ways people obtain, store, use, and discard food. Individual, social, cultural, religious, economic, environmental, and political factors all influence people's eating habits.
- Gram: Metric unit of weight equal to 1000 milligrams.
- Haemoglobin: The iron- containing and oxygen carrying pigment of the red blood cells formed in the bone marrow, which gives red colour to the blood. It is found 12- 16 gms. per 100mls. of blood in adult females and 14-18 gms. per 100mls. of blood in adult males and somewhat less in children.

- **Kwashiorkor:** It is characterized by the symptoms of lethargy retarded growth, lack of proper development of the muscles, absence of muscle tone, presence of edema on the legs, arms and face (moon face and enlargement of the liver).
- **Malnutrition:** It is a pathological condition resulting from a relative or absolute efficiency or excess of one or more essential nutrients in the diet. It includes under-nutrition and over-nutrition.
- **Macronutrients:** They include proteins, facts and carbohydrates, which are taken in large quantities and from the main bulk of food.
- **Micronutrients:** They include vitamins and minerals and required in very small quantities.
- **Marasmus:** It is characterized by wasting of the subcutaneous fat and muscles with retardation of growth and less of weight.
- Mortality rate: Death rate. Number of deaths per, year per 1000 of population.
- **Underweight:** When the body weight is decreased by 10% of more below the standard reference weight for the age, sex and height, the body was under weight.

#### **CHAPTER - TWO**

#### **REVIEW OF RELATED LITERATURE**

In this chapter various literatures related to this study is reviewed. Those sources of literature consist of thesis of related subject, books, reports of the study, earlier findings and journal articles especially focusing to Nepalese context is reviewed. Some international information is reviewed from related websites, international books, magazines and journals. Literature would be divided into two parts. First part is theoretical which was said by scholars about the related topic and other part of literature is more or less empirical part, contemporary research findings and recent publish related to topic was included.

#### 2.1 Theoretical Literature Review

**2.1.1 History of Casteism in Nepal:** Ever since Medieval Period, the minorities have a pathetic social and economic life style due to different types of discrimination. As a result, their food, shelter, customs and social behavior also got highly influenced. They started thinking about changing way of life and self dignity in course of living a life. The so-called higher classes of the society kept on suppressing and exploiting the minorities. The Dalits were forbidden to enter the temple; recite the religious books, plant the holy plants, celebrate the festivals, attend the social celebrations, enjoy social happiness. Such a bad practice was continued in the society for a long time. If the Dalits looked at the daughters of the higher classes, they were brutally treated. Thus, they became untouchable and hated class of the society.

Casteism was such a serious issue that if a so-called higher class member happened to touch a Dalit, he had to be sprinkled with pious water to purify him from the touch of the Dalit. Such a social behavior deprived them of participation in social, economical, cultural and administrative functions and affairs, they joined low–income jobs like, playing the musical instrument, cutting firewood, Practicing singing and dancing, cleaning the toilets and so on. (Bishwakarma, 2068)

Untouchability in Newar community: Before the Civil come into practice in 1854 A.D, some of the sub castes were considered untouchable in the higher rank of untouchable (PANI CHALNE) and pode and chyame were the lower ranking untouchable (PANI

NACHALNE.) Kathmandu, Bhaktapur and Lalitpur were the major areas of Pode and chyame. So, these places were called Pode Basti. (Dwelling places of pode) Pode very often prefered to call themselves 'Deula'. They were involved in sanitation, cleaning and sweeping as the major source of income as an occupation. (Bishwakarma, 2068)

#### 2.1.2 Dom: Settlement and Population:

Scattered in millions of number in south Asia, mainly North India, Dom community was wide spread in the Terai of Nepal. Dom lives across terai in Nepal. Saptari, siraha, Sunsari, Morang of Eastern Region, Dhanusa, Mahottari. Routahat, Sarlahi, Bara and Parsa of Central Region were the 12 districts where there live more than 100 members of Dom community. The Doms were regarded as hardworking, Skilled and handy Since Ancient times. Though they were categorized under the term untouchable, life was difficult for the other Castes in the absence of Dom. Though they belong to lower level in the hierarchy of the Society; they have irrigated the soil of the Terai with their blood and sweat. Dom was called the dweller of the crematory because they look after the dead body before the time of funeral ceremony. According to Hinduism, funeral of a dead body was conducted by Dom. There was a superstition in Hinduism that if the funeral five was obtained from the Dom, the departed soul of the dead person goes to the heaven. In various rituals and ceremonies of the Terai, Dom was as important as the Brahmins and Thakur. The bamboo products of Dom have a great importance in the cultures of the Terai. Such a role of the Dom was a positive aspect but the prevailing discrimination on Dom was really heart - rending. It was crystal clear that such discrimination has hampered the development and civilization of not only Dom but also of the whole society. In the present time, they were seeking for their identity and existence. (Bishwakarma, 2068:17)

In South Asia also, the main duty of the Dom was to conduct the funeral ceremony of the dead body. ((Bishwakarma, 2068:17)

2.1.3 Nutrition. Nutrition may be defined as the science of food and its relationship to health. It is concerned primarily with the part played by nutrients in body growth (Park & Park)

The state of the human body resulting from the balance between intake of food and expenditure of energy is known as the nutritional status (**Park & Park**)

Nutrition is the science of food and its relationship to health. Nutrition plays an important role in the promotion and maintenance of health and prevention of human diseases especially the nutritional deficiency diseases. Malnutrition under nutrition and the nutritional disorder were the greatest international health problems of today. All nutrition causes certain specific nutritional deficiency diseases as Kwashiorkor, Marasmus, and Blindness due to Vitamin 'A' deficiency, Anaemia etc. Malnutrition predisposes to infection like tuberculosis. Over nutrition a form of malnutrition causes obesity, diabetes mellitus, hypertension, cardiovascular diseases, renal diseases and disorder of the liver and gallbladder. Under nutrition us characterized by loss of weight, a trophy of muscles, weakness and edema. (Sherchan, 2011)

**2.1.4 Religious Beliefs.** The various religions of the world have some influence on the food habits. For example, Muslims are forbidden from eating pork and Hindus from eating beef. Such religious beliefs have been practiced over the past several hundred years. Caste system is main characteristics of Hinduism. It directs food to eat or not to heat for each caste.

**2.1.5 Traditional beliefs** in food habits are still prevalent with a large majority of the population who were illiterate or ignorant regarding the nutritive value of foods. These beliefs influence profoundly the pattern of food eaten. In South Pacific Islands, it is believed that certain shell fish eaten during a pregnancy would cause the child to be born with scales on its head. In Ethiopia a pregnant woman must avoid roasted meat as it is believed to induce abortion. Eggs are thought to cause baldness and sterility and hence not consumed by pregnant women. In India, consumption of papaya fruit by pregnant woman is believed to lead to abortion, and consumption of garlic by lactating women would increase milk production. Milk, which is an essential protective food in Western countries, is disliked in many Asian and African countries and not even fed to weaned infants and preschool children.

In some parts of India (west Bengal), it was believed that consumption of milk and fish at the same meal would lead to the development of leprosy and leucoderma. Other similar beliefs include the following: (i) Consumption of brain would lead to premature graying of hair and baldness of head (ii) Consumption of tongue of goat by children would make them talkative, (iii) Eating goat's leg by children would lead to improper development of knees and ankle joints, (iv) consumption of pig's stomach by girls and young women would darken their complexion and (v) Consumption of meat from the underside of an animal by young married women would prevent childbearing. In some parts of Africa, it was believed that eggs, if given to children before the teeth have erupted, will lead to stupidity, fish would produce skin rashes and meat would make children greedy. (Aman1960)

Foods are classified as 'hot' and 'cold' by different cultures in many countries. 'Hot' foods are believed to produce more heat in the body and lead to the development of boils. 'Cold' foods are supposed to lower the heat production and lead to the development of cold , sore throat, etc, Meat, eggs, legumes, nuts and oilseeds are supposed to be 'hot' foods, while fruits, vegetables and milk are supposed to be ' cold' foods. (Burgess.1962)

2.1.6 Food Fads and Cults, Exaggerate claims for some foods: Hippocrates wrote the health value of certain foods. Foods fads of various kinds have persisted ever since. According to Indian Ayurvedic system of medicine many foods were reputed to have curative properties for some diseases (Aman, 1969). For example, bitter gourd was reputed to cure diabetes mellitus, but without any scientific basis. Yogurt, wheat germ, black strap molasses, brewer's yeast and honey have been widely promoted by some food faddists as possessing extraordinary nutritional and medicinal qualities. Fruits and vegetables cultivated using organic manure (compost, etc) are believed to possess greater nutritive value than foods grown with inorganic fertilizers. Brown sugar is reputed to possess higher nutritive value than white sugar. A survey is made by a committee of the American Dietetic Association showed that the following to be more commonly observes food fallacies in U.S.A.(1) Fruits, especially citrus and tomato, are too acid to be handled by the body, (2) garlic cures high blood pressure, (3) Beets build blood, (4) Food, cooked in aluminum vessels, would cause cancer, (5) The following combinations food are poisonous: Milk and orange juice or other citrus good ways to diet is to skip breakfast, (8) Honey is not fattening, (9) Meat gives strength, (10) Fruit juices do not contribute calories to the diet, (11) Toast has fewer calories than bread: (12) Vegetable fats and oils could be used in any quantity and are not fattening, (13) Adults need no milk, (14) Skim milk has no nutritive value, (15) Pork liver is less nutritious than beef or calves liver, (16) Yogurt is an aid to retaining youth and beauty,

(17) Natural foods are the only ones that were safe for the consumer, (18) White shelled eggs were more nutritious than brown, shelled eggs, (19) Large amounts of gelatin dissolved in water and taken as a food supplement would strengthen finger nails, (20) The nutritive value of foods raised on 'depleted' soil is poor and (21) Water is fattening. Most of the above beliefs have no scientific basis. (Aman, 1960)

**2.1.7 Nepalese food habits in Dining.** In normal way Nepalese people's food habit can be marked as a rice culture social adoption. Nepalese main course of meal known as Dal- Bhat-Tarkari traditionally which was perfect combination of carbohydrate, protein, vitamin, mineral and fat. The real wholesome Dal-Bhat-Tarkari was being eaten all over Nepal generally and it was habitual way of twice a day. Besides morning and late afternoon time tea, coffee other drinks and light food snacks are also could be eaten normally. Dall was well cooked lentil soup from different beans, Bhat was boiled rice, Tarkari was curried vegetables, pickle of seasonal vegetable or fruits, salad and curried or fried meat as a non-vegetarian food can be eaten commonly. Well refined mustard oil, ghee are used for the typical Nepalese cooking propose of curry items for taste and flavor spices were used such as cumin seed, coriander, black pepper, sesame seed, turmeric, garlic, ginger, methi (fenugreek), bay leaf, clove, cinnamon, pepper, chilies, mustard seed and salt added by taste.

In mountain area, where rice grows very less, millet, barley, bark wheat and maize were growing commonly in suitable climate so people of their mostly eat Dhindo with Gundruk or different curry, meat curry, homemade pickle, yoghurt and milk as a their course but they also like to have Dall Bhat time to time. This authentic tradition of food habit was very common all over Nepal's mountain areas. There was also several common continental food items were available in cities abundantly as well many countries food items were prepared by several restaurants and fast food stalls of around main hub of tourists. (Nepal link .com)

Three died of toxic mushroom consumption. Three members of a family died within the past 24 hours while two others fell seriously ill as they consumed wild mushroom at Kabilas VDC- 7 in Chitwan district. Buddi Bahadur Chepang, his wife Sukamati, their three sons- Arjun, Man Bahadur and Santa Kumar were taken seriously ill after they feasted on the toxic mushroom that Buddhi Bahadur collected from a nearby forest. Santa Kumar died on Saturday evening while Sukamati and Man Bahadur passed away

on Sunday while undergoing treatment at Bharatpur Hospital. The father and the sons were receiving treatment at the hospital. According to Antari, the victims' relative, they were the mushroom on Thursday evening and Friday morning. "They had been suffering from vomiting, diarrhea and severe stomachache from Friday morning," she said. Antari said the villagers used to take the same species of the mushroom in the past but this time it was forum toxic. Dr Bijaya Poudel at the hospital said they did their best to save the victims' lives but to no avail. It was very difficult to save the life of a patient who falls ill after consuming toxic mushroom as it instantly damages liver; he said (Editor the Kathmandu post, Monday June 18, 2012)

15 ways to avoid heartache Listen to your heart it can save your (love) life.... your heart is in your mouth (1) Battle heart disease with sweet corn. The green giant's favorite if packed with chromium: the higher the levels of this mineral, the lower your chance of ticker troubles. Harvard of University, (2) Don your coat to avoid a heart attack. During colder months, blood pressure rises, along with the risk of clots, A  $1^0$  c reduction in average temperature was associated with a 2 per cent increase in heart – attack risk over 28 days. London School of Hygiene and Tropical Medicine, (3) Protect yourself against heart disease with kiwi fruit. They can reduce platelet – clumping by 18 per cent and blood triglyceride levels by 15 per cent. Eating kiwi has the same effect as aspirin for heart health. University of Oslo, (4) Drinking 60ml of pomegranate juice every day for a year can improve blood flow and lower your systolic blood pressure by 21 per cent. Rambam medical Centre, Israel, (5) Healthy bones equal a healthy heart. People are 60 per cent more likely to have a heart attack if diagnosed with rheumatoid arthritis, so keep up on your calcium to keep to the beat. Journal of Internal Medicine, (6) Safeguard your heart with a glass of claret a day. Red wine is rich in antioxidants, which have a positive effect on cholesterol. Scientists recommend a Pinot Noir. University of Mississippi, (7) People who eat six small meals a day have 5 per cent lower cholesterol levels than those who only eat one or two large meals. Reduce portion sizes and eat little and often. British Medical Journal, (8) Refrigeration your vitamin supplements would prolong their effectiveness, dramatically decreasing your risk of heart disease. Purdue University, (9) Brushing your teeth reduces the risk of heart disease by 70 percent by fighting the bacteria that cause inflammation. University College London, (10) Chocolate milkshakes reduce the risk of a heart attack. Cocoa's anti- inflammatory benefits reduce the chances of atherosclerosis. University of *Barcelona*, (11) A few rashers of processed chicken salami contain enough nitrates to aid in preventing cardiovascular disease. Club it with dairy and citrus intake in your meal. Builder's sand which, anyone? *University of Texas*, (12) Lengthen your life by having fun in the sun. Five – 20 minutes of sunshine can decrease your risk of death from heart disease by 26 per cent. *Johns Hopkins Sciences*, (14) sleep your way to a healthier heart. Three 30 – minute, mid – day naps a week cut your risk of heart disease by 30 per cent. *Archives of Internal Medicine*, (15) a glass of milk a day helps to keep hypertension at bay, the nasty ailment that can lead to stroke and heart disease. Milk was also known as one of the best known heartburn remedies. *American journal of Clinical Nutrition*. (www. Men Health India. com)

Half of the children in Nepal are dwarf due to malnutrition. They don't have physical growth as per their age. So, mental and physical growth is disturbed. It is said in the report by UNICEF, on Thursday, 20<sup>th</sup> Falgun, 2066, that half of the children below 5 years of age are more dwarf than their age, which was a symptom of insufficient nutrition for the children. It causes the impairment of the brain. The same report presents the idea that about 1.7 millions of children were dwarf or are the victim of long – term malnutrition. Malnutrition is largely found in the children below two years. 80% of the mental growth of a child is completed by the age of two years. If the body doesn't get sufficient food, it was called malnutrition. A famous Pediatrician Prof. Dr. Chandreshor Mahesetha says "Malnutrition impairs the immune power of the children." People view that malnutrition was all due to poverty and ignorance.

Another Pediatrician Dhana Raj Aryal says majority of the people have no idea about balanced diet. So they can't include the nutritious food in their children's diet.

Children with malnutrition should be especially cared and brought to the level of general children. General effects of malnutrition lack of physical and mental growth were not taken seriously by the parents.

Prof. Dr. Mahasetha says the children are taken to the doctors only after the affects of malnutrition becomes visible. There should be the regular check up whether there was proper growth and physical development. Since, the brain was in course of maturity till the age of five, malnutrition below this age hampers mental growth of a child.

Among the types of malnutrition, the malnutrition caused because of the lack of protein was the most serious and dangerous. To sub side this problem the child must be breastfed until the age of six months. If the mother goes for outdoor work, her milk must be kept in a clean pot. Dr. Aryal said mother's milk can be kept in a pot for six hours in the normal temperature of the room. However, before feeding, this milk must be made warm, keeping in the another pot of the age of six months, no other substances, except mother's milk, like honey, water, grapes water can be fed to the child. Even after six months, other solid food items should be accompanied by mother's milk. Mostly the children between six months and two years were prone to malnutrition. During this period, there was a rapid growth of their physical and mental self. So they need a lot of nutritious food items. At this age the size of the children's stomach was very small, so they should be fed the balanced diet, with Vitamin, Iron iodine minerals, salt etc regularly. It was because of untimely food, the children were not found to have sound mental and physical development.

According to National Institute of Nutrition, India, The children below six years require fifty grams green vegetable every day. There was a superstitious belief in the society that green vegetables cause diarrhea. So, the parents don't give green vegetables to their children. However, the fact was that they don't clean the vegetables well, and the germs there cause diarrhea. Prof. Dr. Mahasetha says that the value of green vegetables should never be measured in terms of money. Though cheap in price, green vegetables were more nutritious than the most expensive food items available in the market. Even the mother should take green vegetables from the beginning phase of pregnancy. Malnutrition during pregnancy was fatal to a child. The parents have the responsibility to care the child even form the day of birth. The parents should not feed two/three children from a single dish. Dr. Aryal said if the child leaves a morsel in the dish, it was good. It means even when a child is sick breast feeding should not be stopped. (Editor Kantipur Rastriya Dainik patrika Sanibar 22 fagun 2066)

#### **2.2 Emperical Literature**

**2.2.1 Access of Dom community in Health Services**: The dalits of Nepal have been the victim of social, historical and institutional discrimination since long. Such discrimination has imposed poverty to the helpless dalit which is vividly reflected in the Dalit's poor access to health services (Acharya, 2010:17). The forms of discrimination

are varied which can be found at the different levels of Health service. System of the nation; According to HDI – 2011. Out of 1000 Infant 116 in Dalit and 50 in Brahmin was the Infant death rate. Agani, regarding child death rate, the average child death rate was 104 out of 1000, however, child death rate of Dalit has been 171.2 out of 1000. (Thapa, 2009:14) on the other hand, fertility rate of the Dalits is 4.07% Not only that a large, number of dalit children suffers from malnutrition. (Bishwakarma, 2068:217)

**2.2.2 According the Nepal Demographic and Health Survey 2006, Summary Report:** Improving the nutritional status of children continues to be a major challenge in Nepal, despite some positive changes in recent years. Stunting, which indicates chronic nutrition, still affects 49 percent of children under five. While this is a decrease from the 2001 rate of 57 percent, it still constitutes a significant health threat for children. Childhood anemia has dropped dramatically since the 1998 Nepal Micronutrient Survey, but continues to be a major problem for Nepalese Children, as almost half are anemic.

**2.2.3 Nutrition Breastfeeding:** Breast milk was the optimal source of nutrients for infants. Exclusive breastfeeding was recommended during the first six months of a child's life because it limits exposure to diseases as well as provides all of the nutrients that a baby requires. 88 percent of children less than two months of age are exclusively breastfed, but this percentage drops sharply at subsequent ages. Overall, 70 percent of children under six months were exclusively breastfed. This was a remarkable improvement since 2006, when only 53 percent of children of the same age were exclusively breastfed. Although bottle-feeding was not common in Nepal, there has been a slight rise in the practice from 4 percent in 2006 to 6 percent in 2011 among children 0-5 months. Bottle feeding peaks at 9 percent among children 4-5 months old.

**2.2.4 Nutritional Status of Children:** Under nutrition places children at an increased risk of morbidity and mortality and was also associated with impaired mental development. Anthropometry provides one of the most important indicators of children's nutritional status. Height and weight measurements were obtained for all children born in the five years before the survey in the sub-sample of households selected for the male survey. The height and weight data were used to compute three summary indices of nutritional status: height-for-age; eight-for-height; and weight-for-age. These three indices were expressed as standard deviation units from the median for

the international reference population recommended by the World Health Organization. Children who fall more than two standard deviations (-2 SD) below the reference median were regarded as undernourished, while those who fall more than three standard deviations (-3 SD) below the reference median were considered severely undernourished Children whose height-for-age was below minus two standard deviations from the median of the reference population were considered stunted or short for their age. Stunting was the outcome of failure to receive adequate nutrition over an extended period and was also affected by recurrent or chronic illness. Forty-one percent of children under five were short for their age, and 16 percent were severely stunted. Children whose weight-for-height was below minus two standard deviations from the median of the reference population were considered wasted or thin. Wasting represents the failure to receive adequate nutrition in the period immediately before the survey, and typically was the result of recent illness episodes, especially diarrhea, or of a rapid deterioration in food supplies. In Nepal, 11 percent of children were wasted and 3 percent were severely wasted. Children whose weight-for-age was below minus two standard deviations from the median of the reference population were considered underweight. The measure reflects the effects of both acute and chronic under nutrition. Nearly three in ten children (29 percent) were underweight and 8 percent were severely underweight. Especially striking were differences by place of residence and mother's education. For example, in terms of all three measures, rural children were much more likely to be nutritionally disadvantaged than urban children. About half of Children in the Mountain are stunted and more than one-third were underweight. Children whose mothers have no education were more likely to be stunted, wasted, or underweight than children whose mothers have attended school. In general, the nutritional status of children in Nepal has improved over the last decade. Fifty seven percent of children were stunted in 2001 compared with 41 percent in 2011 and 43 percent of children were underweight in 2001 compared with 29 percent in 2011. However, the proportion of children who were wasted declined only slightly from 13 percent in 2006 to 11 percent in 2011.

**2.2.5 Iodized Salt:** Iodine deficiency disorders (IDD) was a public health problem in Nepal and government programs have been geared towards promoting universal salt iodization (USI) since 1998 under a five year Plan of Action for Control of IDD (1998-2003) in collaboration with UNICEF and JICA (MOHP, MI and New ERA, 2005). The

fortification of salt with iodine is the most common method of preventing IDD. Fortified salt that contains 15 parts per million (ppm) or more iodine at the consumption level is considered as adequately iodized to prevent IDD. Previous national surveys in Nepal have indicated that nearly 95 percent of the households in Nepal use salt with some iodine (MOHP, MI and New ERA, 2005). The NDHS used MBI Kits that provides an estimate of the iodine content in salt in one of three levels: 0 ppm, <15 ppm, and >=15 ppm to record the adequacy of iodine content in the salt, which allows the information to be compared over time. The findings on salt test carried out at the household level. Four in five households in Nepal use adequately iodized salt. Urban households were more likely to use adequately iodized salt than rural households (94 percent and 78 percent, respectively). Households in the Mountain were slightly less likely to consume adequately iodized salt compared with those in the Hill and Terai zones (73 percent versus 80-81 percent). There has been a marked improvement in households using adequately iodized salt since 2006, when only 58 percent of households consumed adequately iodized salt in Nepal (MOHP, MI and New ERA, 2005). (Nepal Demographic and Health Survey Report 2011)

Kafley (2004) carried out a study in field of the dietary nutrient intake of persons aged 10-59 years (57 males and 49 females ) living in the Tusal, Panchakanya and Chandal area of Kathmandu district, Nepal, was investigated using the total consumption record sheet, out visit record sheet, eating away diary and kitchen record calendar. The mean daily consumption of food for males and females averaged  $495\pm92$  and  $385\pm115$  g of cereals,  $103 \pm 26$  and  $97 \pm 29$  g of colored vegetables ,  $219 \pm 77$  and  $181 \pm 97$ g of milk and dairy products,  $63 \pm 24$  and  $77 \pm 22g$  of potatoes, respectively. The amounts and frequency of the consumption of meat, fish and eggs were also high compared to other regions. Males  $(381 \pm 80g)$  consume a larger amount of rice than females  $(297 \pm 105g)$ . The level of cereals consumption was strongly correlated to the level of energy intake (r = 0.60), protein (r = 0.48), carbohydrate (r = 0.78), Calcium (r = 0.15) and iron (r = 0.20). Legumes and pulse showed correlations with protein (r = 0.15) and iron (r = 0.19). Fat and oils correlated with energy (r = 0.21). Vegetables showed correlation with ca (r =(0.28), vitamin A (r = 0.74) and iron (r = 0.20). Fish, meat, milk and dairy products were correlated with energy (r = 0.1), Protein (r=0.1), fat (r = 0.1) and ca (r = 0.49). The mean amount of total energy intake for males  $(2795 \pm 526)$  was higher than that of females (2283 ±457 kcal). The daily intakes of protein, fat, ca, p and iron were  $72 \pm 13.0$ g,  $50 \pm$  9.8g, 741  $\pm$  228 mg and 1671  $\pm$  241mg for males and 67  $\pm$  12.5g, 48  $\pm$  13.8g, 724  $\pm$ 237mg and 1555  $\pm$  312mg for females, respectively. The intake levels of Fe for males (33  $\pm$  3.4 mg) were higher than those of females (27  $\pm$  1.9mg). The mean intake of vitamin A, mostly of carotene, was 3317  $\pm$  1003 mg and 3064  $\pm$  1031 mg for males and females, respectively. The consumption of colored vegetables was correlated with the intake of vitamin A (r = 0.74).

The anthropometric measurements were carried for 104 respondents. The mean values of height and body weight for males were significantly higher than those for females  $(164 \pm 10 \text{ and } 63.3 \pm 6.4 \text{ for males}, 156 \pm 6 \text{ and } 56.8 \pm 5.6 \text{ for females})$ . However the mean level of BMI was almost same for the both sexes  $(23.7 \pm 1.7 \text{ for males and } 23.3 \pm 1.8 \text{ for females})$ .

In general, the nutritional status of Nepalese in this study is improving than that reported previously. They are healthy, the fact that there may not be a latent deficiency of protein, Ca, Fe, vitamins A and a lack of high quality amino acids because of more intake of animal origin food groups such as meats, fish, or eggs. The status of food consumption was greatly influenced by food habits, food availability, and socioeconomic conditions. The usual diet in the research area consists of boiled rice, thin soup of pulses and cooked vegetables. The total energy intakes of the respondent were higher than that recommended. The adequacy of diet on the basis of energy intakes was about  $109.76 \pm 4.23\%$ . There was a positive correlation between energy intake and BMI. The correlation was high in case of male (r =0.97) than female (r = 0.23). But the negative correlation with rice intake and age (r = -0.97). There is a positive correlation between age and energy intake. Men were significantly taller and heavier than women in each group of the respondent. But the mean level of BMI are almost for both sexes (BMI<sub>m</sub> = 23.7 and BMI<sub>w</sub> = 23.3). The age and BMI of the respondent were positively correlated i.e. BMI increased with age (r = 0.99).

The diet survey can also be carried out in the places where the problems of deficiency diseases have shown. It helps to determine whether the problem had risen due to the diet, deficiency in nutrients or due to other factors. The physical activity also determines the physical characteristics of individual. So the record of the physical activity of the respondent can be recorded in the further work of the diet survey.

#### 2.3 Implication of review for the study

The literature review has helped in my study in following ways.

2.3.1 To determine the topic of the study

2.3.2 To identify the related field for the study

2.3.3 To implement various programs to the concerned field.

2.3.4 To gain additional knowledge about research methods.

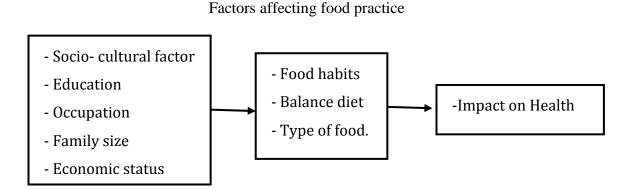
2.3.5 To compare the old findings of the study with the present one.

2.3.6 To evaluate the recent research.

2.3.7 To give reference to the further studies related to the topic.

#### 2.4 Conceptual framework

On the basis of objectives and review of related literature the conceptual frame work are as follows.



The quality education eliminates the wrong beliefs and superstitions existing among individuals, family and society. Education must be a social concern and all people must have easy access to quality education. If the family members are educated, they can maintain sound health, cleanliness, harmony, corporation, peace and mutual understandings in the family.

Socio-cultural values and norms affect the degree of quality of life. Discrimination among people in the name of caste, ethnicity, poverty and gender etc. creates a felling of self humiliation in the suppressed group. Such feeling declines the quality in life. Socio-cultural values are preserving some superstitious beliefs and practices too. DHAMI- JHAKRI, Dowry system, isolation of girls in menarche, similar isolation of mothers in pregnancy, use of alcohol in social rites, rituals, feasts, and festivals, etc. that create declination in quality of life of the concerned group of people. Some socio-cultural practices are beneficial for improving the health status of people. Taking bath everyday in the morning, eating nutritious food, and fasting sometimes helps in improving health status of people. In this way, the socio-cultural values influence the human health positively or negatively.

Family size a large family has to encounter many problems like inadequate food, scarcity, hunger, disputes, misunderstandings, etc. These factors decline quality of life. Therefore, family must be made so small as to make happy and healthy family.

Income of the family is regarded as the primary tool to fulfill basic as well as additional needs life. Fulfillment of needs determines the quality in life. Family income becomes more if there are more active members in the family. The active members go for job to earn money. They can manage their profitable business and other income generating activities. More income in a family assures fulfillment of needs in the family and maintain high quality of life, manage balanced diet in the family and sound mind, sound health of family.

# **CHAPTER - THREE**

# METHODS AND PROCEDURES OF THE STUDY

## 3.1 Research Design

This Study has been based on descriptive research design. The following methodologies were applied to carry out study systematically and successfully.

# 3.2 Sources of Data

The data were collected from Dom community of Dharan Municipality. Primary Source and Secondary Sources

# 3.2.1 Primary Source

The Primary Source of data was used for this purpose like field interview.

# **3.2.2 Secondary Source**

The Secondary Source of the study was Books, related sources of thesis and magazine like: Dalit and our Community 2068, Dalit and Our society 2068, Changing Life style of the Dom community 2068, Park & Park, Health and Physical Education 2011, Nepal link .com, The Kathmandu post, Monday June 18, 2012, www. Men Health India.com. Kantipur Rastriya Dainik Sanibar 22 fagun 2066 etc

# 3.3 Population sampling and strategy

In Dharan Municipality, there were nearly about 50 family of Dom and the total population of Dom is 300. So researcher used Non Probability, purposive sampling method to collect the data. Data has been gathered through research with interview and observation method in Dom community

# **3.4 Tools for Data Collection**

The source of data would be primary. The researcher used primary data so that data collection was essential. For the collection of data from primary source, the researcher used weight machine, height scale meter, interview and observation schedule, Therefore a set of structured interview schedule was data collection tools. The tools were given in appendix I.

### 3.5 Validation of the Tools

To meet the objectives of the study, tools must be valid and reliable. After preparing the research tools the first shown to our supervision and other teachers of health education department and improvement had been made as for their suggestions. The interview Schedule, were administered for pretest on 4 family of Dom community. After piloting tools, it was revised and finalized on the basis of result obtained from analysis and after getting necessary suggestions from the Supervisor.

## **3.6 Data Collection Procedure**

Firstly the researcher collected necessary request letter from Department of Health Education, Janta Multiple Campus, Itahari. The letter was made easy to deal with Dharan Municipality office. The researcher contacted to ward secretary and took authority to take interview from selected Dom community. The respondents were facilitated by researcher. Researcher collected the data from 50 head of family of Dom Community by using interview question.

### 3.7 Methods of Data Analysis and Interpretation

In the data processing the field interview schedules were carefully checked to remove the possible errors and necessary correction was done. After collecting raw data, it was tabulated manually under different headings and sub headings. Numerical and percentage were used to analysis and Interpretation of data. Information was presented in table, bar diagram and pie-charts. Finally the summary and conclusion were drawn and required recommendations were stated.

### **CHAPTER-FOUR**

### ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the analysis and interpretation of data on food habits and its impacts on health of Dom community in Dharan Municipality.

All the obtained data were processed manually with the help of master chart according to research questions and objectives of the study. The data were presented using simple statistical tools like table, pie chart and bar graphs. These also help to interpret the date. The analysis and interpretation was presented under the following as main section

- 4.1 Socio demographic characteristics
- 4.2 Knowledge of Food Habits
- 4.3 Health Status of Dom communities

## 4.1 Socio – Demographic Characteristics

Under this section, some important data were collected as needed in research to show the personal (Socio-demographic) features of the respondents that were analyzed as follows:

- 4.1.1 Age Distribution of Respondents
- 4.1.2 Gender Distribution of Respondents
- 4.1.3 Religion of Respondents
- 4.1.4 Caste of Respondents
- 4.1.5 Family size of Respondents
- 4.1.6 Educational Status of Respondents
- 4.1.7 Occupational Status of Respondents.
- 4.1.8 Income Status of Respondents
- 4.1.9 Income sufficient for live hood
- 4.1.10 Dependents person of Respondents family
- 4.1.11 Working hours of Respondents
- 4.1.12 Respondents gets salary/ payment in time

#### **4.1.1Age Distribution of Respondents**

Generally in Nepal active age range is 15-59 years. In this survey, it is seen that only 1(2%) person is less than 15 years. Which are against the law of child rights and 3 respondents were ready to take retirement.

Age	Number	Percent
10-15	1	2%
15-20	5	10%
20-25	5	10%
25-30	10	20%
30-35	10	20%
35-40	9	18%
40-45	4	8%
45-50	2	4%
50-55	1	2%
55-60	3	6%
Total	50	100%

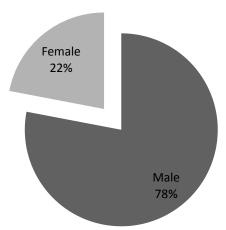
Table No. 1: Age Distribution of Respondents

In the above table, it is only 1 (2%) of the total respondents fall under the age range of 10-15 year, 5 (10%) respondents fall under the age range of 15-20 years, 5 (10%) respondents fall under the age range of 20-25 years, 10 (20%) respondents fall under the age range of 25-30 years, 10 (20%) respondents fall under the age range of 30-35 years, 9 (18%) respondents fall under the age range of 35-40 years, 4 (8%) respondents fall under the age range of 40-45 years, 2 (4%) respondents fall under the age range of 45-50 years, 1 (2%) respondent fall under the age range of 50-55 years and 3 (6%) respondents fall under the age range of 55-60 years.

## 4.1.2 Gender Distribution of Respondents

Female of Dom community were active as their male. They work same as the male. It shows that female have equal participation in the community. It can help them to improve their economic standard.

## **Figure No.1 Gender distribution**



Among the respondents, male respondent were 39 (78%) and female respondent were 11 (22%) engage in work

## 4.1.3 Religion of Respondents

All Dom people follow Hindu religion. They follow all tradition and Custom as the Hindu

Religion	Number	Percentage
Hindu	50	100%
Buddha's	0	0%
Muslim	0	0%
Christian	0	0%
Other	0	0%
Total	50	100%

**Table No. 2: Religion Distribution of Respondents** 

According to table, 50 (100%) Dom people were Hindu. All Dom people regard main festival Dhashain, Tihar, Chhat Parba.

### 4.1.4 Caste of Respondents

In Dom Community all respondents were Dalit Caste which was shown in the table.

Caste	Number	Percentage
Dalit	50	100%
Janjati	0	0%
Other	0	0%
Total	50	100%

**Table No. 3: Caste Distribution of Respondents** 

In the above table all Dom People were caste (under privilege) Community. They were known as Basfor, Marik, Mallik, Dom etc. These all caste lies on Dalit Caste. Mallik and Marik were same but they want to write Mallik

## 4.1.5 Family Size of Respondents

The size of family can affect the living standard of the people. Small numbers of family can maintain well and nicely but big number of family has difficulty to maintain their problem well and properly.

Size	Number	Percentage
2	1	2%
3	1	2%
4	7	14%
5	12	24%
6	9	18%
7	14	28%
8	2	4%
9	1	2%
10	1	2%
11	2	4%
Total	50	100%

Table No. 4: Family size of Respondents

In the above table 1 (2%) people family size was 2, 1 (2%) people family size was 3, 7 (14%) people family size was 4, 12 (24%) people family size was 5, 9 (18%) people family was 6, 14 (28%) people family size was 7, 2(4%) people family size was 8, 1 (2%) people family size was 9,1(2%) people family size was 10 and 2(4%) people family size was 11. It is found that in Dom community there are many big families which affect them to face many problems to manage the hygienic food.

### 4.1.6 Educational Status of Respondents

Dom people are illiterate due to their economic reasons. Although all the Dom people used to be illiterate in the Dom community in the past, nowadays some of them sent their children to school.

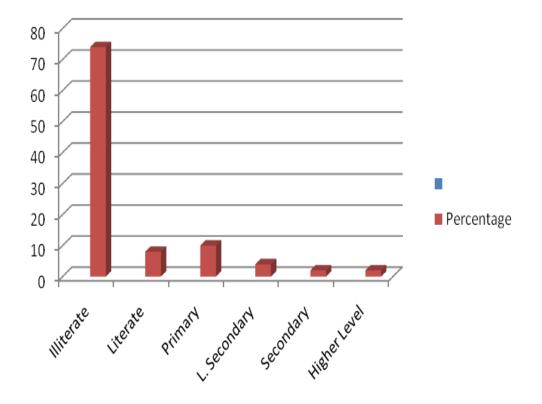


Figure No. 2: Educational Status of Respondents

According to the figure Dom community is mainly uneducated family. In the Dom community 37 (74%) people were illiterate, 4 (8%) people were literate, 5 (10%) people were in primary education, 2 (4%) people were Lower secondary education and 1 (2%) people were Secondary education. It shows that most of the Dom people were uneducated. In this Community only few people are educated.

## 4.1.7 Occupational Status of Respondents.

Many Dom people were involved in work to clean toilet, house or streets cleaning. They do permanent or temporary job in hospital, municipality, water supply offices, Health post and Private offices.

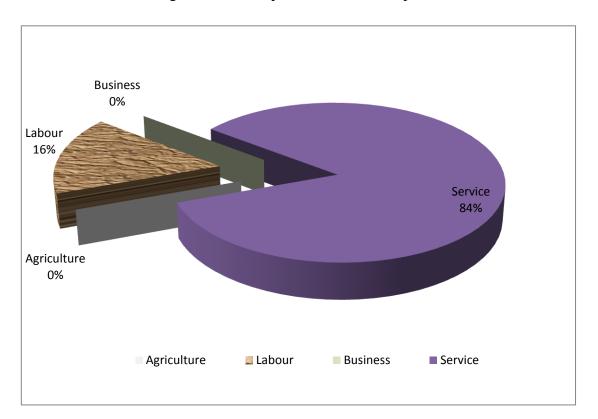


Figure No.3 Occupational status of respondents

According to the figure All Participants of this research works in different offices such as Municipality, water supplies, Hospitals, Private offices, Schools, Colleges, etc. 42 (84%) people work in office but 8 (16%) were cleaner. Other Castes don't like to do these kinds of job. So they find these works easily.

### 4.1.8 Income Status of Respondents

Income determines the people to take nutritious food. So the researcher studied the income source of Dom people. Nobody earns above Rs. 15000 salary per month but they earn below Rs 15000 and some earns only Rs 2500 per month.

Income	Number	Percentage
Rs.2500	1	2%
Rs.4000	3	6%
Rs.7000	1	2%
Rs.8000	6	12%
Rs.10,000	10	20%
Rs.11,000	7	14%
Rs.11,500	3	6%
Rs.12,000	2	4%
Rs.13,000	7	14%
Rs.14,000	5	10%
Rs.15000	5	10%
Total	50	100%

Table No. 5: Income Status of Respondents

According to the table 1 (2%) people income per month was Rs 2500, 3 (6%) people income was Rs 4000, 1 (2%) people income was Rs 7000, 6 (12%) people income was Rs 8000, 10 (20%) people income was Rs 10000, 7 (14%) people income was Rs 11000, 3 (6%) people income was Rs 11,500, 2 (4%) people income was Rs 12000, 7 (14%) people income was Rs 13000, 5 (10%) people income was Rs 140000 and 5 (10%) people income was Rs 15000.

### 4.1.9 Income sufficient for lively hood

Many Dom people have low income sources and it doesn't fulfill their needs.

Condition	Number	Percentage
Yes	8	16%
No	42	84%
Total	50	100%

Table No. 6: Income Sufficient for live hood of Respondents

According to the table 8 (16%) people said that they could manage their family with their income but 42 (84%) people, said that they couldn't manage their family with their income. Their Nutritional food depends on their Income sources. They can offer high hygienic food which had high income source so that people should think about the sources of income.

### 4.1.10 Dependents person of Respondents family

Dom people have many dependent family members. That's why it affects their economic condition and food habits. In their family many young, old and children were dependent. The table shows the data about the dependent respondent family.

Dependents	Number	Percentage
2	2	4%
3	8	16%
4	10	20%
5	12	24%
6	6	12%
7	3	6%
8	2	4%
No	1	2%
Total	50	100%

Table No.7: Dependents person of Respondents family

According to table 2 (4%) peoples dependent family were 2, 8 (16%) peoples dependent family were 3, 10 (20%) peoples dependent family were 4, 12 (24%) peoples dependent family were 5, 6 (12%) peoples dependent family were 6, 3 (6%) peoples dependent were 7, 2 (4%) peoples dependent family were 8 and 1 (2%) people dependent family were 0.

## 4.1.11 Working hours of Respondents

Working hour also affects their health and food habits. They get up early in the morning and go to clean road, houses, office, etc. They cleared the dirty things and throw in the dumping side.

Working Hours	Number	Percentage
4	11	22%
5	4	8%
6	4	8%
8	31	62%
Total	50	100%

Table No. 8: Working hours of Respondents

According to table 11 (22%) people work 4 hours duty per day, 4 (8%) people work 5 hours duty per day, 4 (8%) people work 6 hours duty per day and 31 (62%) people work 8 hours duty per day. Dom people work as ILO rules.

# .1.12 Respondents Salary and Payment

If Dom people don't get their salary in time, it would affect in food habits and managing of the house hold work.

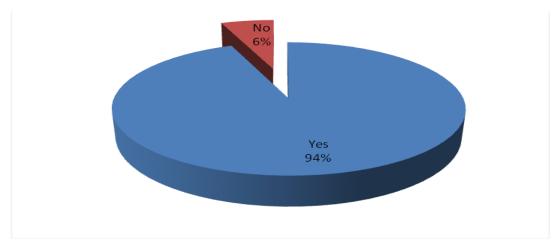


Figure No: 4 Respondents gets salary in time

According to figure 47 (94%) people get their salary in time but 3 (6%) people didn't get their salary in time.

### 4.2 Food Habits

Generally, we have three meals; breakfast, lunch and supper. We must eat during meal times. We should not eat between meals. Our stomach also needs rest. Eating between meals is a bad habit. We should eat in a proper way to keep our body healthy. We must eat just enough food to keep fit. We should eat only fresh and covered food. We should not eat uncovered food. We should not eat stale food. State food causes sickness. It is exposed to flies and dust. Improper nutrition affects our health. If we eat balance died, our health would also be balanced. Junk food can lead our health in worse condition. In Dom community researcher asked them different questions about their food practice and they gave the answer as follows.

## 4.2.1 Habits of Fruits items

Fruit is good for health. Fruit helps to fulfill nutritional factors in our body. However, they don't eat daily fruit because of their poverty and lack of the time.

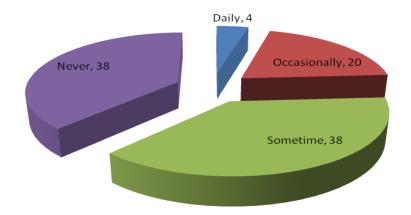


Figure No. 5 Eating Habits of fruits items

According to table 2 (4%) people eat fruits daily, 10 (20%) people often eat fruits. 19 (38%) people eat sometimes only and 19 (38%) people never eat fruit. Due to the lack of proper nutrition of this food habit they have been the victim of malnutrition.

### 4.2.2 Taking fruits items

Different fruits are necessary for body. Fruit is the main source of vitamin. In the survey researcher asked the questions to Dom people and they answered as follows.

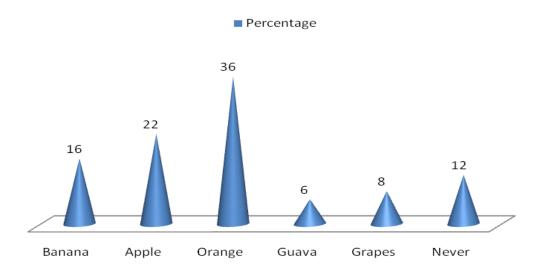


Figure No. 6 Taking fruits items

According to figure 8 (16%) people eat banana, 11 (22%) people eat orange, 18 (36%) people eat apple, 4 (8%) people eat Guava, 6 (12%) people eat grapes and 3 (6%) people never eat fruits.

## 4.2.3 Eating time and item

Launch, dinner and breakfast should be taken timely but Dom people don't follow this time. They take launch, dinner and breakfast at the different times for their convenience.

## 4.2.3.1 Breakfast

Breakfast make the digestive system in active condition. Researcher asked the question in different Dom people and they answered as follows.

Item	Number	Percentage	Time	Number	percentage
Chana cheeura	15	30%	6Am	3	6%
Noodles	10	20%	7 Am	14	28%
Eggs	5	10%	8 Am	8	16%
Tea and Biscuits	15	30%	9 Am	13	26%
Never	5	10%	10 Am	2	4%
Total	50	100%		50	100%

Table No.9: Eating habits of Breakfast

In the above table 15 (30%) people eat breakfast like chana cheeura (bitten rice), 10 (20%) respondents eat noodles, 5 (10%) people eat eggs, 15 (30%) respondents eat tea and Biscuits and 5 (10%) people never eat breakfast. In this survey 3 (6%) people eat breakfast at 6 am, 14 (28%) people eat at 7am, 8 (16%) people eat 8 am, 13 (26%) people at 9 am and 2 (4%) people eat breakfast at 10 am. In breakfast Dom people always take chana, bitten rice, noodles and occasionally they eat eggs. Because of this the fulfillment of nutritious food isn't good in Dom people.

## 4.2.3.2 Launch Time and Items

For good health, taking good food in the morning time (launch). If we eat balance diet in morning time it would easily digest in whole days.

Item	Number	Percentage	Time	Number	percentage
DalBhat,Vegetable	45	90%	10:30Am	11	22%
Noodles	5	10%	11:00 Am	17	34%
			12:00 Am	15	30%
			2:00 Pm	7	14%
Total	50	100%	Total	50	100%

Table No. 10: Eating habits of launch items and time

In the above table 45 (90%) people eat Dalbhat, vegetable for launch and 5 (10%) people eat noodles for a launch. 11 (22%) people eat launch at 11:30 am, 17 (34%) people eat launch at 11:00am, 15 (30%) people eat launch at 12:00 noon, and 7 (14%) people eat launch at 2:00 pm. It shows that all Dom people eat launch at different time. They don't eat balance diet at launch.

### 4.2.3.3 Dinner

Dom people eat meat and fish in their supper. They usually eat meat; it can fulfill their nutritional needs. Meat is good in the morning not in the night. Meat is main source of permanent protein.

Item	Number	Percentage	Time	Number	percentage
Dal,Bhat and Chicken	40	80%	7:00 pm	17	34%
Dal Bhat Mutton	5	10%	7:30 pm	11	22%
Dal Bhat Fish	5	10%	8:00 pm	8	16%
			8:30 pm	14	28%
Total	50	100%	Total	50	100%

Table No.11: Eating habits of dinner item and time

According to table 40 (80%) people eat Dalbhat and chicken at a dinner, 5 (10%) people eat Dalbhat Mutton in dinner and 5 (10%) people eat Dalbhat fish. 17 (34%) people eat dinner at 7:00 pm, 11 (22%) people take dinner at 7:30 pm, 8 (16%) people take dinner at 8:00 pm and 14 (28%) people eat dinner at 8:30 pm. All Dom take dinner at different time in the night. Due to their heavy work Dom eat meat and fish daily in the evening which affects their health.

# 4.2.4 Quantity of rice taken in launch

Researcher asked the question of quantity of rice taken in launch. They answered as follows.

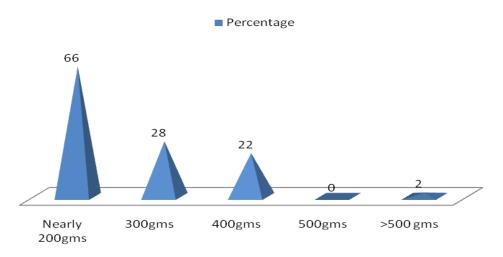


Figure No. 7 Quantity of rice taken in launch

According to figure 33 (66%) people eat 200 grams of rice, 14 (28%) people eat 300 grams of rice, 11 (22%) people eat 400 gram of rice and 1 (2%) people eats 500 grams

of rice in a launch time. The average food taken by Dom people is 280 grams, which is enough for live hood.

# 4.2.5 Habits of fried food

On the view of good health the fried food isn't good for our body; it causes cancer and many other diseases.

Time	Number	Percentage
Daily	25	50%
1-3 times a week	17	34%
< once a week	5	10%
Never	3	6%
Total	50	100%

Table No. 12: Eating habits of fried food

According to table 25 (50%) people eat fried food daily, 5 (10%) people eat fried food once a week, 17 (34%) people eat fried food, 5 (10%) people eat fried food less than once a week and 3 (6%) people never have eaten fried food. More people take fried food daily which damage digestive system.

# 4.2.6 Eating Habits of milk

Milk is good for our health. Milk is the main source of calcium and it makes our bones strong. Researcher asked the question about taking milk and they give the answer as follows.

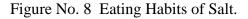
Items	Number	Percentage
None	31	62%
Full fat	18	36%
Skimmed	1	2%
Soya	0	0%
Total	50	100%

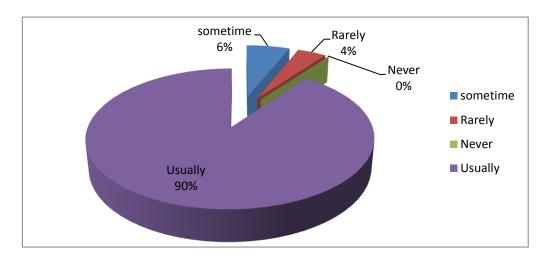
Table No.13: Eating habits of milk

According to table 31 (62%) people never drink milk, 18 (36%) people drink full fat milk and 1 (2%) people drinks skimmed milk. Maximum respondents don't drink milk and they have the deficiency of Calcium. All respondents are economically poor so they didn't drink milk properly.

### 4.2.7. Eating Habits of Salt.

Salt is the main source of iodine. It makes the body active and sharp mind of human. It is very necessary for children and pregnant women. Other persons also need small quantity of salt. Over doses of salt makes the body sick. Researcher asked the questions to respondents and they answered as follows





According to table the people who had participated in the survey were found that 45 (90%) people use salt daily, 3(6%) people use salt sometime and 2 (4%) people use salt rarely.

## 4.2.8 Breakfast item

Breakfast is good for our health. If we don't eat breakfast then we will be the victim of different heart disease, fatty body and increase of acidity.

Items	Number	Percentage
Higher fiber cereal	0	0%
Fruit	0	0%
Other cereal	2	4%
Bread	15	30%
Nothing	4	8%
Other (Chana chiura, Noodles)	27	54%
Total	50	100%

Table No.14: Eating habits of Breakfast item

According to table people who had participated in the survey were found that 2 (4%) people eat toasts, 2 (4%) people eat other cereal, 15 (30%) people eat bread, 4 (8%) people don't eat anything, 27(54%) people eat other types of breakfast in their daily life.

### 4.2.9 Eating Habits of Main meal items

Main meal items means dinner item. The researcher asked the questions of main meal items to respondents and they answered as follows.

Items	Number	Percentage
Meat, fish, chicken, vegetables	46	92%
pasta	1	2%
other	1	2%
Rice dish	18	36%
Total	50	100%

Table No. 15: Eating habits of Main Meal items

According to table 46 (92%) people in Dom community have taken main meal items such as meat, fish, chicken, vegetables with rice dish, 1 (2%) people eat pasta and 1 (2%) people eat other food item. It shows that the meal of Dom community fulfills the carbohydrate item.

# 4.2.10 knowledge of eating fruit and vegetables

Vegetable and fruits are good sources of vitamins and minerals. It is very good for our health. Researcher asked the question of knowledge of eating fruits and vegetables, very few numbers of respondents used it daily and other uses sometimes which are as follows.

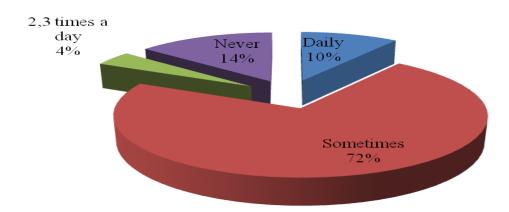


Figure No. 9 Eating Habits of fruit and vegetables

According to figure fruit and vegetable are the main sources of minerals, people should eat fruit and vegetable daily which can secure their health .In the survey it is found that 5 (10%) people eat fruit daily, 2 (4%) people eat 2/3 time daily, 36 (72%) people eat sometimes and 7 (14%) people never eat fruits.

### 4.2.11 Eating Habits Snacks between meals

Taking of Tiffin is good for our health but respondents don't take Tiffin properly. Regularly taking of Tiffin is safe for our body for gastric disease. Researcher asked the questions of taking snacks between meals and they answered as follows.

Time	Number	Percentage
Never	30	60%
2,3 times a week	8	16%
Daily	12	24%
Total	50	100%

Table No. 16: Eating habits of snacks between meals

According to table people should eat snacks between meal and from the survey it is found that 30 (60%) people never eat snacks, 8(16%) people eat 2/3 times a week and 12 (24%) people eat snacks daily.

## 4.2.12 Eating Habits of fast food in a week

Readymade food like wai wai, biscuits, isn't good for our health. It causes different diseases of stomach. So researcher asked the questions to respondents of taking fast food in a week and they answered as follows.

Time	Number	Percentage
Never	13	26%
5,6 times in a week	4	8%
2,3 times in a week	23	46
1,2 times in a week	1	2%
Daily	9	18%
Total	50	100%

Table No. 17: Eating habits of Fast food in a week

According to table Jung food and fast food is harmful for our health. From the survey it is found that 13 (26%) people never eat junk food, 4 (8%) people eat 5,6 times in a week, 23 (46%) people eat 2,3 times in a week, 1 (2%) people eat 1,2 times in a week and 9 (18%) people eat daily. It shows that many people use Junk food.

### 4.2.13 Eating bread / cereals / potatoes.

In the survey, maximum respondents eat bread, cereal and potatoes in breakfast. They eat every day potatoes in launch, dinner and breakfast. So it may lead many types of diseases.

Time	Number	Percentage
Never	10	20%
2,3 times in a week	8	16%
3,4 times in a week	2	4%
5,6 times in a week	1	2%
1,2 times in a day	29	58%
Total	50	100%

Table No. 18: Eating habits of bread, cereals and potatoes.

According to the table 10 (20%) people have never eaten bread, cereals and potatoes, 8 (16%) people eat 2,3 times in a week , 2 (4%) people eat 3,4 times in week, 1 (2%) people eat 5,6 times in a week and 29 (58%) people eat 1,2 times in a day.

### 4.2.14 Eating Habits of dairy product

Dairy product is made by milk. Milk is the main source of calcium which is important for our health.

Times	Number	Percentage
Never	38	76%
3/4 times a day		
1,2 times in a day	12	24%
Total	50	100%

Table 19: Eating habits of dairy product

According to table 38 (76%) Dom people never eat dairy product but 12 (24%) Dom people use dairy product 1, 2 times in day. More respondents can't drink the milk due their poverty. Because of this they have low immunity power and they can't function properly.

### 4.2.15 Food Pyramid.

Food pyramid helps us to know about essential hygienic food. It gives us tips as when we should eat, how much we should eat, which food we should eat etc.

Knowledge	Number	Percentage
Very well	0	0%
Not well	8	16%
Fairly well	0	0%
Never heart	42	84%
Total	50	100%

Table No.20: Knowledge of guidelines of food Pyramid

According to the table 8 (16%) people don't have the proper knowledge of guidelines of food pyramid and 42 (84%) Dom people never have heard about this type of knowledge.

## 4.2.16 Eating Habits of Healthy breakfast

Healthy breakfast is good for our healthier life. If we take the healthy breakfast our body will be healthy. The researcher asked the questions of taking healthy breakfast every day and they answered as follows.

Item	Number	Percentage
Whole grain cereal	2	4%
eggs	25	50%
whole grain pancakes	1	2%
yogurt	0	0%
Fruit	0	0%
Whole grain toast	1	2%
Other	21	42%
Total	50	100%

Table No. 21: Eating habits of Healthy Breakfast

According to table people should eat balance diet in the breakfast which can digest the breakfast easily. 2 (4%) Dom people eat whole grain cereal, 25 (50%) Dom people eat eggs, 1 (2%) people eat whole grain pancakes and 21 (42%) people eat other food items in their breakfast.

### **4.2.17 Eating Habits of snack**

Researcher asked the questions of taking healthy snack between breakfast and lunch but respondent don't eat any food in the period between breakfast and lunch. They didn't have more time to eat food and due to their Poverty.

Item	Number	Percentage
Fruit	3	6%
Nuts	0	0%
Bean dip	0	0%
vegetables	4	8%
No	43	86%
Total	50	100%

Table No. 22: Eating habits of snack between breakfast and lunch

According to table 43 (86%) Dom people don't eat anything in gaping time of breakfast and launch, 4 (8%) Dom people eat vegetables and 3 (6%) Dom people eat fruit item in gaping of breakfast and launch.

### 4.2.18. Knowledge of eating Healthy launch.

Breakfast and launch help people to do active activities. That's why breakfast and lunch is the most important part of our health. Researcher asked the knowledge of taking healthy launch every day and they answered as follows.

Item	Number	Percentage
Soup	5	10%
Salad	14	28%
Chicken	0	0%
Vegetables or similar healthy choices	31	62%
Total	50	100%

Table No. 23: Knowledge of eating Healthy launch

According to table, 5(10%) Dom people eat soup in the launch time. 14 (28%) people eat salad and 31(62%) people eat vegetables, similar healthy choices food. It shows that all Dom people eat vegetable in the morning launch which is healthy for body.

## 4.2.19 Eating Habits of Healthy dinner item.

All respondents eat meat and fish in their supper. It can fulfill their permanent protein in their food. Researcher found the following date of survey.

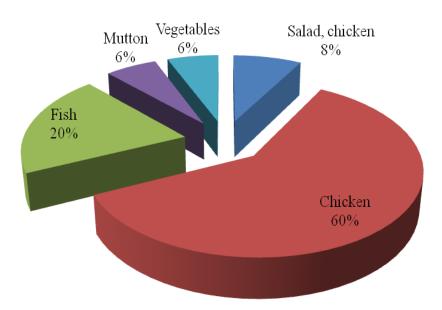


Figure No. 10 Eating Habits of Healthy dinner item

All participants of the survey eat chicken, fish, mutton and pork in their dinner because they were all tired and habits of eating meat in night time. They have to eat meat daily because of their daily physical labored. According to figure 3 (6%) Dom people eat vegetable with meat, 4 (8%) Dom people eat salad, chicken, 30 (60%) Dom people eat chicken, 10 (20%) Dom people eat fish, 3 (6%) Dom people eat mutton and 3 (6%) Dom people eat vegetables with rice dish.

### 4.2.20 Habits of drinking water

Adult should drink eight glasses of water daily. Water helps people to live healthy. It can clear out many waste products through the urine. They should drink plenty of water when they work in the field. But they don't have filter water that's why they don't get pure and clean water to drink.

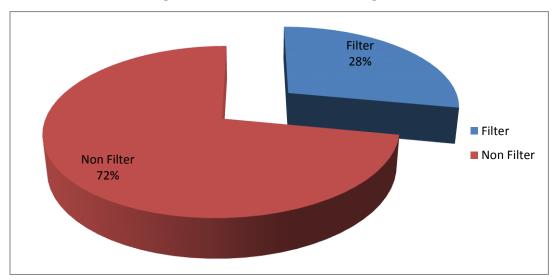
Knowledge	Number	Percentage
Yes	45	90%
No	5	10%
Total	50	100%

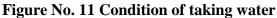
Table No. 24: Eating habits of water

According to table 45 (90%) people drink 8 glass of water per day but 5 (10%) Dom people don't drink 8 glasses of water per day. More people take enough water for body which is good symptoms, less people use filter for drink water. They need to have safe drinking water everyday. It also forms excreta and the waste product from the body.

# 4.4.21 Condition of Taking Water

Water is the most important things of our body. Clean and pure water helps us to live healthy. From the survey of international sanitation year 2008 only 76% people has the availability to drink the water in Nepal. The drinking water must be safe, pure and free from the pathogenic germs. Dirty water can transfer different types of diseases like diarrhea, typhoid etc. From the research we have found that Dom people use following type of water.





According to figure 14 (28%) Dom people drink only filter water but 36(72%) Dom people drink Non filter water. From the table only 28% people were conscious for clean drinking water.

### 4.2.22 Habit of drinking coffee

Limitation of intake of coffee makes the body healthy. Overdose of intake of coffee make different disease. Researchers asked the questions to respondents and they answered as follows.

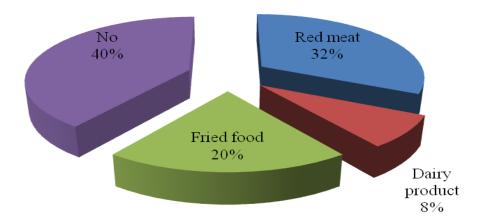
Knowledge	Number	Percentage
Yes	12	24%
No	38	76%
Total	50	100%

Table No.25: Eating habits of coffee

According to table 12 (24%) Dom people intake coffee as the limitation of one or more cup in each day but 38 (76%) Dom people don't intake coffee in limit. More people don't take coffee but few people take coffee. Over dose of coffee makes different disease like High Blood Pressure etc.

### 4.2.23 Habits of saturated fat.

Saturated fat gets from the fat of animals. It may get from fat butter. It gives us heat, energy and balance the temperature of our body.



### Figure No.12 Eating habits of saturated fat

According to table 16 (32%) Dom people use red meat, 4(8%) Dom people use dairy product, 10 (20%) Dom people use fried food and 20 (40%) Dom people don't use saturated fat for a few times in a week. Fat is not preferred for production of total energy required as it has various adverse effects including obesity in human body.

# 4.2.24. Habits of unsaturated fats.

In  $20^{\circ}$ c temperature the unsaturated fat is in liquid form. It is found in vegetable oil which makes our food tasty and flavor. In survey researcher asked the questions to the respondents and they answered as follows.

Things	Number	Percentage
Salmon	0	0%
Tuna	0	0%
Sardines	0	0%
Olive oil	7	14%
Sunflower oil	14	28%
Mustard oil	19	38%
Total	50	100%

Table No.26: Eating habits of unsaturated fats

According to table 7 (14%) Dom people use olive oil, 14 (28%) Dom people use sunflower oil and 19 (38%) Dom people use mustard oil. It shows that the Dom people use different kinds of oil which fulfill the unsaturated fat in our body.

### 4.2.25 Habits of intake sugar and sweets.

In Nepalese diet 70 to 80 percent of the energy required by the body is supplied by carbohydrates. Nutrition like carbohydrate is found in sweet food. It gives us one gram carbohydrates equivalent to 4.1 calories. Sugar and sweets contain more carbohydrates. It was harmful to use more in our health but good if we take in balance.

Things	Number	Percentage
Candy	3	6%
Desserts	0	0%
Refined Flour such as bread	1	2%
Cakes or donuts	3	6%
Other Sugar foods	8	16%
No	35	70%
Total	50	100%

Table No.27: Eating habits of sugar and sweet.

According to table 3 (6%) Dom people use candy, one (2%) Dom people use refined flour such as bread, 3 (6%) Dom people use cakes or donuts, 8 (16%) Dom people use other sugar foods and 35 (70%) Dom people don't use sugar and sweets to a few times

per week. More Dom people don't use sugar and sweets which don't fulfill the carbohydrates in the body.

## 4.2.26 Habits of soft drinks and fast food.

Soft drink and readymade food aren't good for our health. That's why soft drink and readymade food shouldn't eat. It makes our health harmful. It is called improper food habits.

Condition	Number	Percentage
Yes	22	44%
NO	28	56%
Total	50	100%

Table No. 28: Habits of soft drinks and fast food

According to table 22 (44%) Dom people intake soft drinks and fast food as the limit to a few times per week. 28 (56%) Dom people don't intake soft drink and fast food in limit to a few times per week.

### 4.2.27 Knowledge of chews.

We should chew our food properly because it will help us to digest our food. If we eat our food without chewing it will make our digestive system weak and cause many problems in our stomach.

Condition	Number	Percentage
Yes	20	40%
NO	30	60%
Total	50	100%

Table No. 29: Knowledge of chews of food.

According to table 20 (40%) Dom people chew most of their food at least 20 to 30 times before swallowing and 30 (60%) Dom people don't chew most of their food at least 20 to 30 times before swallowing. In survey researcher found that many people don't chew properly. It shows that in future Dom people suffer many problem of digestive energy.

## 4.2.28 Knowledge of own metabolic type

We must know our digestive system. It helps us to keep good health. Researcher found the following result in survey.

Knowledge	Number	Percentage
Fast	10	20%
Slow	30	60%
Balanced metabolism determines levels of carbohydrates, protein and fats	2	4%
No	8	16%
Total	50	100%

Table No.30: Knowledge of own metabolic types.

According to table 10 (20%) Dom people had fast metabolic type and eat in accordance with it, 30 (60%) Dom people had slow metabolic type, 2 (4%) Dom people had balanced metabolism that determines the levels of carbohydrates, protein and fats and 8 (16%) Dom people didn't know about their metabolic type.

# 4.2.29. Knowledge of Organic food

Organic and locally grown food is good for our health, which helps to protect from different diseases. Researcher asked the questions to the Dom people and they answered as follows

Condition	Number	Percentage
Yes	20	40%
NO	30	60%
Total	50	100%

Table No. 31: Knowledge of organic foods

According to table 20 (40%) people try to eat organic or locally grown product as much as possible and 30 (60%) of people don't try to eat organic or locally grown product as much as possible. More Dom people don't use daily organic food which is bad for health but less Dom people use organic food which is good for health.

# 4.2.30 Knowledge of eating raw fruits and vegetable

Raw fruits and overcooked food avoids from becoming fatness. It secures our health. Researcher asked the question to eat some raw fruits and vegetables every day and not to overcook your food, which destroy enzyme and nutrient levels. Respondents answered as follows.

Condition	Number	Percentage
Yes	13	26%
No	37	74%
Total	50	100%

Table No. 32: Knowledge of eating raw fruits and vegetable

According to table 13 (26%) Dom people eat some raw fruit and vegetables every day and not overcook food, which destroy enzyme and nutrient levels and 37 (74%) people didn't eat some raw fruits and vegetables every day. More Dom people use raw fruits and vegetable every day which is bad for health but less people don't use raw fruits and vegetable which is good for health.

### 4.2.31 Knowledge of eating portion size of meals

We must take 500 calories in a time. We must know how much calories we should take. We may be weak if we have taken low calories in food.

Condition	Number	Percentage
Yes	10	20%
No	40	80%
Total	50	100%

Table No. 33: Knowledge of eating portion size of meals

According to table 10 (20%) people watch the portion size of their meals to keep the calorie count or less than 500 calories per meal as often as possible and 40 (80%) people didn't watch the portion size of their meals to keep the calorie count. Most Dom people don't know the eating portion size of meals so they are facing many health problems.

### 4.2.32. Knowledge of eating vitamins

Vitamin is the most important factor to secure our health Vitamin A,B,C,D,E, Omega oil, Magnesium, zinc and calcium are the most important things to secure our health from different disease or virus.

Condition	Number	Percentage
Yes	15	30%
No	35	70%
Total	50	100%

Table No. 34: Knowledge of eating vitamins

According to table 15 (30%) Dom people take quality nutritional supplement, especially for the common deficiencies such as vitamins A,B,C,D, E omega oils, magnesium, zinc and Calcium and 35(70%) Dom people didn't take quality nutritional supplement, especially for the common deficiencies. Most Dom people don't take vitamins so their body function is not protective.

## 4.2.33 Usual Food

Natural food is better than junk food for our health. Junk food creates different type of disease. Natural food makes the people healthy. So researcher asked them about junk food and natural food and the Researcher asked them which food they prefer. They have their food habits as follows.

Condition	Number	Percentage
Junk	33	66%
Natural	17	34%
Total	50	100%

Table No. 35: condition of usual food

In the above table 33 (66%) people use junk food, and 17 (34%) people use natural food. It means that many Dom people use junk food. Dom community don't have their own land that's why they didn't grow any time of natural vegetable and natural food so they use junk food. They usually go to work at 5 am in the field and they take a breakfast like junk food in hotel and they come home at 11 am for lunch.

## 4.2.34. Knowledge of Physical Exercise.

Physical exercise is the most important part for our body especially it keeps our heart and lungs fit and fine. Nobody does the exercise in the Dom community.

Condition	Number	Percentage
Yes	0	0%
No	50	100%
Total	50	100%

Table No. 36: Knowledge of Physical Exercise

According to table all respondents didn't get the time to exercise almost 30 minutes in a day in order to help burn calories, build muscle, improve metabolism, improve delivery of nutrients and facilitate the removal of toxins from the body.

## 4.2.34 Practice of yoga, meditation

Nobody does the yoga and meditation due to their lack of awareness and busy schedule in their duty.

Condition	Number	Percentage
Yes	0	0%
No	50	100%
Total	50	100%

Table No. 37: Practice of yoga, meditation

According to table 50 (100%) respondents don't practicing yoga, meditation or deep breath due to which they didn't have good food digestion.

## 4.3 Health Status

Health is wealth, this statement only true when we apply in our life. In survey researcher research about the health status of Dom community and they question about their health sanitation, wearing of cloths, suffering from different type of diseases and the Researcher gave the following data.

# 4.3.1 Body Mass Index of Respondents

Human health condition is determined by their BMI. The normal range of BMI is 20 to 25. In general, healthy person has their height and weight base on BMI.

BMI	Number	Percentage
17	1	2%
18	4	8%
19	7	14%
20	9	18%
21	3	6%
22	6	12%
23	6	12%
24	4	8%
25	2	4%
26	3	6%
29	2	4%
30	1	2%
32	2	4%
Total	50	100%

Table No. 38: Body Mass Index of Respondents

According to table BMI of 1 (2%) people was 17, BMI of 4 (8%) people was 18, BMI of 7 (14%) of people was 19, BMI of 9 (18%) people was 20, BMI of 3 (6%) people was 21, BMI of 3 (6%) people was 21, BMI of 6 (12%) people was 22, BMI of 6 (12%) people was 23, BMI of 4 (8%) people was 24, BMI of 2 (4%) people was 25, BMI of 3 (6%) people was 26, BMI of 2 (4%) people was 29, BMI of 1 (2%) people was 30, BMI of 2 (4%) people was 32. In this data below 20 BMI has 12 people and above 25 has 8 people.

## 4.3.2 Suffering of diarrhoea

Dom community people specially work in sanitation of toilet, drainage and carrying of dirty things (garbage). Due to this they suffer from diarrhoea but it happen only sometime to them.

Time	Number	Percentage
Sometimes	15	30%
No	15	30%
After 1,2 months	16	32%
After 3,4 months	4	8%
Total	50	100%

Table No. 39: suffering of diarrhea

According to table 15 (30%) respondents suffer from diarrhoea sometimes, 15 (30%) respondents aren't suffering from diarrhoea, 16(32%) people suffer every 1, 2 months and 4 (8%) people suffer every 3, 4 months from diarrhoea. Due to the improper facility of health education they suffer from this disease.

## 4.3.3 Condition of Protein Energy Malnutrition (PEM)

Protein Energy Malnutrition (PEM) is the main problem of Nepal. In survey researcher asked the question of protein Energy Malnutrition they answered as follows.

Condition	Number	Percentage
Yes	15	30%
No	35	70%
Total	50	100%

Table No. 40: condition of PEM

According to table 15(30%) Dom people suffer from protein Energy Malnutrition and 35 (70%) Dom people don't suffer from PEM. This means 70% Dom people are

conscious about the PEM. More Dom people are conscious about the PEM and they eat sufficient protein like meat, fish.

# 4.3.4 Condition of Any type Weakness.

Due to the lack of nutritional food habits people suffer from different types of weakness. In survey the researcher asked the questions about the condition of weakness and has found the following data.

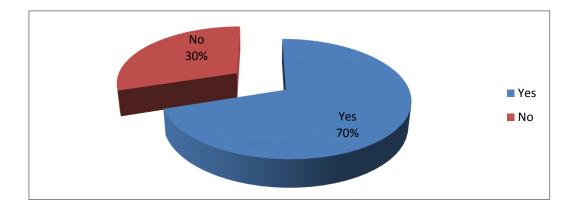


Figure No.13 Condition of any type weakness

According to table 35 (70%) people suffer from different types of weakness but 15 (30%) people aren't suffering from any type of weakness.

# 4.3.5 Condition of anemia.

Due to the deficiency of haemoglobin people suffer from anaemia. In survey researcher asked the questions of suffering any type of anaemia and they give the answer as follows.

Condition	Number	Percentage
Yes	3	6%
No	47	94%
Total	50	100%

Table No. 41: suffering of any type of anaemia

According to table 3(6%) Dom people suffer from anaemia but 47(94%) people didn't suffer from this disease. Less Dom people suffer from anaemia which is cause from lack of iron.

### 4.4.6 Cleanliness

Cleanliness is one of the most important parts of our health. So we should maintain cleanliness in our life. We can find out their health condition how they have maintained good sanitation. Cleanliness makes man away from transferrable disease. Researcher observes the cleanness of Dom community and gets as follows.

Condition	Number	Percentage
Yes	25	50%
No	25	50%
Total	50	100%

Table No. 42: Condition of cleanness

According to table 25(50%) respondents were cleaned but 25(50%) respondents were dirty appearance. Half Dom people conditions of cleanliness are not satisfactory.

### 4.4.12 Washing hand.

Hand is the main cause of transferrable diseases. So, we must clean our hand. Many bacteria and virus enter in our body through hands. We should wash our hand systematically and clean with soap.

Table: 43 washing hand

Condition	Number	Percentage
Yes	47	94%
No	3	6%
Total	50	100%

According to table 47 (94%) of respondents wash hand before take food or launch and after toilet and 3 (6%) of respondents don't wash hand before take food or launch and after toilet. Most Dom people wash hand before taking food which is good habits.

# 4.4.13 Sanitation Status of home

Clean environment is good for our life. Our surrounding is our environment. So we must keep our surrounding clean for good health. If our house is dirty, many insects and disease enter in our body. If we want to live without touching of this disease then we must live in clean and pure environment.

Condition	Number	Percentage
Clean	3	6%
Average	35	70%
Dirty	12	24
Total	50	100%

Table N0. 44: Sanitation status of home

According to table 3 (6%) Dom people sanitation status of home was clean, 35 (70%) Dom people home was average and 12 (24%) Dom peoples' home was dirty. Only few Dom people were conscious about the sanitation of their home but more people are unconscious about this. Sanitation is directly related to health and food so sanitation is must for Dom people.

### 4.5 Summary

Food Habits refers to human beings' attempt to take a balanced diet as per the need of our body and health. Our body always requires clean, fresh and nutritious food. Balanced diet keeps our health sound and strong. So, we need to be careful about our food. However, we are used to taking fast food, specious food and junk food because of lack of knowledge about the importance of food and health. Moreover, ignorance, illiteracy, poverty and other factors make us take the type of food that we, in fact, should not eat. An improper food habit makes us unhealthy. So, we should develop Proper Food Habit.

This researcher had visited the dwelling place of the Dom Community of Dharan Municipality in order to study their food habit and health status. In order to conduct a survey, Non Probability Census method was adopted. Fifty families were found there in course of research. Mainly Dom is found to have been engaged in cleaning the toilets, making bamboo products and rearing pigs. They were found to be very much poor. Thirty Eight people were found to be given job by Dharan Municipality Their average income is 11,480 per month though it is not sufficient for them to run their life, they are leading life well. Generally, they drink alcohol in the evening. They take meat and fish as well so; their dinner fulfills the nutrition required. However, they take beaten- rice, biscuits, noodles etc in the morning. 60% of them never take milk, 60% of them never take snacks: 90% of them take 8 glasses of milk every day and 40% take saturated fats. In this way, their food habits is proper and improper both.

In order to conduct this research, observation list and objection questionnaire were mainly used. The available data was analyzed through descriptive method. Besides, Graphs, bar chart, were also presented in statistical method and percentage is used to present the data.

## 4.6 Major Findings

- 5.2.1 Among all respondents of Dom communities of Dharan city, average ages of respondents were 29 years. Only 1 respondents was found under the age of 10-15 year,
- 5.2.2 About 78% respondents were male and 22% respondents were female
- 5.2.3 The average BMI of respondents was 22.82. In this survey below 20 BMI has 12 people and above 25 has 8 people.
- 5.2.4 The average family size of all respondents was 6.04.
- 5.2.5 Dom community was mainly uneducated family. 74% people were illiterate.
- 5.2.6 All Participants of this research worked in different offices as Municipality, water supplies, Hospitals, Private Offices, Schools, Colleges, etc. were 84% and cleaners were 16%
- 5.2.7 The average income of respondent was Rs 11480 per month.
- 5.2.8 84% said that they couldn't manage their family with this income
- 5.2.9 The average dependent family members were 4.02 per family
- 5.2.10 The average working hours of respondent were 6.72 hours per people
- 5.2.11 The person who has participated in the survey 38% never eat fruit.
- 5.2.12 The person who has participated in the survey 16% people eat banana,22% eat orange, 36% eat apple, 8% eat Guava, 12% eat grapes and 6% never eat any fruits.
- 5.2.13 30% people eat for breakfast chana cheeura, 20% respondents eat noodles, 10% eat eggs, 30% respondents eat tea and Biscuits and 10% people never eat breakfast. In this survey 6% people eat breakfast at 6 am, 28% people eat at 7am, 16% people eat 8 am, 26% people at 9 am and 4% people eat breakfast at 10 am.
- 5.2.14 90% eat Dalbhat, vegetable for launch and 10% people eat nudles for a launch. 22% people eat launch at 11:30 am, 34% people eat launch at

11:00am, 30% people eat launch at 12:00 noon, and 14% people eat launch at 2:00 pm.

- 5.2.15 80% people eat Dalbhat and chicken at a dinner, 10% people eat Dalbhat Mutton in dinner and 10% people eat Dalbhat fish. 34% people eat dinner at 7:00 pm, 22% people take dinner at 7:30 pm, 16% people take dinner at 8:00 pm and 28% people eat dinner at 8:30 pm.
- 5.2.16 Average quantity of rice taken in launch was 280 gm
- 5.2.17 6% people never take fried food
- 5.2.18 60% people never drink milk
- 5.2.19 90% people use salt daily, 6% people use salt sometime and 4% people use salt too much less.
- 5.2.20 4% eat toasts, 4% eat other cereal, 30% eat bread,8% don't eat anything,54% eat other types of breakfast in their daily life.
- 5.2.21 92% Dom community have taken main meal items are meat, fish, chicken, vegetables with rice
- 5.2.22 60% people never eat snacks daily between two meals.
- 5.2.23 26% people never eat junk food. It shows that many people use Junk food.
- 5.2.24 20% people never eat bread, cereals and potatoes in a day.
- 5.2.25 76% Dom people never eat dairy product in day.
- 5.2.26 16% Dom people didn't have well knowledge of guidelines of food pyramid and 84% people never heart this type knowledge.
- 5.2.27 86% Dom people don't eat anything in gaping time of breakfast and launch.
- 5.2.28 10% Dom people eat soup in the launch time. 28% eat salad and 62% eat vegetables, similar healthy choices food.
- 5.2.29 They have to eat meat daily because of their daily physical labored. 6% Dom people eat vegetable with meat, 8% Dom people eat salad, chicken, 60% Dom people eat chicken, 20% Dom people eat fish, 6% Dom people eat mutton and 6% Dom people eat vegetables with rice dish.
- 5.2.30 90% people drink 8 glasses water per day.
- 5.2.31 24% of Dom people limitation of intake coffee to one cup or more each day and 76% Dom people don't limit of intake of coffee to one cup or more each day.

- 5.2.32 40% of Dom people don't use saturated fat to a few times each week.
- 5.2.33 14% of Dom people use olive oil, 28% of Dom people use sunflower oil, and 38% of Dom people use mustard oil.
- 5.2.34 6% of Dom people use candy, 2% of Dom people use refined flour such as bread, 6% of Dom people use cakes or donuts, 16% of Dom people use other sugar foods and 70% of Dom people don't use sugar and sweets to a few times per week.
- 5.2.35 44% of Dom people limit of intake of soft drinks and fast food to a few times per week. 56% of Dom people don't limit of intake of soft drinks and fast food to a few times per week.
- 5.2.36 40% of Dom people chew most of his food at least 20 to 30 times before swallowing and 60% of Dom people don't chew.
- 5.2.37 20% of Dom people had fast of metabolic type is and eat in accordance with it , 60% of Dom people had slow of his metabolic type, 4% of Dom people had balanced metabolism determines levels of carbohydrates, protein and fats and 16% of Dom people didn't know his metabolic type.
- 5.2.38 40% Dom people try to eat organic or locally grown produce as much as possible and 60% of Dom people don't try to eat organic or locally grown produce as much as possible.
- 5.2.39 26% Dom people eat some raw fruit and vegetables every day and not overcook his food, which destroys enzyme and nutrient levels and 37 (74%) didn't careful to eat some raw fruits and vegetables every day.
- 5.2.40 20% Dom people watch the portion size of his meals to keep the calorie count at or less than 500 calories per meal as often as often as possible and 80% Dom people didn't watch the portion size of his meals to keep the calorie count.
- 5.2.41 30% of the Dom people take quality nutritional supplement, especially for the common deficiencies such as vitamins A,B,C,D, E omega oils, magnesium, zinc and Calcium and 70% of Dom people didn't take quality nutritional supplement, especially for the common deficiencies.
- 5.2.42 All respondents didn't get at least 30 minutes of exercise almost days in order to help burn calories, build muscle, improve metabolism, improve delivery of nutrients and facilitate the removal of toxins from the body.

- 5.2.43 100% respondents weren't Practice some form of stress management most day such as yoga, meditation or deep breathing in order to facilitate the good digestion goods.
- 5.2.44 8% people were daily bathing, 48% people were bathing every 2 days,24% people are bathing every 3 days, 6% people are bathing every 4 days and 14% people were bathing every 7 days.
- 5.2.45 70% of respondents were suffering diarrhea.
- 5.2.46 30% of Dom people had protein Energy Malnutrition and 70% of dom people didn't suffering PEM.
- 5.2.47 70% of people were suffering different type of weakness and 30% people aren't suffering any type of weakness.
- 5.2.48 6% of Dom people were suffering from anemia and 94% people weren't suffering any type of anemia.
- 5.2.49 All respondents weren't suffering any type of nutritional diseases like murrasmus, kwashiorkor etc.
- 5.2.50 66% were using junk food, and 34% people were use natural food.
- 5.2.51 50% of respondents were cleaned and 50% of respondents were dirty appearance.
- 5.2.52 94% of respondents washing hand before take food or launch and after toilet and 6% of respondents weren't washing hand before take food or launch and after toilet.
- 5.2.53 6% of Dom people Sanitation status of home were clean, 70% of Dom peoples' home was average and 24% Dom peoples' home was dirty.
- 5.2.54 28% of Dom people drink filter water and 72% of Dom people drink Non filter water.

### CHAPTER – V

### **CONCLUSION AND RECOMMENDATIONS**

### 5.1 Conclusions

The researcher have studied about food habits and health of 50 families of Dom community who have been living in Dharan and the researcher came to the following conclusions which are mentioned bellow.

- 5.3.1 More Dom people are illiterate.
- 5.3.2 Most of them are involved in toilet in toilet, house or streets cleaning.
- 5.3.3 Dom people aren't conscious about their food habits.
- 5.3.4 They prefer tea- biscuits, noodles or bitten rice as their breakfast.
- 5.3.5 Mostly, Doms are found taking alcohol in the evenings which is affecting their health.
- 5.3.6 Doms eat meat and fish daily in the evening which shows they are consuming nutritious foods.
- 5.3.7 They earn sufficient amount in a month which enables them to run their families.
- 5.3.8 More of Doms never consume milk and snacks. However Higher number of them drink eight glasses of water daily.
- 5.3.9 Less Dom people don't use saturated fats.
- 5.3.10 Doms have big families because of lack of education.

### 5.2 Recommendations.

On the basis of this study, some of the important Recommendations are formulated as follows.

### 5.2.1 Policy related

- 5.2.1.1 The office of Dharan Municipality should be modernization in sanitation system.
- 5.2.1.2 Awareness and education program on the knowledge and important of nutrition balanced diet, and social of nutritive value.

## 5.2.2 Practice related.

5.2.2.1 Social traditions and superstitions about food habits should be removed from the society by health educating people.

- 5.2.2.2 Knowledge about balance diet in back word people gives by educated people.
- 5.2.2.3 Immunity decreases due to lack of nutritious food so; they should eat fruits to maintain good health.
- 5.2.2.4 Filtered or boiled water should be used for drinking purpose.
- 5.2.2.5 They should avoid such foods that harm their health and make a habit of eating nutritious foods.
- 5.2.2.6 Importance should be given to health drink like milk, juice and other dairy products which prevent them from joints problems.
- 5.2.2.7 Fish and meat should be included in lunch, rather than dinner.
- 5.2.2.7 New clothes should be put on, along with bath, after regular duty.

# 5.4.3 Further research related

Some of the following area would be taken for research work.

- 5.4.2.1 Assessment of school level curriculum of health education.
- 5.4.2.2 Different issues of food habits in relation to caste and religion.
- 5.4.2.3 A study of food habits practices and effects on health.
- 5.4.2.4 Comparative studies on food habits between educated and uneducated family, different caste, urban and rural family.
- 5.4.2.4 A study of Food Habits of other castes and their impacts.
- 5.4.2.5 Responsibility of an individual behind balanced diet and food habits.
- 5.4.2.6 A study on the supply of required nutrition at a local level.
- 5.4.2.7 A study on the impact of junk food on public health

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### **APPENDIX I**

## TRIVUWAN UNIVERSITY

# FACULTY OF HEALTH AND PHYSICAL EDUCATION JANTA MUNTIPLE CAMPUS

Questioner used on the study of "FOOD HABITS AND ITS IMPECT ON HEALTH "Of Dom community in dharan Municipality

### **Questionnaire for interview:**

Information collected in this questionnaire will be kept confidential and used only for academic purpose.

Date of interview:

## SECTION 1: INDIVIDUAL QUESTIONAIRE:

- 1.1 Name:
- 1.2 Age:
- 1.3 Gender (i) Male (ii) Female
- 1.4 Religion: (i) Hindu (ii) Buddhish (iii) Muslim (iv) Christian (v) Other
- 1.5 Height:
- 1.6 Weight
- 1.7 Caste/ethnicity: (i) Dalit (ii) Janjati (iii) Other
- 1.8 How many member's in our family?
  - a) 2 b) 3 c) 4 d) 5 e) .....
- 1.9 Education:

```
b) Literate.
                                                d) Secondary e) Over SLC
      a) Illiterate.
                                  c) Primary
1.10 Occupation.
                    b) Agriculture c) labour
      a) Service
                                                d) Business
                                                              e) Other
1.11 Economics Condition.
1.11.1 How much do you earn per Month? ..... Rupees.
1.11.2 Is this income sufficient for your live hood?
                                                                     (ii) No
                                                       (i) Yes
1.11.3 How many persons are dependent on you.....?
1.11.4 How many hours you have to work in one day?
      Usual working hours from ...... To ......
1.11.5 Do you get your salary /payment in time?
                                                       (i) Yes
                                                                     (ii) No.
```

# **SECONTION 2: FOOD HABITS**

2.1 Do you have habit of?

Habit	Yes (1)	No (2)
Alcohol		
Tobacco(khaini)		
Pan, Sweet supari, Gudkha		
Drug Abuse		
Smoking		

2.2 Do you take fruit items?

-Daily	- Occasionally	- Sometime	-Never
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- 2.3 What fruits do you eat?
- -Banana Apple -Orange -Guava Grapes
- 2.4 At what times do you usually take as and what item? Breakfast ...... at ...... AM

Launch	 	 at	 AM/F	'N

Dinner ...... PM

- Other .....
- 2.5 How much rich can be taken at a lounch time?(i) Nearly 200 gms (ii) 300 gms (iii) 400 gms (iv) 500 gms (v) more than 500 gms
- 2.6 How often do you eat fried food?

(i) Daily (ii) 1-3 times a week (iii) Less than once a week (iv) Never

- 2.7 What type of milk do you use most often?(i)None (ii) Skimmed (iii) Full fat (iv) Soya (v) Other
- 2.8 How often do you add salt to food when cooking?(i) Usually (ii) Sometimes (iii) Rarely (iv) Never
- 2.9 What do you eat for breakfast most days?
  (i)High fiber cereal (ii) Other cereal (iii) Bread / toast
  (iv) Eggs (v) Fruit (vi) Nothing (vi) Other
- 2.10 What do you usually eat for your main meal of the day?(i) Meat / fish / chicken / vegetarian option (ii) Pasta (ii) rice dish (iii) Other
- 2.11 How often do you eat fruit and vegetables?(i) Daily (ii) 2/3 times a day (iii) 5 times a day (iv) Sometimes (v) Never
- 2.12 How often do you eat snacks between meals?(i)Never (ii) 2/3 times a week (iii) Daily (iv) 2/3 times daily

- 2.13 How many times a week do you eat fast food / take always?(i)Never (ii) 2/3 times a week (iii) 5/6 times a week (iv) daily
- 2.14 How often do you eat bread / cereals / potatoes?(i)Never (ii) 1/2 times a day (iii) 3/4 times a day (iv) 5/6 times a day
- 2.15 How often do you consume dairy products (milk, yoghurt, cheese)?(i)Never (ii) 1/2 times a day (iii) 3/4 times a day
- 2.16 How well do you know the guidelines of Food Pyramid?(i)Very well (ii) fairly well (iii) Not well (iv) Never heard of it
- 2.17 Which type of breakfast do you eat a healthy breakfast nearly every day?(i) whole grain cereal (ii) eggs (iii) whole grain pancakes(iv) Yogurt (v) fruit (vi) whole grain toast
- 2.18 Which type of a healthy snack do you eat between breakfast and lunch?(i) Fruit (ii) nuts (iii) bean dip (iv) vegetables or similar healthy foods
- 2.19 Which type of a healthy lunch do you eat nearly every day?(i) soup (ii) salad (iii) tuna (iv) chicken(v) turkey(vi) whole grain pasta (vii) fruit (viii) vegetables or similar healthy choices
- 2.20 Which type of a healthy dinner nearly do you eat every day?(i) Salad (ii) chicken (iii) fish (iv) Mutton (v)vegetables(vi) Sweet potato (vii) other similar healthy foods
- 2.21 Do you drink at least 8 glasses of spring or filtered water every day?(i) Yes (ii) No
- 2.22 Do you limit your intake of coffee to one cup or none each day?(i) Yes (ii) No
- 2.23 Do you limit your consumption of saturated fat to a few times each week?(i) Red meat (ii) dairy products (iii) fried foods
- 2.24 Do you make an effort to eat un-saturated fats several times a week?(i) Salmon (ii) tuna (iii) sardines (iv) Olive oil (v) canola oil (vi) sunflower oil
- 2.25 Do you limit your intake of sugar and sweets to a few times per week?(i) Candy (ii) desserts (iii) refined flour such as bread(iv) Cakes or donuts (v) other sugary foods
- 2.26 Do you limit your intake of soft drinks and fast foods to a few times per week?(i) Yes (ii) No
- 2.27 Do you chew most of your food at least 20 to 30 times before swallowing?(i) Yes (ii) No

- 2.28 Do you know what your metabolic type is and eat in accordance with it?(i) fast (ii) slow (iii) balanced metabolism determines levels of carbohydrates, Protein and fats)
- 2.29 Do you try to eat organic and/or locally grown produce as much as possible?(i) Yes (ii) No
- 2.30 Are you careful to eat some raw fruits and vegetables every day and not overcook your food, which destroys enzyme and nutrient levels?(i) Yes (ii) No
- 2.31 Do you watch the portion size of your meals to keep the calorie count at or under 500 calories per meal as often as possible?(i) Yes (ii) No
- 2.32 Do you try to eat something healthy about every 3 hours in order to keep your blood sugar level in a safe range and avoid the storage of fat on your body?(i) Yes (ii) No
- 2.33 Do you take quality nutritional supplements, especially for the common deficiencies such as vitamins A, B. C. D, E, omega oils, magnesium, zinc and Calcium?

(i) Yes (ii) No

2.34 Do you get at least 30 minutes of exercise almost every day in order to help burn calories, build muscle, improve metabolism, improve delivery of nutrients and facilitate the removal of toxins from the body?

(i) Yes (ii) No

2.35 Do you practice some form of stress management most days such as yoga, meditation or deep breathing in order to facilitate the good digestion of foods?(i) Yes (ii) No

# **SECTION 3 HEALTH STATUS**

- 3.1 In how many days do you have a bath? ..... day(s)
- 3.2 How many times will you suffering diarrhea? .....
- 3.4 Do you have PEM (Protein Energy Malnutrition) before and now?(i) Yes (ii) No
- 3.5 Dou you have any type of weakness?
  - (i) Yes (ii) No

- 3.6 Do you have suffering any type of anemia?(i) Yes (ii) No
- 3.7 Do you have night blindness?

(i) Yes (ii) No

- 3.8 Do you have any type of Tuberculosis?(i) Yes (ii) No
- 3.9 Dou suffering any type of nutritional diseases? Like Marasmus, Kwashiwarkas(i) Yes (ii) No
- 3.10 In your family any one suffering micronutrient diseases like goiters, Scurvy.(i) Yes (ii) No

# **Checklist for Observation**

S.N.	Particulars	Status
1	Nail Cutting	Yes/No
2	Wearing of clothes	Clean/average/ dirty
3	Teeth brushing	Yes/No
4	Hair cutting	Yes/No
5	Talking style	soft /hard
6	Usual Food	Junk/ Natural
7	Cleanness	Yes/No
8	Washing hand before take food or launch and after toilet	Yes/No
9	Sanitation status of home	Clean/average/ dirty
10	Taking water	Filter/non filter
11	All dose Vaccination	Yes/No

Thank you for your time and input-----I appreciate it.....