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# Study on Value of Nutrition - Impact on Individuals and the Society

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**Abstract:** It is found that the awareness programmes at various corners give rise to use of all possible nutrients. Use of Iodine Salt is one such example. Proper care as far as possible is taken for our own health and the health + wealth of the countrymen as a whole. Nutrition generally focuses on metabolism having the ways and means of such substances which are available inside the human body by way of transformation. Food security is the control of sufficiency of food in terms of quality and quantity for a healthy lifestyle. Ways and means of improved food security for both the chronically hungry people and for the general public at large do care for nutrient values.

With the use and help of food we all get energies in the form of nutrients for our own growth, physical and mental development, remaining healthy, ability to be active for all purposes including for work, movement, doing something or anything and so on and so forth. In the case of human body, five nutrients are must to get so that remain the body in tact or in good shape or healthy; these are protein, carbohydrates, fat, vitamins and minerals. It is the duty of the concern government to take care for meeting the challenges of poverty, war or war like situation, trade and commerce, bad debts, gender discrimination, environmental changes and micro nutrients for all purposes.

Key Words: Consumption, Lifestyles, Nourishment, Nutrition, Substances

# **INTRODUCTION**

Malnutrition is also because of hunger, food scarcity / non availability of food articles or proper food. Hunger is another source of malnutrition which is the prime component leading to deficiency of energy. Hunger also leads to threatening of life which is called the acute hunger and intense treatment by the trained medical staff can only save the life of such person. With the use and help of food we all get energies in the form of nutrients for our own growth,

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physical and mental development, remaining healthy, ability to be active for all purposes including for work, movement, doing something or anything and so on and so forth. In the case of human body, five nutrients are must to get so that remain the body in tact or in good shape or healthy; these are protein, carbohydrates, fat, vitamins and minerals.

Malnutrition causes with various facts and hunger is one such cause. There are various and an obvious reason for hunger which ultimately leads and tends to malnutrition thereby causes the poor health or diseases to the person.

#### **OBJECTIVE OF STUDY**

The very purpose of this study is know the situation of nutritrients in the 21<sup>st</sup> Century, its reasons and also the causes for getting less nutritions and also consuming more nutrients with the help of available literature (both online and offline).

#### LITERATURE REVIEW

Nutrition, nourishment or ailment whatever name it may be called is mainly with the reason and cause of food requirement of any person, for maintenance of their physiological needs and organisms. In the language of medical science especially the medical language, nutrition is the science which practices the consumption of food articles. This science speaks about the creating the catabolism and anabolism jointly examines as to how the response of body after taking / consuming the food. This examination also called the metabolism. Salient features of nutrition or nutritional value are:-

- Human body requires nutritionts
- Nutritients provide energy
- Water and fiber are also essential ingredients for consumption
- Vitamins being organic compounds are needed to human body

# Meaning

Nutrition involves and indentifies the certain diseases and conditions caused by and for dietary factors which includes malnutrition, food allergies and intolerances of food consumption etc. Nutrition is also focus on diseases, conditions and any problem faced by the person in case the healthy diet available or not available and similarly taken or not. In simple terms nutrition generally focuses on metabolism having the ways and means of such substances which are available inside the human body by way of transformation.

Literal meaning of malnutrition means is 'badly nourished' by inadequate intake of protein, energy or micronutrients and also by and because of the regular and frequent infections or diseases. Food security is the control of sufficiency of food in terms of quality and quantity for a healthy lifestyle. Ways and means of improved food security for both the chronically hungry people and for the general public at large do care for nutrient values.

#### **Types of Nutrients**

Nutrients are in the form of component of food, protein, carbohydrate, fats, vitamin, mineral, fiber and water. In addition macronutrients and nutrients are required by human bodies in large and good qualities and qualities. Because both (macronutrients and nutrients) are the nutrients are the source of energy.

# Maintaining health and preventing diseases

The role of nutrients is manifold as far as maintaining the health and preventing the diseases is concerned. It is for one and all that the health of any person is sound and the sickness or any or kind of disease is away. Nutrition acts bringing positive quality, emphasises physical, social, intellectual, emotional and spiritual well being of one and all. Optimization of nutrition, providing or making available the nutrients in all the required form and quality keeps the human health well and prevents from cutting edge of diseases. Whatever is eaten or consumed by us the nutrients need to provide the environmental factors, which ultimately influences our own growth, developments, functional abilities and above all the health.

Speaking about the general knowledge of the public as far as the rate of mortality rate from various diseases including the heart disease, cancer, stroke and so on and so forth, the lifestyle with proper nutrition, habits of discipline, exercise and influencing on individual maintenance of health and also reducing the catastrophic medical care expenditure is welcomed by one and all.

Food is essentially required by one and all in this world that may even be a human being, cattle or even the plants, trees, herbs and the shrubs. With the use and help of food we all get energies in the form of nutrients for our own growth, physical and mental development, remaining healthy, ability to be active for all purposes including for work, movement, doing something or anything and so on and so forth. In the case of human body, five nutrients are must to get so that remain the body in tact or in good shape or healthy; these are protein, carbohydrates, fat, vitamins and minerals. The salient features of all five essential nutrients are:

- Protein is needed to build, maintain and repair muscle, blood, skin and bones and other tissues and organs in the body. Foods rich in protein include meat, eggs, dairy and fish.
- Carbohydrate provides the body with its main source of energy. Carbohydrates can be classified into two kinds; starches and sugars. Food rich in starches include rice, maize, wheat and potatoes and food rich in sugars include fruit, honey, sweets and chocolate bars.
- Fat This is the body's secondary source of energy. Fat actually provides more

energy/calories per gram than any other nutrient, but is more difficult to burn. Food rich in fats are oils, butter, lard, milk, cheese and some meat.

 Vitamins and Minerals - Vitamins and minerals are needed in very small amounts and are sometimes called micronutrients, but are essential for good health. They control many functions and processes in the body and in the case of minerals also Help build body tissue such as bones (calcium) and blood (iron).

In addition to the above nutrients Fibre and Water are also essential for a good and healthy diet along with the balanced diet with the combination of vitamins and minerals.

# Essential points for consideration

One such element is hunger. The fact remains that still in the 21<sup>st</sup>century; there is dearth of food worldwide. Such a situation may be less or sometime may not be in the developed countries but in the developing countries and under developed countries the situation is worse. There are instances and reasons of concern that as per the data available despite the efforts for producing food for everyone at all places, which is the program of United Nations, still there are mortality of child in every five seconds because of hunger or malnutrition. Similar is the case for people sleeping without food or sometime with improper or little food in the world such counting is over 800 million people who still go to bed hungry.

# REASONS FOR DEFICIENCY OF NUTRITION

Malnutrition is also because of hunger, food scarcity / non availability of food articles or proper food. Hunger is another source of malnutrition which is the prime component leading to deficiency of energy. Hunger also leads to threatening of life which is called the acute hunger and intense treatment by the trained medical staff can only save the life of such person. Such a situation leads to emergent condition for saving the life. Occurrence of such situation leads to:

- Lack of energy to do things, play and learn
- Apathy whereby the child is less interested in the world around her
- Less resistance to disease as their immune system weakens
- Chronic hunger can lead to malnutrition.

In the language medical technology, nutrition, nourishment or the ailment is because of the supply of materials including the food required by human beings and their organs / cells for survival or living alive. Science also speaks that nutrition is the science or practice of consuming and utilizing foods. Similar is the voice of medical practitioners who refer the food requirements of patients, including nutritional solutions delivered through intravenous or intragastric tube.

#### Some glaring examples of nutrients

- Proteins
- Fats
- Fibre
- Water
- Micronutrients
- Minerals
- Potassium
- Chloride
- Sodium
- Calcium
- Phosphorus
- Magnesium
- Zinc
- Iron
- Manganese

- Copper
- Iodine
- Selenium
- Molybdenum
- Vitamins

# Hunger is one of the main causes of malnutrition

Malnutrition causes with various facts and hunger is one such cause. There are various and an obvious reason for hunger which ultimately leads and tends to malnutrition thereby causes the poor health or diseases to the person. Important aspects for hunger are:

#### - Poverty

Poverty is one such curse for the human beings even in this 21<sup>st</sup> century. On the one hand there are advances and developments all around the globe where people are relishing each and every thing and on the other still today people do not have anything to feed their stomach what to talk for two times or sufficiency even just one time. People go to earn at for the same of their own and their dependents to feed but most of the times either they do not get the opportunity to work or do not get sufficient amount to live up. Therefore, they are not able to get their loaf of bread.

#### War

Major disruptor of human lives and all other things is the outcome of war. Production and distribution both hampered and disrupted in a way in case of any war in any part of the country or the world. Any kind or type of war makes people to fight for their livelihood instead of working on their fields and the public at large becomes the victim turning into the status of refugees. The situation becomes more and more and worse when the crops are destroyed with the vast resultant impact and

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sometimes even with bad or malafide intentions also. Or destroyed intentionally. In some countries, even if fighting. Almost similar type of happening occurs (war like situations) even if there is no war but countries do themselves prepare for future expected wars and a lot of investment is made for purchase of weapons and its preparations etc. Such an investment also turns to paucity of food grains / food articles / nutrients to the public. It is true that about 45% of total income is invested for military operations which may be ongoing (present) or for future planning

#### Trade & Commerce

Open trading by and between the countries is in vogue / practice world-wide. But such a situation sometimes plays the role of trouble creator especially where the countries or the organization who have monopoly of particular things trade / sell or purchase as per their own whims and fancies. Such an act leads to spending more and more, hoarding or lessor and / or no supply of required things. Rich countries or organizations do such negative and unethical practice and if fair deal is practiced / exercised the scarcity becomes redundant and more populations can get their bread and butter. Poorer countries or the organizations many a time do not get the opportunity to sell their produces in the market worldwide for various and obvious reasons because of tough tariffs, quota systems, subsidies etc.

#### - Debt

The problem of debt is more prevalent in developing and poorer countries. Such countries that are not able to meet their requirements especially the financial angle are dependent on other countries more on agencies like the International Monetary Fund, World Bank, Asian Development Banks and also on other financing agencies. In case of not being able to the acquired loan it becomes trouble worthy for those countries and such a situation is more likely taken to economic reforms (sometimes these actions are also called Structural Adjustment Programmes ). Such actions of t he government are bound to make severe cutbacks in public spending resulting into elimination of governments subsidies which keep food prices under control, helping to the farmers and the farming community including the labourers by way of providing them with seeds, fertilisers, technical knowhow besides help in marketing their produces.

#### **Gender Discrimination**

Report on malnutrition speaks that the women of every age have higher rates of hunger and malnutrition than men. Some reasons for this may be due to the women having special nutritional needs as a result of having children and breast-feeding them. Still other discrimination on women is lacking of access to education, long working hours as compared to the male workers doing the same job and also lessor payment etc. Such a situation causes ill health of the mother thereby passing the malnutrition / ailments to her children in all spheres including the growth.

#### Environment

Dependency on the natural environment especially by the poorer sections of the society, lack basic amenities of livelihood including needs, food, water, clothing, firewood. More and higher dependency on the nature makes them more prone to diseases because of their poor or weak physiology as their survival depends only on over farming, sometimes destroying the flora and fauna including the lands for their survival. It is also found that sometime farmers dig up roots for fuel or forage, leaving the soil exposed and unprotected from the wind that blows it away and the water that washes it away. Any degradation on environmental front makes the lives harder to produce such crops which are suitable for their own consumption.

#### - Micro-nutrient

Deficiency of vitamins and minerals are the form of micro nutrients. Both vitamins and minerals are essential elements for good health and are required by human body in small quantities but on regular basis. Therefore, these are micro nutrients viz. Vitamin A, Iodine and Iron.

# DISCUSSIONS (RESEARCH METHODOLOGY)

While going through the various literatures and research available (both on line and offline), the factual position on account of deficiency and excess of nutrients lead to the following shortcomings and diseases:

# COMPARATIVE RESULTS OF VARIOUS NUTRIENTS

Sr Nos.	Nutrients	Deficiency	Excess
1	Food Energy	Starvation, marasmus	Obesity, diabetes, cardiovascular disease
2	Simple carbohydrates	None	Diabetes mellitus, obesity
3	Complex carbohydrates	none	Obesity
4	Saturated fat	Low sex hormone levels	Cardiovascular diseases
5	Trans fat	None	Cardiovascular diseases
6	Unsaturated fat	non	Obesity
7	fat	Malabsorption of fat soluble, vitamins, rabbit starvation	Cardiovascular diseases
8	Omega 3 fats	Cardiovascular diseases	Bleeding, hemorrhages
9	Omega 6 fats	none	Cardiovascular diseases, cancer
10	Cholesterol	Deficiencies in development of brain	Cardiovascular diseases
11	protein	Kwashiorkor	
12	Sodium	hyponatremia	Hypernatremia, hypertension
13	Iron	Anemia	Cirrhosis, cardiovascular diseases
14	Iodine	Goiter, hypothyroidism	Iodine toxicity
15	Vitamins	Beriberi, pellagra, pernicious anemia, scurvy, rickets, immune system, inflammation, nervous disorders, hemorrhage	Hypervitaminosis, diarrhea, dyspepsia, birth defects,
16	Calcium	Osteoporosis, tetany, carp pedal spasm, cardiac arrhythmias	Fatigue, depression, confusion, anorexia, nausea, vomiting, constipation, pancreatitis, increased urination
17	Magnesium	Hypertension	Weakness, nausea, vomiting, impaired breathing and hypotension
18	Potassium	Hypokalemia, cardiac arrhythmias	Hyperkalemia, palpitations

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#### FINDINGS

In addition to various types of problems and diseases caused because of deficiency and excess of nutrients, we need to take care about the health and the wellbeing of one and all human beings across the globe. It is found that the awareness programmes at various corners give rise to use of all possible nutrients. Use of Iodine Salt is one such example. Earlier there used to be various ailments because of iodine deficiency but sine the use and awareness of iodized salt such ailments are taken care. Similar is the cause of Tuberculosis. Patient suffering from TB may take treatment while remaining / living with their family members and on completion of required dose of medicine, he / she lives normal life.

Choices of available / having the meals as per nutrient value makes the eating habits of a positive effect on spatial memory, capacity, potentiality, increasing the process and retain academic information which is beneficial for one and all. The main outcome of this is summarized as under:

- Better nutrition has cognitive value especially controlling the blood sugar levels etc.
- Learning of nutritional value leads to make co-relation between diet and its application.
- Better nourished children perform significantly better in all spheres of life including the schooling
- Nutritional education is an effective and workable model in higher academic arena
- More and more learning engagements shall encompass nutrition as an idea for all corners as a learning model also

Sometimes the situation leads to emergent condition for saving the life for and with the deficient source of nutrients having the symptoms like:

- Lack of energy to do things, play and learn
- Apathy whereby the child is less interested in the world around her
- Less resistance to disease as their immune system weakens
- Chronic hunger can lead to malnutrition.

# RECOMMENDATIONS

With the foregoing, it is recommended that proper care as far as possible be taken for our own health and the health + wealth of the countrymen as a whole. Some essential steps are taken to overcome any and all types of deficiencies in the form are including the followings:

- For leading to a healthy lifestyle more and better nutrition be used.
- Awareness programmes for nutritional value be imparted at various corners including at the school level also.
- Being an effective medium of enriching the values of nutrients engagements on it availability, preservation and use is exercised.
- In case of any related diseases caused on account of deficiency and / or excess of nutrients care should be taken under the supervision of a qualified medical practioner.
- Encouragement for leading a normal and wishful life is the right of one and all and with the practice / use of nutrients in balanced conditions is welcomed by one and all.
- Opportunity for use of nutrients / food as per the choice having nutrient value is included in the routine and daily meals to maintain the immunization system etc.

#### CONCLUSION

To get rid of all negativities, it is concluded that care need to be taken for lack of energy to do things (situation or position of person be checked / supervised), increasing the immunization having proper nutrients and negative part of malnutrition be kept away. Other aspects / reason for deficiency in getting nutrition are looked into.

Utmost care should also be taken to meet the challenges of poverty, war or war like situation, trade

and commerce, bad debts, gender discrimination, environmental changes and micro nutrients by the concerned Society or the Government, as the case may be.

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