

Nutrition from infancy through adulthood essay

[Nutrition](#), [Healthy Food](#)



INTRODUCTION Nutrition is the process that allows an organism to absorb the nutrients from food. Nutrition is science, which deals between the relationship of diet, state of health and diseases. Nutrition can give rise to optimal health if it is healthy or it can also give rise to a range of diseases caused by changes in diet, such as scurvy, obesity and other psychological illnesses. Human being evolved as omnivorous hunters over 250, 000 years. The early human diets were mainly composed of vegetables with little amount of meat and fish. With the development and progress in agriculture (about 10, 000 years ago) man started to taste wheat rice, maize as staple food added with other dairy products. This advancement in agriculture and abundance in food led to cooking which made more tasty and edible.

The human body is composed of certain chemical compounds, such as water, proteins, fatty acid and carbohydrates. All of these compounds consist of carbon, hydrogen, oxygen, nitrogen and phosphorus and minerals (zinc iron, calcium etc). These compounds occur in various forms and combination in human body providing energy to human body. The food human eat are absorbed into blood stream and broken down by digestive tract. However some compounds, even if broken down remain unchanged, as a result they are excreted out of the body through digestive canal, with minimal amount of digestive juice eliminated form the body. It is this combination of compounds (excess or lack), which makes us healthy or sick.

NUTRITION FOR INFANTS Breast milk is the ideal source for (newborn) babies. The mother's milk is packed with antibodies, which protects baby against various diseases.

Research has shown that the babies who are breast-fed are at lesser risk to respiratory and urinary tract infections compared to bottle feed babies.

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Breast milk have vital nutrient compounds which helps in developing a baby's brain, retina and also work as protective shield against various diseases. Breast milk not only contains nutrients, but it also balances the hormonal factors, which helps baby's growth and development. The breast milk also has digestive nutrients, which are easily digestible in baby immature digestive tract in early stage of life. As the child grows up, his nutrition needs also changes.

Children first few years are vital for the future of his good health. These early years development also has enormous impact on later life. However at younger stage (one to four years) healthy nutritive items are essential elements to form strong teeth, bones, muscles and healthy tissues.

Normally an infant diet at this stage requires higher energy nutrients, which are discussed below.. VitaminsIron deficiency is common in the growing years and is an essential requirement in dietary intake of infants. One common way of iron intake is through meat, added with vitamin C, which helps in absorption of food. The common sources of iron are beef, pork, lamb, cereals, bread, dried fruit, eggs, beans and pulses and green leafy vegetables etc. Other essential vitamins include calcium, which is vital for bones and teeth growth and is found in milk and dairy products, such as milk, yogurt, cheese and dark green vegetable. Vitamin A is also a requirement for healthy skin, while Vitamin A and C are important for immune system, which can be taken by eating vegetables fruits, such as peppers, tomatoes, mango, apricots, dark green vegetables, liver and dairy

products. Vitamin D is vital for metabolism and can be directly obtained from the sun or tablet intake or salmon, tuna, mackerel, sardines etc.

The details of vitamins and its sources are shown in the table below.

Carbohydrates Starchy carbohydrates include bread, rice, pasta, cereals and potatoes and are essential in all meal. The main sources of carbohydrates are potatoes (including baked potatoes and sweet potatoes), granary and rye breads as they have higher amount of fiber, muffins, chapatti and pasta etc.

Fruit and vegetables Fruits and vegetables are essential items of infant's food.

Research in food has shown that fruit and vegetables decrease risk of getting several diseases, such as cancer and heart diseases. At least five portions of fruits and vegetables are essential for daily use. An example of a portion is as following; One piece of medium sized fruit (e. g. apple, banana orange); One slice of mango or melon; One tablespoon of dried food. **Milk and Dairy Food** Dairy products are vital source of calcium and 5 to 600 ml of milk is enough to meet a child daily need. Full fat milk or semi skimmed milk is fine for age two and above, as it contains enough energy. Milk can also be used in drinks, cereals, puddings and sauces.

It is also present in cheese, fraise and yoghurt and can be used as alternative if milk is not available. Cheese can also be added with baked potatoes, flans, spaghetti, egg dishes, while yoghurts can be used as pudding and snack between the meals. **Meat and Fish** Meat and fish should be given to children once or twice a day.

The main source of meat are minced beef, turkey, chicken, pork, shepherd's pie, meatballs and spaghetti bolognaise. Some children prefer soft meat with sauce. Mashed sardines, salmon, tuna, cold meats and patés are good fillers. Sausages combined with eggs and omelettes and beans are pluses are also essential part of nutritious food Fatty and Sugary Food Fatty and Sugar food include spreading fats, cooking, sugar, biscuits, cakes, crisps, sweets, chocolate, cream, ice cream and sugary drinks. They should not be given as too often of such kind of food leads to dental decay. However little amount of fatty or sugary diet is fine after meals.

NUTRITION FOR ADULTS The healthy food for adult also consists above-mentioned items, but in a different quantity depending on the daily calories needs. A balanced diet for adult includes variety of foods, such as using plenty of breads and cereals, vegetables, legumes fruit, low salt food and small amount of food, which has little bit of sugar. A healthy and balanced diet for adult is composed of rich and starchy food and vegetables, moderate amount of meat and milk or dairy products. However in adults its not just eating healthy food, but keeping oneself physically fit, moderate alcohol and keeping weight balanced keep adults free from various kinds of diseases even in old age. **ELEMENT OF ADULT FOOD** Vitamins Iron is a vital requirement in adult nutrition, but women needs higher amount of iron compared to men due to the loss of iron during menstruation.

Iron is also vital for the proper functioning of immune system. In women it is also an important part of embryo development. Iron is found in haem and

non-haem food. Iron is found in cereals and pulses, coffee, tea. Calcium is a fundamental part of adult diet, especially for bone health.

The normal intakes of calcium in an adult are about 700 mg per day, to keep an individual healthy. Calcium is found in all dairy products, but eating too much calcium is not good for health. Men are more prone to put extra weight around their bellies and excessive weight in that area can give rise to heart related diseases. One important part of men's diet is zinc, which is involved in making of sex hormones and plays an important role in preventing cancer. Zinc is basically found in bread, nuts, seafood, meat and poultry.

CarbohydratesCarbohydrates make an important part of adult diet. Glucose goes straight into our brain cells and makes its way through liver and muscles, where it is stored as (glycogens) and fat cells as a future source of energy. It is utilized when we need some backup of our energy. Fructose and other sugar products resulting from the breakdown of carbohydrates, go straight to the liver, where they are converted into glucose when needed. The normal source of carbohydrates is pasta, rice, cereals, breads and products made from flour and grains. However many flour products contain sugars and fats, which make food calorie rich.

Rice, pasta whole grain cereals and potatoes contain carbohydrates. The number of intake depends on the energy requirement of an individual, but normally it should consist of 60 percent of a mealProteinsProteins are essential compounds, which repair the body tissue from hair to nails and muscles. They also fight infections and transport oxygen from lungs to other parts of the body (tissue). Even though proteins provide only four calories of

energy per gram and the body uses protein only if carbohydrate intake is insufficient. Proteins are made up of smaller units called amino acids, which our bodies require for proper functioning.

Milk and dairy products provide proteins. Food in this group provides vitamins, such as Vitamin A, D, and B12 and phosphorus. The vitamins riboflavin and niacin allow the release of energy from fats and sugars to keep the body active. The main components of the proteins are milk, cheese, ice cream and yogurt. Normally the adult should consume about 2 to 3 servings each day.

A typical serving includes two ounces of hard cheese. However, eating too much protein can lead to accumulation of fat in the body. Fats Most of the fat food comes from animals, which contain plenty of fats in saturated form.

They form important nutrients to keep the body's metabolism healthy by providing iron, calcium and keeping the red blood cells in optimum condition. Food in this group includes, eggs, chicken, pork, beef, lamb, fish etc. Adults need about two servings per day. Too much eating of this kind of food can lead to weight gain.

Sugary Food Sugary food is of little nutritional value, as most of it contains excessive calories in the form of fats, that's why adults need to be cautious to eat this form of food. The main forms of this food include cakes, chocolate, fat spreads, sweets and soft drinks. **NEGATIVE AND POSITIVE IMPACT OF NUTRITION** Nutrition has a strong determinant of chronic diseases as proven by scientific research. Our diet has enormous positive and negative impact on our health. A balanced and healthy diet provides supply of

essential items in right quantities for our body. Healthy diet can keep our body active and reduce risk of falling vulnerable to diseases. However there is a clear difference between healthy eating and over eating and under eating as all of these have consequences.

Hunger and malnutrition are great problems in the world. Today 30 percent of the world is suffering from hunger and malnutrition. The consequence of malnutrition includes death, disability, and stunted mental and physical growth. About 60 percent of children under age five die due to malnutrition. Among which iodine deficiency is the most common cause of brain damage and mental retardation worldwide. While million of people have iron and vitamins deficiency which causes blindness and increased infections. Poor diet also has effect on babies during birth and every year millions of babies are born under weight, vulnerable to many diseases.

When food is not healthy and essential food items are not taken for long time, body becomes weak and is less able to fight infections and diseases. The brain becomes sluggish and weak. These deficiencies are due to lack of important nutrients in food such as lack of critical vitamins and minerals.

For example the common problem among children is that some times either they eat too much of a food or don't eat, which affects their growth and overall development. On the other side there are children (infants) who are over eaters and they put on a lot of weight at early age, due to excessive eating of snacks, sweets and sugary items. It is natural for these obese children to develop diabetes at young age, which leads to other problems, such as nerve damage, heart and kidney diseases and sometimes blindness, which become

more complicated in later life. Contrary to this under weight problem in infants are also common. Some children have small appetite and do not like to eat. There are other children who face difficulty in breathing after eating a certain food.

Such kind of food should be avoided, as some children are allergic to certain kinds of food. However, offering alternative food can compensate this kind of problem. Another problem common in young age is diarrhea, which happens due to the presence of large quantity of fruit and vegetables, which should be avoided. On the other hand malnutrition is related with dietary deficiency, which means people make poor food choices or take excessive amount of a specific food. For example in US low intake of calcium is common problem and is giving rise to poor bone health among the elderly population.

On other side obesity is also common which is related to having too much extra fat on the body, which gave rise to life threatening diseases, such as diabetes, heart problems, kidney failure, cancer. The reason for these diseases is high cholesterol in the diet. Diet has been known to have key role in chronic diseases and is apparent in global level changes in the 20th century.

Traditionally the diet pattern has been changing from vegetables to high fat energy-based diets. It has been projected that by 2020 chronic diseases will account for about 71 percent of all the deaths in the developing countries. The number of people in developing countries affected with diabetes will increase by 2.5 fold from 84 million in 1995 to 228 million in 2025. While the rate of over weight has reached epidemic level One problem with over

weightiness is hypertension, which is affecting one in four adults and they are at higher risk to suffer from heart attacks, kidney disease, atherosclerosis, macular degeneration and strokes.

It is named as silent killer because 35 percent affected people do not know the reason, especially when it comes to food. People don't avoid junk food, which leads to such problems. On other side there is healthy diet, which controls certain diseases such, lowering blood pressure, for example a study by National Institutes of Health has shown that fruits, vegetables and low-fat dairy products help in lowering blood pressure. ConclusionThe aim of healthy diet is to ensure fitness and have balanced approach in life. A healthy diet should ensure vitality and health not only in short term, but in the long term also.

In long-term diet aim is to minimize the risk of chronic diseases, such as coronary, diabetes, cancer and stroke. It is an old saying that we are, what we eat. The food, we eat have enormous impact on our health and well-being. By eating healthy diet, we cannot only maintain a healthy body but can also increase our chance of longer and healthy living. ReferenceHealthy living. (n.

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