

Food non-vegetarian -vegetarian or vegan - what to eat best ? what is the problem ?

Eating habits are linked to our health and well-being-there is no doubt about it. Some say that non-vegetarian food is good,some say it is best to be vegetarian or may be the vegan. A look back at the history of evolution can throw some light on to decide what type of diet is rational for us.

Evolution and Diet - The period from 70,000 to 40,000 years ago is very important in the history of the emergence of humans because it was then that the first human form evolved from quadrupedal to bipedal and we had the first man forming Australopithecus. One step back it was Ramapithecus, which evolved from Dryopithecus, the common ancestor of monkeys and humans. After two more evolved species , Homo erectus and Neanderthals Homo sapiens or modern humans came to exist only 300,000 years ago. .Humans, chimpanzees, orangutans, etc. are collectively called hominids or primates.

In the early stages i.e. from monkey to Ramapithecus and Australopithecus, humans were herbivores like monkeys. If the animal is a vegetarian, the intestine must be very large, because its digestion requires a very long process.

Therefore, Australopithecus and monkeys did not differ significantly in the size of their intestines and the size of their brains. It is completely different from modern humans. The brain size of modern humans is three times that of Australopithecus and monkeys, and the intestine is one-fifth the size.Other organs of the body have changed gradually but these two organs i.e. the brain and the gut are discussed together because their relationship is central to the revolutionary changes in the body-mind of man's life.It did not happen overnight, it has a long history of conflict and overcoming adversity. The process of evolution proceeds according to the rules of natural selection. It needs to be clarified. For example, because of the lack of food in the trees, the monkeys had to come down to the ground in search of food - and after coming down to the ground, he had to go through the high forest or grassland to see where the food is ahead or if the

enemy is hiding behind the grass to finish him off. In doing so, those who were able to elongate themselves by standing on their hind legs and raising their front legs were at a greater advantage in terms of food availability and survival from the enemy. Monkeys who have become accustomed to this practice have better access to food and are able to survive in greater numbers from their enemies. Those who couldn't have slowly disappeared. Those who are most trained in this bipedalism have advanced and survived. Simply put, this is natural selection. Such selection at all stages, large and small, has given rise to a new group of animals, and evolution continues in this process into the future.

Those who used their front legs as a weapon developed an advanced limb that gave them more leverage, and those who could not develop in this way were eliminated. While this happens in all body parts, the hand is mentioned because one example shows that as the complexity of the hand increases, so does the size and complexity of the brain. If you notice, you will see that the skull of Australopithecus above the eyes, which we call the forehead, was not there at all. Even if the fate we symbolize with our forehead is bad in current speech, it is actually the brain inside it - because the frontal lobe part of the brain, which is inside our forehead, has not been formed yet. Such changes occur in all the organs of the body, such as the human voice box i.e. the larynx has improved to produce complex sounds, the vocal cords have improved - at the same time the brain has also changed rhythm to produce new words, complex phrases. But the most important thing to notice is the change in his eating habits. Why did he change his eating habits? — The most terrible and long-lasting - one hundred thousand year ice age came to earth 25 million years ago. Many animals have become extinct in that miserable condition surrounding. We are not only surviving in the succession of those who overcame those difficult odds, but we are in an advanced state to acquire judgment-analytical powers about that matter. With a thick ice sheet covering the whole world, getting food became a serious problem. To solve it, the ancestor of humans, Australopithecus, was forced to eat flesh.

This is the beginning of the revolutionary change towards making those creatures more human. Because vegetarians need a long intestine. The gut of early Australopithecus was five times longer, about 125 feet, than those of modern humans -who has the the gut only 25 feet long. Fish or meat is a food rich in protein. So being a carnivore human ancestors had no obligation to harbor such a long intestine in the body making a surplus of nutrients to be utilized for other organs specially to the brain. Out of all the organs in the body, the brain needs the most nutrients - 100 grams of brain needs 22 times more nutrients than 100 grams of muscle. Thus evolution proceeded. It is understood that non-vegetarian food played one of the most crucial roles in initiating changes in the direction of evolution along with the labor the human has to undertake to survive- which needs a full discourse we shall find out on different occasions.

What are those characteristics of food that made humans?--In addition to the role of non-vegetarian protein in evolution, some other nutrients have been found in anthropological studies to play a direct positive role in the process of evolution. If we go through the roles of these differentiating elements of food between non vegetarian and vegetarian foods for healthy living, ideas will be more clarified. Without comparing all the nutritional elements , it will be helpful to consider two more important components along with the protein in a short span. Because these three factors ultimately separate vegetarian and non-vegetarian diets. And without these three elements human growth and disease free life is impossible. These three are protein, vitamin B12 and omega 3 fatty acids. Proteins have already been mentioned in the introduction to evolution. To understand the role of protein in our body's needs, we need to know a few things. Proteins are made up of amino acids linked together. About twenty amino acids are needed to provide the necessary proteins to the body without which humans cannot survive. Among these, 9 amino acids which are not produced in the body have to be obtained from food. They are called essential amino acids. It is easily obtained from animal protein and is a bit more difficult for vegetarians as it can be

obtained by consuming large amounts of pulses and milk. To judge the quality of protein in a diet, the conditions are - firstly, how much is the total amount of protein in that food, secondly, how much is the amount of these amino acids in it and thirdly, how easy is it to digest. Considering these conditions, a list is made based on how much amino acids can be used in the body from the protein in question, which is internationally recognized because this is prepared and recommended by the international body FAO. It is called DIAAS (Digestible Indispensable Amino Acid Score). The value of protein can be understood and compared at a glance by looking at this list.

Food	Protein in 100 gm of protein	Protein rank (DIAAS)
Egg	13	113
Fish	24	110
Meat	26	111
Milk	3.4	114
Soyabin (concentrate)	40	91.5
Pulses	8	57
Rice	10.9	59
Wheat	12.2	40.2

All non-vegetarian foods provide these amino acids in good quantity and completeness in terms of human needs. It is not so easy to get that in a vegetarian diet. Only milk or various products made from milk such as chhana, cheeses have to be consumed to compensate for that deficiency in vegetarian food. The quality of protein in milk or dairy food is good, but the quantity of protein is less, so you have to eat more than meat or eggs. A mature adult needs to consume at least 50 grams of protein if that is to be eaten as a good quality protein from a vegetarian diet one has to take at least 50 grams of pulses, 50 grams of soybeans, 800 ml of milk, more than 50 grams of almonds, beans, vegetables, along with 100 grams of rice daily. A non-vegetarian should take 50 grams of fish, 100 grams of meat and 100 grams of vegetables and 20 grams of pulses to consume the same amount of protein. In terms of price, this vegetarian food is more expensive than non-vegetarian food for the same amount of protein consumption. It takes more time to eat also. Looking at the animal world, it is overwhelmingly evident that herbivores eat all day long when carnivores such as tigers and lions eat once every three to seven days.

Omega-3 fatty acids are an important nutrient for brain growth. Its source is also animal protein. These fatty acids are of three types. Two of them - DHA - deoxyhexanoic acid and EPA - eicosapentanoic acid are found only in fish, eggs, meat or milk, vegetarian foods contain nothing except milk, and the third ALA - alpha linolenic acid is found in small amounts in nut foods such as walnuts, soybeans or oils extracted from them (such as soybean oil - linseed oil, etc.). A third important element that is essential for the growth and health of our cells is vitamin B12 (cyanocobalamin). Its source is non-vegetarian food. It can be found in mushrooms in a vegetarian diet, but it needs to be eaten in large quantities to meet the daily requirement - 50 grams of dried mushroom food is needed per day, which is much less than what is available in fish, meat and eggs. To stay healthy, we need 1.5 mcg of vitamin B12 per day, for which a vegetarian person

needs to consume at least 400 ml of milk per day. Eating 50 grams of fish per day is enough to get that for a non-vegetarian.

Why is there so much talk favoring vegetarianism?--These special qualities of animal protein further clarify the role of diet in driving important changes in human evolution. However, it seems that nowadays there is a lot of hype around vegetarianism, or even going far as veganism. Emphasis on a vegetarian diet in religious practice is based on fantasy—without any scientific evidence. Basically it is said that a vegetarian diet helps to keep human nature healthy and calm. But it does not have any support in reality or in scientific data. The Gujarat riots can be seen as an example, where the violence of the vegetarians in the riots was by no means less despicable.

Some diseases are said to be associated with animal protein diets. For example, some research papers have shown that people who eat animal protein more have a higher risk of heart disease. As opposed to this, the different information is found among vegetarians. So, at least in the case of heart disease, no definite opinion could be reached. But animal protein is consumed more in the West and much of it is processed and preserved. People who eat this type of food are more likely to develop cancer in the lower part of the intestine, i.e. the colon. That is why a balanced diet is said to be most scientific. In the case of food, one-sided ideas are unscientific because animal protein contains essential things, as well as vitamins and minerals, especially fiber, it is important to eat vegetables and fruits. It should be remembered that in the beginning, people were only vegetarians and the same condition to assimilate vegetarian food exists in the body of modern humans, i.e. vegetable food is important in supplying nutrients to the body, it can meet the nutritional needs of the body completely together with animal food.

Being vegetarian can be beneficial - In today's society, many people we know who work as opinion makers, celebrities, intellectuals, etc., many of them are

now trying to promote vegetarianism by talking about environment, disease prevention, etc. For example the famous Hollywood star Arnold Schwarzenegger can be named, many may know his name. This large-bodied showman weighing 107 kg, 6 feet 2 inches tall, says that he had to eat a lot of animal protein and 25 eggs per day to build this body with a lot of effort, but now he is talking for vegetarianism to everyone - he is also eating that way himself now. This promotion is advocated by many people with high incomes. There are many such images of celebrities, star players in our country too. They protect themselves from illness by taking supplements such as high-density protein powder, essential omega three fatty acids, vitamin B twelve, etc. It also has a purpose. The aim is to market new products. Everything can be manipulated in the interest of the market and in doing so half-truths are used. An example, since the fifties, processed food has been introduced in different packages, although it was known then that the fiber, especially of animal protein necessary for human nutritional needs, turns so bad through processing that its nutritional value is largely reduced. Nevertheless, it continues, trying to open up new markets for new products. If you are vegetarian or vegan, it is not possible to live healthy if you do not eat different types of supplements. The market for these dietary supplements is already there. The food supplement market has become huge in 2022. It is now 15.52 billion dollars and it is estimated to grow to 22.08 billion dollars in 2027, that is, a big market has been created and that is growing fast. So eating this kind of food definitely brings profit - the profit of the market, of the owner of capital.

Why will ordinary people do that? What is the benefit of ordinary people? The environment is being brought on stage, such an emotion is impelled that eating animal protein would make people feel like criminals. The natural relationship between food and consumer in the food chain is thus junked. Some even equate the screams of animals being killed in slaughterhouses with their parents' cries of pain - questioning the morality of eating animal protein. It would

seem that tiger-lion deer hunting should be banned. The question is whether it is a problem to kill animals for food or to increase profit by killing animals beyond necessity. If it is not clear, the opposition to eating animal protein becomes a conspiracy against people.

Before starting something new by denying the nutritional quality of the food that people have evolved to this advanced state, everyone should know its scientific basis, otherwise people will have to pay the price soon by falling victim to this market economy.

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