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VEGETARIANISM HEALTH, ENVIRONMENT AND SATISFACTION THROUGH THE NATURAL HUMAN DIET



Kshitij N. Shah

Asst. Professor in Food Science , Arts, Science & commerce College,
Chikhaldara, Distt. Amravati (MS)

Short Profile

Kshitij N. Shah is working as an Assistant Professor at Department of Food Science in Arts, Science & commerce College, Chikhaldara, Distt. Amravati (MS). He has completed M.Sc. He has professional experience of 8 years and 9 months and research experience of 6 years.



ABSTRACT:

An early age study on nutrition and diet had dealt with only the adequacy of nutrients, so the quality of diet is decided only on that ground. But the scenario is changing now. Health and food based diseases are one of the prime criteria to decide the quality of diet. The purpose of this article is not to oppose the non-vegetarian diet prejudicially, but to find out the facts about the good diets, comparisons, and searching the reasons about the myths about vegetarian and non-vegetarian diets. The position paper of American dietetic association in 2009 states that, 'an appropriately planned vegetarian

diet is healthful, nutritionally adequate & may provide health benefits in the prevention and treatment of certain diseases'. It is the outcome from the modern researchers in nutrition & health that, vegetarian diets are adequate in all the essential nutrients, and provide better health as compared to non-vegetarian food. The ample fibers, phytochemicals, unsaturated fats, low cholesterols, a colorful variety of the plant-based food are the factors which make a vegetarian diet more nutritious, ethical and healthy.

KEYWORDS

Vegetarianism Health , Environment and Satisfaction , Natural Human Diet.

INTRODUCTION:

In the early age of mankind, when man was not civilized, used to consume non-vegetarian diet. In fact it was an act of type of compulsion since no or very low options of food were available. It was the time, when getting food was the real battle, there was no chance for choices of taste, ethics or nutrition, at that time man was used to consume even raw meat. The art of agriculture & cooking was unknown to him. So he satisfied his hunger by eating natural food materials such as fruits, roots & tubers & flesh of other animals.

But as per the civilized history of the world concerned, vegetarianism is strongly related to culture of Indian people. India has a very proud history of ethical vegetarianism. All the religions originated from India have a commitment to 'Ahimsa' meaning non-violence. "Had the Aryans (ancient Hindu) used to consume animal flesh before more than 3000 years?" is the question of debate, but it is no exaggeration to say that for some Indians, their vegetarianism is itself their dharma. Eating animal flesh was considered as committing a sin.

Now India will not identify as a vegetarian country, as according to a survey of 2006, only 40% people of India are vegetarians, reported by 'brighter green', a New York-based public policy action tank. It is observed that eating non-veg diet is becoming the symbol of affluence, independence and modernity. Many youth relate this with their 'ruff n tuff' image. It is also added by the myths that vegetarian diet is not fully appropriate and may lack in one or more essential nutrients.

The purpose of this article is not to oppose the non-vegetarian diet prejudicially, but to find out the facts about the good diets, comparisons, and searching the reasons to the myths about vegetarian and non-vegetarian diets.

BACKGROUND OF THE STUDY

It is observed that almost all people are vegetarian by heart or by mind. It is very hard for anyone to think of consuming a dead body of an animal. I think nobody thinks about this, they just eat flesh due to impact of the external forces applied by friends, family background, modernity, fear grew due to the misunderstanding about health. This paper is for those who are on the vegetarian side but still on the boundary, and about to cross the boundary. Who has a doubt upon the adequacy and healthiness of vegetarian diet. Who are under the influence of some myths, which are illogical and in favour of non-vegetarian diet.

The review of the literature shows that in early research, most of the articles about food and diet had dealt with the deficiency and adequacy of nutrients. After that, that is, in the mid period, according to Sabate in 2003, a new paradigm emerged which gave emphasis on health effects of diet. It was found that well-balanced vegetarian diets were more health improving as well as equally nutritious than non-vegetarian diet which caused diseases.

In our country, the awareness about the vegetarian food is still less, and we are still stuck to the issue about the nutritional adequacy of vegetarian diet, which is undoubtedly nutritional. Very few research articles by Indian authors are found, though our country has a great cultural and ethical background, about vegetarianism.

What is vegetarianism?

Vegetarianism is the concept of consumption the vegetarian diet, that means the diet originated

from the plant sources. There are various kinds of vegetarians, according to Tusso PJ (2013) vegans are the people who consume the food originated only from plants, thus exclude all types of meats, fish and sea foods, eggs and dairies. Lacto vegetarians, includes plant foods with milk & dairy products in their diet. Lacto-ovo-vegetarians consume plant foods with eggs and milk.

In India the veg or non-veg diet is chiefly related with the concept of “Ahimsa”, source is not that much important. Thus milk and milk products are also included in the vegetarian diet. Since these products are obtained from animal without killing. Though there are various types of vegetarians throughout the world, in India, ‘vegetarians are the people who exclude all the foods from animal origin like meat, beef, poultry, fish etc. except milk and milk based products’. Here I am using the word ‘vegetarians’ for those who include plant foods with milk and milk products in their diet.

There are some common myths about vegetarian diet

- Vegetarians cannot get enough proteins
- They are deficient in calcium, iron, vitamin B12, vitamin D, n-3 fatty acids
- Non-vegetarian food is must for strong bones, muscles and health.
- Vegetarian food is not appropriate for pregnant women, sportsmen.
- If non-vegetarians are not there, there will not be enough grains for the vegetarians.

In this article I tried to advocate the vegetarian diet as a natural diet for human, more ethical and spiritual, nutritionally adequate, economical, more eco-friendly & healthier diet for all the stages of life. Vegetarian diet is the best for the health, it is in favor of animal welfare and also good for environment.

Vegetarian diets are adequately nutritious:

Vegetarian diets are highly nutritious, since it contains cereals, legumes which are the rich sources of carbohydrates and proteins; it contains fruits & vegetables which are the largest and richest sources of several vitamins and minerals. Nuts, fruits and vegetables are the sources of many phytochemicals, flavonoids & fibers which may not provide any nutrition but are essential in performing regular body functions, acts as antioxidants, and may be useful in the treatment of many diseases. Many fruits, vegetables, spices and condiments have a medicinal value.

The position paper of American dietetic association in 2009 states that, ‘an appropriately planned vegetarian diet is healthful, nutritionally adequate & may provide health benefits in the prevention and treatment of certain diseases’. Gary Fraser (2009), Tusso (2013), Sanders (1999) also support this fact in their respective papers. It is also said by the ADA that, vegetarian diets are also appropriate in all stages of lifecycle including pregnancy, lactation, infancy, childhood and adolescence; it is also well and good for athletes too. It is found that the composition of the breast milk of vegetarian and non-vegetarian mother is nutritionally same. None of the studies according to ADA, report a protein deficiency in pregnant vegetarians.

Plant proteins can meet the protein requirement appropriately. All the essential and non-essential amino acids can be provided by the well planned veg diet, provided that the variety should be maintained. For example, cereals are low in lysine, but incorporation of beans or legumes or soy products complete the requirement.

Many researchers raise a doubt for deficiency of some nutrients, specially proteins, calcium, iron, vit D, vit B-12. ADA adds that, a vegetarian diet can meet current recommendations for all the nutrients,

and specially the nutrients which are supposed to be lack in vegetarians like proteins, n-3 fatty acids, iron, zinc, iodine, calcium, vit-D and vit-B 12.

It is found that there is no difference in the bone mineral density (BMD) of vegetarians and non-vegetarians. there are different views on the availability of the above said nutrients for a vegetarian, but most of the statements found biased, as once upon a time we related the non-vegetarian diet with masculinity. But there are many other studies and papers which support the adequacy of vegetarian diet. As the vitamin B-12 is concerned there are more evidences, found, which say that the vegetarians are lack in vitamin B-12. But the effect of vitamin B-12 was not actually found. So it is recommended that the vegetarians specially vegans (consuming only plant foods), should take some dietary supplements for vitamin B-12.

Ready to eat cereals, health drink concentrates like boost, bourn-vita, chocolates, biscuits, readymade atta etc. many packed foods are fortified with vitamin B-12, vitamin D and other key nutrients. As the requirement of these nutrients is very less, it can be made up by these products.

Health benefits:

C R Gale in 2007 has drawn a conclusion from a cohort study that, the persons with higher IQ prefer vegetarian diet as a healthier option than consuming meat.

Neal D. Barnard, M.D., President, Physicians Committee for Responsible Medicine, Washington, D.C. said that "The beef industry has contributed to more American deaths than all the wars of this century, all natural disasters, and all automobile accidents combined. If beef is your idea of 'real food for real people,' you'd better live real close to a real good hospital."

Vegetarian diet is high in fibers, flavonoids and phytochemicals. Phytochemicals fall in two main classes: carotenoids and anthocyanins. All rich-yellow and orange fruits and vegetables, like carrots, oranges, sweet potatoes, mangoes, and pumpkins owe their color because of the carotenoids. Green leafy vegetables are also good sources of carotenoids. The fruits and vegetables with Red, blue and purple colour like plums, cherries, mangoes etc. contain anthocyanins. These naturally occurring substances, boost immunity and prevent a range of illnesses, important for the regulation of body functions, which effect as antioxidants, in reducing aggregation & blood clotting, acts as anti inflammatory agents and improve endothelial functions (ADA).

"When we kill the animals to eat them, they end up killing us because their flesh, which contains cholesterol and saturated fat, was never intended for human beings." It is the statement given by a well known doctor William C. Roberts, M.D., and editor of The American Journal of Cardiology, in his interview.

The director of a study that found a close correlation between red meat consumption and colon cancer and an MD of Brigham and Women's Hospital also spoke on flesh that, "If you step back and look at the data, the optimum amount of red meat you eat should be zero."

Other than the examples given above there are some conclusions which can be drawn in favor of vegetarianism. Vegetarians have following health benefits over non-vegetarians. (ADA 2009, Lanou AJ 2011, Joyce A 2012, Bellows 2012, Frazer 2009, Tusso 2013 etc)

- Vegetarians tend to have lower BMI, hence lower obesity.
- Vegetarians are associated with a lower risk of death from ischemic heart diseases.
- They have lower LDL (low density lipoprotein) and cholesterol levels.
- They have lower blood pressure compared to non-vegetarians.

- Lower rates of hypertension.
- Lower rates of type 2 diabetes.
- Have adult height, weight and overall organelle dimensions similar to non-vegetarians.
- Vegetarians tend to have lower overall cancer rates.
- Lower intake of cholesterols, saturated fats, total fats and higher intake of fruits and vegetables in vegetarians keep them leaner and healthy.
- Vegetarian diet offers protection from various cardiovascular diseases.
- Nuts, whole grains, unsaturated oils, fruits & vegetables which are included in vegetarian diets are found to be cardio protective.
- Mann J. in 2009 mentioned that vegetarians have overall lower morbidity and mortality rates from several chronic degenerative diseases.
- The studies show that (Tuso PJ, 2013), vegetarian diet reduces the medications needed to treat certain chronic diseases, thus suggest that the physicians should recommend a plant based diet to all their patients, especially suffering from high BP, diabetes, CVD's or obesity.

The above mentioned health benefits strongly suggest that adopting a vegetarian diet is a good option in favour of one's health.

Vegetarian food is a natural food for human

While expressing his views on human physiology, Dr. William Clifford Roberts said that, although human beings have been eating meat, we are not natural carnivores. The plant based food should be included in our diet. No matter how much fat carnivores eat, they do not develop atherosclerosis. It's virtually impossible, for example, to produce atherosclerosis in the dog even when 100 grams of cholesterol are added to its meat ration. (This amount of cholesterol is approximately 200 times the average amount that human beings in the USA eat each day!) In contrast, herbivores rapidly develop atherosclerosis if they are fed foods, namely fat and cholesterol, intended for carnivores.

Humans are natural herbivores, the cholesterol and saturated fat, was never intended for human beings. While comparing with herbivores and carnivores humans clearly fall to words herbivores side. This can be proved by following points.

- The teeth of carnivores are sharp and those of herbivores, more flat.
- The intestinal tract of carnivores is short; about 3 times body length, which remove the high protein food, which is more susceptible by microorganisms, from body. Whereas the intestinal tract of herbivores is long, about 12 times body length, which give a long time for microbes to attack, and thus causing more diseases.
- Carnivores cool their bodies by panting, herbivores, who can also pant, do so mainly by sweating (carnivores cannot sweat)
- Carnivores lap their fluids, herbivores sip them
- Carnivores make their own vitamin C; herbivores obtain that vitamin only from their diet.

Ethical reasons

We always speak about the human rights, morals and ethics. But what about the animals, do they not have a right to live.

Mahatma Gandhi said that, "To my mind, the life of a lamb is no less precious than that of a human being. I should be unwilling to take the life of a lamb for the sake of the human body."

In 2011 PETA released a video showing the abuse and cruelty by us. New borne calves tethered without water, the cattle being beaten heavily getting on or off the trucks, while transporting, the long treks are completed without giving food or water to animals, not even enough space is given to them, they are caged in such a way that, they cannot even turn themselves. These all are acts of extreme cruelty and a man with a sensitive heart cannot see it.

"If slaughterhouses had glass walls, everyone would be a vegetarian", the statement of a famous musician Paul McCartney, is sufficient to explain our cruelty towards the animals. Vegetarianism is for sustainability, equity & 'Ahimsa'.

Vegetarianism for sustainability:

Former Indian minister Mr. Shashi Tharur said that, "Vegetarianism is a lifestyle that demands less from our planet".

Vegetarian Network Victoria quote in their brochure that, "If people stopped eating beef, global warming could be slowed".

According to Mr. Rajendra Pachori, chairperson of an Intergovernmental panel on climate change (IPCC), the lead international agency charged with climate change, if we reduce meat consumption, we can make to slow global warming.

These opinions are due to the fact that, livestock industry has a strong effect on the environmental crisis. The Food and agricultural organization of United Nations states that, the animal industries are one of the most significant contributors to the most serious environmental problems at every scale from local to global.

According to Jennifer Devis in 2010, four meals with different amounts of soybeans or peas (either used as feed for production of pork or directly consumed) were analyzed using life cycle assessment methodology. The results of this analysis demonstrate that it is environmentally favourable to replace meat with peas.

CONCLUSIONS:

A well planned vegetarian diet, especially typical Indian diet, which includes foods from all groups like cereals, legumes and pulses, fruits & vegetables, dairy products & nuts is a healthy diet, provides all the essential nutrients for every stage of life. Some study recommends taking vitamin B-12 supplements for vegetarians.

Vegetarians have lower risk of death from ischemic heart diseases. Vegetarians have lower morbidity and mortality rates from several chronic degenerative diseases. Vegetarian diet is associated with lower blood pressure, lower rates of hypertension, type 2 diabetes & overall lower cancer rates as compared to non-vegetarian diet.

Vegetarian diet is natural for human, as the physiology of human is closer to herbivores, it is more sustainable, nutritionally adequate, healthy, economic, natural, consider better animal welfare factors so more ethical when compared to a non-vegetarian diet.

When vegetarian food is amply available there is no justification to kill animals, for the purpose of food. Killing them only for food purposes sounds inhuman and cruel.

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