

AN ANALYSIS OF THE EFFECTS OF ORGANIC FOODS ON HUMAN HEALTH

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ABSTRACT

The study paper provides a summary of the effects of organic foods on human health and focuses on an overview of studies on the health benefits of organic meals. We must first comprehend the fundamentals of organic food. The fundamentals of organic food are what we need to know about it first. The simplest definition of organic food is simply food that is cultivated naturally without having any artificial materials poured on top of, around, or even beneath it. An environment that is entirely natural is required for the growth of organic matter. Any meal that wants to be categorized as organic must not have any internal cell structures that have undergone genetic modification. The plant should have the same requirements as those found in the wild, but it should also be safe for humans to eat and have unaltered inner cell structure. Next, there should be no traces of chemicals on the land that has been selected for the planting of these 100% organic plants. When comparing organic to conventionally cultivated food, there are a few possible health advantages. Eating organic food may lower the risk of obesity and allergy diseases. As a whole, this study.

Keywords: Human Health, Organic Farming, Nutrients, Fertilizers, Pesticides. Benefits Of Organic Food.

I. INTRODUCTION

There are many different fruits and vegetables in the market that appear to be quite fresh, but this does not imply that they are organic. Food items that are organic are certified independently. These are printed or attached with official stickers. Additionally, they taste a little different from typical cuisine. Compared to regular food, organic food has a more overpowering smell. Farmers and food producers that practice organic farming cultivate and produce food without the use of synthetic chemicals like artificial fertilizers and pesticides. Foods labeled as organic may have chemical residues since they are cultivated on land that hasn't been used for organic food production in the past. Fresh fruits and vegetables in the market may not be organic, as certified items are printed or attached with official stickers. Organic food has a unique taste and smell, and is grown without synthetic chemicals. However, it may contain chemical residues. Nonetheless, compared to conventional farming, which uses artificial chemicals to create food, organic food has substantially fewer pesticide residues. The majority of consumers purchase organically cultivated food items out of concern about pesticides, additives, antibiotics, or other chemical residues, and because they think eating organic food will improve their health. Concerns about the ethical treatment of cattle and the effects of traditional farming on biodiversity and the environment are some further justifications. Organic food is preferred by consumers due to its lower pesticide residues, health benefits, ethical treatment of cattle, and environmental concerns compared to conventional farming, which uses artificial chemicals.

II. OBJECTIVES OF STUDY

1. To study the benefit of Organic Foods for human health.
2. To understand the organic farming and agriculture of organic foods.
3. To explore the various products of organic foods.
4. To understand the importance of organic foods to fight COVID-19

III. RESEARCH METHODOLOGY

The goal of the research is to determine the value of organic foods and how they improve human health. The secondary data from books, journals, and the internet served as the study's foundation.

IV. BENEFITS OF ORGANIC FOODS

Because organic food is not produced or processed using chemical pesticides or fertilizers, it does not contain any toxic chemicals, and it may not negatively impact human health, using natural methods like crop rotation to control pests and diseases and fertilize the land work well in producing safer, healthier, and odorous final food

products. Simply said, eating healthy organic food results in happier, healthier people and better nutrition for both humans and animals. Because organic products minimize exposure to hazardous and persistent chemicals in food, the soil in which they work and play, the air they breathe, and the water they drink, they lower the dangers to the public health of farm workers, their families, and consumers. Pesticides particularly affect children. Hence, parents now have the choice to select goods made without the use of these poisons thanks to the introduction of organic food and fiber products into the market. Resistance to Antibiotics: Since people are prone to a wide range of illnesses and ailments, it is necessary for them to take preventative steps to stay healthy. Vaccinations and the use of antibiotics when a new strain of bacteria or virus is discovered are two ways to do this. Growing research indicates that foods grown organically are richer in nutrients, such as vitamin C, iron, magnesium, and phosphorus, and are less exposed to nitrates and pesticide residues than conventionally grown fruits, vegetables, and grains. This helps lower the risks to the public's health. In the field, organic veggies are cultivated without the use of artificial pesticides. They are grown in a way that is entirely natural and advantageous to human health.

Organic food is safer for human consumption because it is created naturally, without the use of chemicals or processing. They are higher in antioxidants because they don't include any outside additions. The greatest advantage of eating organic food is that it has no negative effects on the body, which helps protect the elderly from a variety of diseases.

Organic food, which is grown in a healthy manner, has better vitamins and minerals. and fortifies the immune system. Since organic food is produced without the use of any hazardous chemicals, it is regarded as healthful and devoid of toxins. Customers are starting to realize that eating organic food also makes them feel more energetic and fit. When someone solely eats organic food, their sensitivities to certain foods, chemicals, or preservatives frequently become better or disappear entirely.

Organic food is considered healthful and toxins-free, promoting energy and fitness. Consuming organic food can reduce sensitivity to certain foods, chemicals, or preservatives.

Food that has been ripened organically tastes better than conventional food since it is cultivated naturally and is given more time on farms. Reduced risk of food borne illness: Because it doesn't utilize any chemicals, there is a lower risk of food borne illness. enhances cardiovascular health and is good for cardiac health. Additionally thought to be a great source of vitamin C, iron, magnesium, and phosphorus, eating more organic food is strongly encouraged for those who suffer from heart-related conditions. Organic food, grown naturally and on farms, offers superior taste and reduced food borne illness risk. It also improves cardiovascular health, providing essential vitamins and minerals, making it a popular choice for heart-related conditions. content of antioxidants Because organic food contains antioxidants, it protects against cancer, malnutrition, and visual difficulties in developing children. Organic food also makes a substantial nutritional contribution.

Eating organic food may lower the incidence of allergic reactions as well as obesity and overweight, but the data is inconclusive because organic food consumers typically lead healthier lifestyles overall. This is likely because to residual confounding.

The levels of omega-3 fatty acids, which are considered to be important for good nutrition, are generally higher in organic meat, milk, and dairy products.

Animals kept organically are NOT fed animal byproducts, growth hormones, or antibiotics. The danger of mad cow disease (BSE) is increased when animals are fed animal byproducts, and the usage of antibiotics can result in bacterial strains that are resistant to them. Animals grown organically typically have greater room to roam about and have access to the outdoors, both of which promote their health.

According to recent media reports, COVID-19 has returned with a second wave. Concerns over immunity and health are common. As a result, there is a sharp rise in the demand for nutritious foods and immunity-boosting supplements. Purchasing organic and healthful food is becoming more popular than conventional and unhealthy food items. While the epidemic has undoubtedly brought about hardships, it has also imparted valuable lessons. These positive traits include adopting the healthiest lifestyle possible, caring for our health, and taking personal responsibility for our well-being. The greatest option to strengthen immunity and make daily living healthier is to use organic products. Not to add, immunity is the best defense against the majority of

illnesses, including COVID 19. Many individuals think that genetic modification can lower the nutritional content of food and is risky and unpredictable. The COVID-19 pandemic has taught us the importance of adopting a healthy lifestyle, taking personal responsibility, and using organic products to strengthen immunity and improve daily living. Genetic modification is also a potential risk. Vegetables grown without the use of chemicals or pesticides are referred to as organic produce. For organic produce to grow, only naturally occurring fertilizer such as manure can be used. Although eating non-organic vegetables is still preferable to eating none at all, consumers are beginning to recognize the benefits of purchasing organic goods.

Because organic produce is grown without chemicals or poisons and instead employs natural agricultural practices, it is guaranteed to be of the highest quality. Because they aren't preserved or waxed to extend their shelf life, organic food products are always fresh. The use of natural fertilizers like compost and manure gives them a rich flavor, even though they don't taste like our preferred junk food, which is more spicy and sweet. Since organic fruits, vegetables, and dairy products are not treated with toxic chemicals or pesticides—which are not only dangerous for us to eat, but also for farmers and those who live close to farm areas—they are environmentally beneficial. Chemicals can contaminate other plants as well as the soil and water. Natural agricultural techniques that improve soil fertility, save water, and lessen pollution are a part of organic farming. Additionally, it lessens the effects of global warming and mitigates climate change by lowering carbon dioxide.

V. ORGANIC FARMING

Because organic food has higher nutritional value and lower pesticide exposure for all, it is generally healthier. We must consider all the factors involved, from the farm laborers who do the important task of producing food to the waterways from which we drink and the air we breathe, in order to comprehend the significance of consuming organic food from the standpoint of harmful pesticide contamination. as well as what we eat. We may be fed and kept healthy with organic food without experiencing the harmful side effects of chemical agriculture.

The usage of pesticides mostly affects farm workers and their families. These individuals reside in areas where hazardous pesticides are frequently applied, where water contamination and pesticide drift are frequent occurrences. Workers on farms frequently come into contact with pesticides; this includes field workers who tend to and harvest crops as well as pesticide applicators. By coming into contact with them and their clothes, their families and kids are subsequently exposed to these chemicals. Working in the fields during pregnancy exposes expectant mothers to harmful chemicals without realizing it. Because organic agriculture doesn't use these harmful chemicals, it removes a serious health risk to its employees, their families, and the communities in which they live.

Biological fertilizers are used in the agricultural practice of organic farming. The practice of organic farming was really developed as a response to the harm that synthetic fertilizers and chemical pesticides were causing to the environment. To put it another way, organic farming is a novel approach to agriculture that preserves and enhances the natural equilibrium.

farming method that cultivates crops using organic inputs like cow dung, green manures, etc. This type of farming produces nutrient-dense, vibrant food that is resistant to disease by maintaining the soil's ability to reproduce and regenerate at the grass-root level, together with healthy plant nutrition and appropriate soil management. Carbon sequestration is aided by organic farming, which lowers the amount of carbon dioxide in the atmosphere. Pollinators such as bees and wildlife are shielded from harmful toxins by organic farms and crops. Rebuilding soil health and preventing dangerous chemicals from entering our water supplies are two benefits of organic farming.

Two very crucial resources that are required for growing food are soil and water. Because consumers believed that organic foods were healthier and better for immunity, demand for them increased during the COVID pandemic. Nevertheless, the market for organic food is also growing steadily. The demand for sustainable and organic food is rising as a result of the corona virus outbreak. Organic farming aids carbon sequestration, protects pollinators, and restores soil health. During the COVID pandemic, demand for organic foods increased due to their perceived health benefits. The market for sustainable and organic food is steadily growing, driven by the rising demand for sustainable and organic food.

Organic farmers don't use pesticides or fertilizers made of non-renewable oil, which we might not always have access to.

Increased biodiversity is a byproduct of organic farming.

Emissions of greenhouse gases are reduced by organic farming.

The foods that are most frequently purchased organically include fruits, cereals, vegetables, dairy products, meat, and eggs. Processed organic foods are made using solely natural ingredients and farming techniques. All types of food goods, such as oil seeds, fiber, sugar cane, cereals & millets, cotton, pulses, aromatic & medicinal plants, tea, coffee, fruits, spices, dry fruits, vegetables, processed foods, etc., are produced in India and are certified organic.

VI. CONCLUSION

Eating a diet rich in organic foods and steering clear of conventional meals, food chemicals, and other harmful substances. From the standpoint of the average consumer, eating organic food is a fundamentally healthy practice. Another thing to think about is that living in a clean environment is linked to better health outcomes for humans, according to recent scientific research. In the process of processing organic food, the use of ionizing radiation and food additives is restricted to preserve the authenticity of the product. Cleaner food translates into cleaner diets, which promote long-term health. Artificial coloring, flavoring, or preservatives are not included in organic food.

Indian consumers have become increasingly conscientious about the quality, nutritional value, and impact of the food they eat in recent years. They have started to progressively switch to eating organic food because of these worries, despite the fact that organic food is more expensive than conventional food. Customers are becoming more aware, and this is helping the organic industry since they are willing to spend more for products that will improve their health and well-being. Additionally, since more people are willing to pay higher costs in areas where they are aware of the safety and quality of organic products, the market is growing. There has been a paradigm change in India following the pandemic of 2021, as people started purchasing more organic food as a preventative health step.

Organic food consumption is a healthy practice, as it promotes a clean environment and better health outcomes. Indian consumers are becoming more aware of the quality, nutritional value, and impact of food, leading to a shift towards organic food. Despite its higher cost, this awareness is benefiting the organic industry, as customers are willing to pay more for products that improve their health. The pandemic of 2021 has led to a paradigm shift in India, with people purchasing organic food as a preventative health measure.

The market for organic food will probably continue to increase as a result of this shift in opinion. In actuality, the market for organic foods and beverages—especially fruits and vegetables—have expanded around the world. In actuality, fruit and vegetables account for the largest portion of the organic food market, with bread, cereals, milk, and meat coming in second and third. Fresh fruit farmed organically leads the way in global trade as well. Although industrialized nations are the primary producers and consumers of organic food, emerging nations are also starting to manufacture and export organic goods. India leads the world in the export of cotton, basmati rice, and organic tea.

Organic veggies are another segment in which India perceives a market for its exports. Emerging research confirms what proponents of organic farming have long claimed: in addition to being more nutrient-dense and free of the harmful residues found in conventional food, organic farming improves both human health and the environment. Society benefits from organic farming, but eating organic food also benefits the general public because it is very nutrient-dense and safe for human consumption. However, there is a cost involved. For the farmers, maintaining pest-free organic food products is a burden. Hence, it is up to the consumer or prospective consumer to determine if organic food is a blessing or a curse. But lately, organic food has become more and more popular, and stores all over the nation have been stocking it on their shelves. An increase in the promotion of organic foods by big-box retailers and specialist shops has increased consumer access to organic foods.

The organic food market is expanding globally, with fruits and vegetables being the largest portion. Emerging nations like India are also producing and exporting organic goods, such as cotton, basmati rice, and organic tea.

Organic farming is praised for its nutrient-dense, pest-free, and environmentally friendly benefits. However, maintaining pest-free products is a burden for farmers. The increasing popularity of organic food has led to increased access to it by consumers, with big-box retailers and specialist shops promoting it.

VII. REFERENCES

- [1] A. Mie et al., "Human health implications of organic food and organic agriculture: A comprehensive review," *Environmental Health: A Global Access Science Source*. 2017, doi: 10.1186/s12940-017-0315-4.
- [2] A. L. Brantsæter, T. A. Ydersbond, J. A. Hoppin, M. Haugen, and H. M. Meltzer, "Organic Food in the Diet: Exposure and Health Implications," *Annu. Rev. Public Health*, 2017, doi: 10.1146/annurev-publhealth-031816-044437.
- [3] E. Rööß et al., "Risks and opportunities of increasing yields in organic farming. A review," *Agronomy for Sustainable Development*. 2018, doi:10.1007/s13593-018-0489-3.
- [4] S. Cahill, K. Morley, and D. A. Powell, "Coverage of organic agriculture in North American newspapers: Media: Linking food safety, the environment, human health and organic agriculture," *Br. Food J.*, 2010, doi: 10.1108/00070701011058244.
- [5] S. Cahill, K. Morley, and D. A. Powell, "Coverage of organic agriculture in North American newspapers," *Br. Food J.*, 2010, doi:10.1108/00070701011058244.
- [6] P. Yanakittkul et al., "Agriculture Census 2010-11," *Livest. Prod. Sci.*, 2017.
- [7] C. A. Watson et al., "Using soil and plant properties and farm management practices to improve the micronutrient composition of food and feed," *J. Geochemical Explor.*, 2012, doi: 10.1016/j.gexplo.2012.06.015.
- [8] A. Cano Estrada, D. Vélez Díaz, and C. A. Morgado Hernández, "The role of biotechnology in agricultural production and food supply TT -El papel de la biotecnología en la producción agrícola y en el abastecimiento de alimentos," *Cienc. e Investig. Agrar.*, 2017.
- [9] R. Cruz, S. C. Cunha, A. Marques, and S. Casal, "Polybrominated diphenyl ethers and metabolites - An analytical review on seafood occurrence," *TrAC - Trends in Analytical Chemistry*. 2017, doi: 10.1016/j.trac.2016.12.005.
- [10] A. Cano and C. Morgado, "The role of biotechnology in agricultural production and food supply," *Cienc. e Investig. Agrar.*, 2017, doi: 10.7764/rcia.v44i1.1567.