OPEN ACCESS: Al-Aijaz Research Journal of Islamic Studies & Humanities
ISSN (ONLINE): 2707-1219 & ISSN (PRINT): 2707-1200
http://www.arjish.com

Organic Food and Human Health: A Comparative Study in the Perspective of Semitic (Abrahamic) Religions and Science

Muhammad Mumraiz
Ph.D. Scholar, Department of Islamic and Religious Studies Hazara University Mansehra.

Dr. Muhammad Anees Khan
Lecturer, Department of Islamic and Religious Studies Hazara University Mansehra.
Email: manees332@gmail.com

Received on: 12-01-2026 Accepted on: 16-02-2026

Abstract

The growing global demand for organic food has been driven by increasing consumer awareness of health, nutrition, and environmental sustainability. However, food choices are influenced not only by scientific and environmental considerations but also by cultural and religious beliefs. Religion as one of the most influential social institutions, profoundly shapes food practices by prescribing dietary laws, customs, rituals, and culinary traditions. Across cultures, food serves not merely as a source of physical nourishment but also as a symbol of religious identity, social cohesion, and spiritual values. Religious myths and traditions have played a central role in establishing distinctive dietary patterns, while the purity of food has often been associated with mental clarity, moral discipline, and spiritual growth. Consequently, food functions as both a cultural and religious symbol, reflecting the interconnected relationships between belief, ritual, community, and social institutions.Within this broader context, the concept of natural and pure food has gained renewed significance in contemporary discussions of health and sustainability. This review examines the scientific evidence regarding the nutritional quality, safety, and potential health benefits of organic foods compared with inorganic produced foods. Organic agriculture is characterized by the avoidance of synthetic fertilizers, pesticides, genetically modified organisms, irradiation, and artificial additives, while emphasizing ecological balance, biodiversity conservation, and sustainable farming practices. These findings suggest that organic food aligns not only with contemporary public health and environmental objectives but also with longstanding religious and cultural ideals that associate pure, natural food with physical well-being, ethical responsibility, and spiritual flourishing. organic food production represents a promising approach for promoting human health while supporting environmental sustainability. Organic animal products, exhibit several nutritional advantages. Organic nutritional characteristics may contribute to cardiovascular health, immune function, and reduced inflammation. Observational human studies have further reported associations between organic food consumption and lower prevalence of

allergies, eczema, overweight, and obesity. However, evidence regarding cancer prevention and other long-term health outcomes remains inconsistent, and causal relationships have not been firmly established. Despite some variability among studies, the overall body of evidence suggests that organic foods provide reduced exposure to potentially harmful agricultural chemicals and may offer certain nutritional and health benefits. Nevertheless, further well-designed longitudinal and clinical studies are required to clarify the extent of these benefits and establish stronger evidence regarding the direct effects of organic food consumption on human health.

Keywords: Organic food, nutritional quality, food safety, inorganic food, nutritional quality, antioxidants, sustainable nutrition. Sematic, Religions

Introduction

In today's era, food is no longer just a source of energy; rather, it has become a fundamental factor that directly affects a person's physical, mental, and social well-being. In the modern world, consumers' awareness regarding their health and environmental protection is rapidly increasing, which is why there has been an extraordinary rise in the global demand for organic food.From a scientific perspective, it is necessary to integrate nutritional information to provide a sustainable foundation that can guide healthy choices in daily life similarly religion also gave important to food. Religion had regarded as one of the most important secondary institutions of human society has a profound influence on social values, customs, traditions, and ways of life. Food has likewise become an integral component of religious systems, and together with religious laws, myths, narratives, traditions, and rituals, it has contributed to the formation of distinct dietary patterns. Across different religions, food has been shaped by events associated with sacred personalities and deities, incorporated into acts of worship and religious ceremonies, and used as a means of fostering unity and solidarity within communities. In the myths and religious traditions of many of the world's religions, food occupies a central position. As a result, it is no longer viewed merely as a material necessity but also as a key to understanding human institutions and social structures. Food can be regarded as an effective medium for interpreting the meanings and relationships embedded in complex religious rituals and social practices. Similarly, it serves as a symbolic reminder of various religious events, traditions, and narratives. For this reason, the symbolic and cultural significance of food has been of particular interest to anthropologists.[1]

Many researcher said about food that when food is pure, the mind becomes pure. When the mind is pure, understanding and perception become clear. When understanding is purified, one attains steadfastness and inner concentration. Once this state is firmly established, the bonds of the worldly existence are naturally

[1] Pandey K. Ethnography of Food and Food Habits in a Transhumant Population of North India. International Journal of Medical Research Professionals. 2015;1(3):132–141.

dissolved.[2] Similarly, according Norman wirzba, Natural food is not merely a means of physical nourishment but also a divine gift, a moral responsibility, and a spiritual experience. It teaches human beings to live in harmony with creation, the environment, other living beings, and God.[3]

Religious myths and traditional narratives reveal how such accounts contribute to the development of specific dietary habits and culinary traditions, which subsequently remain an integral part of social and religious life for long periods. Furthermore, various food items, customs, and ritual practices become so closely intertwined that they collectively form a complex yet coherent system of relationships, values, and social traditions within the religious institution.[4]

Ancient Israelite society was predominantly based on an agrarian economy; therefore, agriculture constituted a fundamental component of its social, economic, and religious life. Consequently, the Bible primarily mentions those plants, trees, and agricultural products that were closely associated with everyday life, farming practices, and religious teachings. In contrast, root vegetables such as turnips and beetroots are rarely mentioned, whereas naturally growing wild edible herbs and plants such as mustard seeds are frequently employed in parables and moral teachings to convey spiritual and ethical lessons.During the biblical period, fruit-bearing trees and nut orchards held exceptional importance. Prominent natural foods included **dates, olives, figs, walnuts, almonds, honey, grapes**, and foods prepared from these products. These foods not only formed an essential part of the daily diet but also played a significant role in religious ceremonies, economic activities, and cultural traditions. Likewise, various herbs and spices were used for both culinary and medicinal purposes. **Flax** was cultivated primarily for the production of linen cloth in biblical times, whereas today its seeds are widely consumed as a nutritional supplement. The Bible also mentions fragrant flowers such as the **lily** and the **rose**. Furthermore, several trees possessed particular religious significance, including the olive, etrog (citron), carob, rue, and myrtle, some of which continue to play an important role in Jewish religious observances.

Biblically inspired dietary traditions emphasize simple, natural, and nutritious foods. These include applesauce, plain bread, cucumber salad, lamb, grilled fish, honey and dried fruit biscuits, preacher cake, and seasonal fruit salads. These foods are prepared primarily from natural ingredients, many of which—including fruits, vegetables, honey, olive oil, and various spices—are specifically mentioned in the Bible. As a

---

[2] Olivelle, Patrick, trans. The Early Upanishads: Annotated Text and Translation. New York: Oxford University Press, 1998, Chandogya Upanishad 7.26.2.

[3] Wirzba, Norman. Food and Faith: A Theology of Eating. New York: Cambridge University Press, 2011, pp. 23–27.

[4] Bediako GM. *Primal Religion and the Bible: William Robertson Smith and His Heritage*. A&C Black; 1997

result, these traditional foods are not only nutritionally valuable but also serve as practical representations of biblical culture and religious heritage.Both biblical and Jewish religious traditions also attribute symbolic significance to certain foods. The egg symbolizes new life, honey represents blessing and abundance, the lamb signifies sacrifice, and olive oil symbolizes healing, light, and spiritual strength. Similarly, in Judaism, the **Seder Plate** is an important religious tradition consisting of six symbolic foods that commemorate the Israelites' slavery, suffering, and the Exodus from Egypt. These symbolic foods serve as an important means of preserving Jewish religious and cultural identity while transmitting the historical memory of the Exodus to future generations. [5],[6],[7],[8],[9],[10],[11],[12],[13],[14]

Christianity generally does not impose strict religious dietary restrictions. Consequently, most Christians are **omnivores**, consuming both plant-based and animal-based foods. Nevertheless, the Bible emphasizes moderation in eating, avoidance of gluttony and extravagance, and the responsible use of food. It also provides ethical guidance regarding the stewardship of the earth, agriculture, environmental protection, and the humane treatment of animals. Although the consumption of meat is considered permissible in Christianity, some Christians choose to adopt a **vegetarian** or **vegan** lifestyle based on concerns for animal welfare, environmental sustainability, or personal ethical values.A prominent example of the health benefits associated with a plant-based diet within the Christian community is found among the **Seventh-day Adventists**. More than half of this population follows a vegan, vegetarian, or predominantly whole-food, plant-based dietary pattern. Numerous scientific studies have shown that their healthy dietary and lifestyle practices are associated with a significantly longer life expectancy. The most notable example is **Loma Linda, California**, where the Adventist community's exceptional

[5] PhunkyFoods. *Religion and Food*. Warrington, UK: PhunkyFoods, n.d. Accessed July 13, 2026. https://www.phunkyfoods.co.uk/religion

[6] **Matthew 17:20** (The Gospel according to Matthew, Chapter 17, Verse 20)

[7] **Leviticus 23:40** (The Book of Leviticus, Chapter 23, Verse 40)

[8] Prime Publishing LLC. *Bible Food Recipes: 8 Heavenly Meals Inspired by the Bible*. Northbrook, IL: Prime Publishing LLC, 2018:05.

[9] Prime Publishing LLC. *Bible Food Recipes: 8 Heavenly Meals Inspired by the Bible*. Northbrook, IL: Prime Publishing LLC, 2018:9

[10] Prime Publishing LLC. *Bible Food Recipes: 8 Heavenly Meals Inspired by the Bible*. Northbrook, IL: Prime Publishing LLC, 2018:13

[11] Prime Publishing LLC. *Bible Food Recipes: 8 Heavenly Meals Inspired by the Bible*. Northbrook, IL: Prime Publishing LLC, 2018:17.

[12] Prime Publishing LLC. *Bible Food Recipes: 8 Heavenly Meals Inspired by the Bible*. Northbrook, IL: Prime Publishing LLC, 2018:19.

[13] Prime Publishing LLC. *Bible Food Recipes: 8 Heavenly Meals Inspired by the Bible*. Northbrook, IL: Prime Publishing LLC, 2018:22.

[14] BibleGateway. *New International Version Bible*. Accessed July 16, 2026.

health and longevity have led to its recognition as one of the world's five renowned **Blue Zones**—regions where people live exceptionally long and healthy lives. Although vegetarianism is not a mandatory religious requirement within the Seventh-day Adventist Church, a plant-based diet is widely regarded as an important expression of health promotion, spiritual discipline, and religious identity.[17]، [16] ، [15]۔
Islamic teachings regard a healthy, natural, and balanced diet as a fundamental component of human health, immune function, and a well-balanced lifestyle. The **Holy Qur'an** and the **Sunnah of Prophet Muhammad (peace be upon him)** mention numerous natural foods, highlighting not only their nutritional significance but also their therapeutic value. Modern scientific research has largely confirmed the nutritional and medicinal benefits of many of these foods. Prominent natural foods mentioned in the Qur'an and Sunnah include **dates, figs, honey, bananas, olives and olive oil, black seed (Nigella sativa), grapes, pomegranates, onions, cucumbers, melons**, and **fragrant flowers**. These foods are rich sources of vitamins, minerals, dietary fiber, antioxidants, and other bioactive compounds that play important roles in physical growth, strengthening the immune system, preventing diseases, and promoting overall health. Thus, Islam advocates a balanced, natural, and wholesome dietary system that provides comprehensive guidance for preserving not only spiritual well-being but also physical and mental health.[18]، [24] [23]،[22] [21]،[20]-[19]،
. A natural and balanced diet is one that contains all essential nutrients—carbohydrates, proteins, fats, vitamins, and minerals—in appropriate amounts. For this purpose, three basic scientific principles are effective:

1. **Diversity:** Including foods from different food groups so that no nutrient deficiency occurs in the body.
2. **Moderation:** Eating according to the body's actual energy needs, neither too much nor too little.

---

15 PhunkyFoods. *Religion and Food*. Warrington, UK: PhunkyFoods, n.d. Accessed July 13, 2026. https://www.phunkyfoods.co.uk/religion

16 Sábaté et al., "Feeding Holy Bodies: A Study on the Social Meanings of a Vegetarian Diet to Seventh-day Adventist Church Pioneers," *HTS Teologiese Studies / Theological Studies* 72, no. 3 (2016): 1–8, https://doi.org/10.4102/hts.v72i3.3080

17 C.Neal Stewart,Jr.,Rana K.Abdudayyeeh, AND susan G.Stewart, "Houseplants as home health monitors ,"Science 361,no 6399(2018):229_230.

.18 The Holy Qur'an. Surah Al-Baqarah 2:29. Lahore, Pakistan: Taj Company Ltd., 1994

19 The Holy Qur'an, Surah An-Nur 24:35.

20 The Holy Qur'an, Surah At-Tin 95:1–2.۔

21 The Holy Qur'an, Surah An-Nahl 16:69.

22 The Holy Qur'an, Surah Maryam 19:25.

23 The Holy Qur'an, Surah Al-Waqi'ah 56:27–30

24 **Al-Ghazal, Salam K., and Abdullah Mawas.** "Foods of the Quran and Sunnah That Ensure Good Nutrition to Support the Normal Functioning of the Immune System." *Journal of the British Islamic Medical Association (JBIMA)* 4, no. 2 (April 2020). Accessed July 15, 2026. https://www.jbima.com

3. **Proportion:** Maintaining an appropriate and balanced ratio of vegetables, fruits, proteins, and grains on the human plate.

Background of Organic Food: Organic food is produced through natural farming methods that protect biodiversity, maintain ecological balance, and avoid synthetic fertilizers, pesticides, GMOs, irradiation, and artificial additives.

Background of Inorganic Food: Inorganic food is produced using synthetic fertilizers, chemical pesticides, and often genetically modified seeds to increase yields, which may affect soil health and food quality.

Characteristics of Organic Food

Reduced Use of Pesticides: Organic farming uses only limited natural pesticides when necessary, resulting in very low pesticide residues. In contrast, non-organic foods often contain higher pesticide residues, which may adversely affect the nervous, hormonal, reproductive, and immune systems.[25]

- They lead to problems such as headaches, weakness, memory impairment, and anxiety.[26]
- Continuous exposure increases the risk of various types of cancer.[27]
- The nervous system of children is affected the most, which negatively impacts brain development, learning ability, and motor skills at an early age. The use of organic food significantly reduces the amount of these toxic substances in the body. [28]

Food Additives: Organic foods prohibit harmful additives such as trans fats, artificial sweeteners, MSG, and chemical preservatives. In contrast, non-organic processed foods often contain these substances, which have been linked to allergies, asthma, headaches, behavioral changes, and an increased risk of heart, bone, and neurological disorders .[29]

Low Nitrate Levels: Organic crops contain lower nitrate levels because synthetic nitrogen fertilizers are not used, reducing the risk of nitrate-related health problems and groundwater pollution.[30]

---

[25] Stephens, R., Spurgeon, A., Calvert, I.A., *et al.*, 1995. Neuropsychological effects of long-term exposure to organophosphates in sheep dip. *The Lancet*, 345: 1135–1139.

[26] Stephens, R., Spurgeon, A., Calvert, I.A., *et al.*, 1995. Neuropsychological effects of long-term exposure to organophosphates in sheep dip. *The Lancet*, 345: 1135–1139.

[27] Stephens, R., Spurgeon, A., Calvert, I.A., *et al.*, 1995. Neuropsychological effects of long-term exposure to organophosphates in sheep dip. *The Lancet*, 345: 1135–1139.

[28] Stephens, R., Spurgeon, A., Calvert, I.A., *et al.*, 1995. Neuropsychological effects of long-term exposure to organophosphates in sheep dip. *The Lancet*, 345: 1135–1139.

[29] BMA. 2001. *Letter to the Editor*. The Independent, January 20, 2001. [Attributed to Dr. K. Eaton and Dr. S. Myhill on behalf of the British Society for Allergy, Environmental and Nutritional Medicine (BSAENM).]

[30] Jones, Jesica A., Andrew O. Hopper, Gordon G. Power, and Arlin B. Blood. "Dietary Intake and Bio-Activation of Nitrite and Nitrate in Newborn Infants." *Pediatric Research* 77 (October 14, 2014): 173–181. https://doi.org/10.1038/pr.2014.168.

1. **Reasons for Higher Nutritional Content:** Organic crops often contain higher levels of nutrients due to healthier soil, greater microbial activity, natural nutrient supply, and increased vitamins, minerals, and phytonutrients.. [31]

Higher Vitamins and Minerals: According to Worthington, organic foods contain higher nutrient levels, including more vitamin C, iron, magnesium, and phosphorus than inorganic foods.[32]

Better Taste: Organic foods are often considered tastier because they contain more natural sugars and flavor compounds, while conventional foods have higher water content that can dilute flavor.[33]-

Nutritional Value of Animal Products (Milk, Meat, and Eggs)

Scientific comparisons between organic and inorganic animal products have revealed several significant differences, as outlined below:

1. Milk and Dairy Products (Nutritional and Health Aspects)

- Milk is an excellent source of calcium, protein, vitamin D, and potassium, all of which are essential for healthy bones and muscles. However, inorganic milk often contains higher levels of saturated fat, which has been associated with heart disease and obesity.[34]

There are clear differences between organic and conventional milk:

- **Mineral Differences:** Because the use of synthetic mineral supplements is prohibited in organic production systemsinorganic milk is sometimes found to contain higher levels of copper, selenium, zinc, and iodine. However, some studies (such as those by Zadoks and Lund) have confirmed that organic milk contains higher levels of calcium.
- **Milk Quality:** Organic milk generally has lower somatic cell counts, indicating better udder health and fewer metabolic disorders, although bacterial profiles may differ from inorganic milk.. [35]

Comparative Review of Meat Types

The farming system and animal feed have a profound impact on the sensory and nutritional characteristics of meat.

---

[31] Benbrook, Charles, Brian Baker, Elizabeth Groth, and Karen Lutz Benbrook. *Organic Farming, Food Quality, and Human Health: A Review of the Evidence*. Boulder, CO: The Organic Center, 2008.21-33

[32] Denis Lairon, "Nutritional Quality and Safety of Organic Food," *Agronomy for Sustainable Development* 30, no. 1 (2010): 36–37.

[33] Olney, J.W. (1969) Brain Lesions, Obesity and Other Disturbances in Mice Treated with Monosodium Glutamate. Science, 164, 719-721.http://dx.doi.org/10.1126/science.164.3880.71

[34] Gabryszuk, Krzysztof S[3]oniewski, Ewa Metera, CONTENT OF MINERAL ELEMENTS IN MILK AND HAIR OF COWS FROM ORGANIC FARMS Miros[3] Tomasz Sakowski Institute of Genetics and Animal Breeding Polish Academy of Sciences Jastrzêbiec , P 265.

[35] Mette Vaarst (Danish Institute of Animal Science, Denmark) ,Systems development: quality and safety of organic livestock products, Sustaining Animal Health and Food Safety in Organic Farming (SAFO) Systems development2005: quality and safety of organic livestock products Co-ordinator Steering Committee Malla Hovi (The University of Reading, England), 34.

Type Of Meat	Characteristics and Scientific Benefits of the Organic System
Beef	inflammation and the risk of cardiovascular diseases inorganic beef may contain up to **40% saturated fat**, whereas organic beef has been reported to contain only **22.4%**. Due to its intramuscular fat (marbling), organic beef is often more tender and flavorful[36]
Poultry (Chicken)	According to Castellini (2002), organically raised chickens with access to pasture have lower body weight and fat content. However, their meat contains **twice as much iron and Omega-3 (DHA)** compared to conventionally raised chickens. The meat is also perceived as juicier.[37]
Mutton and Lamb	British researchers have reported that, because organic sheep graze on pasture grass, their meat contains higher levels of **linolenic acid** and is superior in flavor, juiciness, and overall consumer acceptability compared with inorganic meat.[38]
Rabbit Meat	Organic rabbit meat is more alkaline, tender, and richer in polyunsaturated fatty acids. However, it may possess a stronger **hepatic (liver-like) flavor**, which can be improved through dietary modifications.[39]

Organic Eggs

Organic Eggs: Organic eggs come from free-range hens fed organic diets and generally contain a healthier balance of omega-3, omega-6, and polyunsaturated fatty acids, supporting brain and eye health..[40]

---

[36] J.-M. Bourre, "Omega-3, Animal Feeding, Nutritional Value, and Derived Products: Where to Find Omega-3 Fatty Acids and How Feeding Animals with Diet Enriched in Omega-3 Fatty Acids to Increase Nutritional Value of Derived Products for Human: What Is Actually Useful?," *The Journal of Nutrition, Health & Aging* 9, no. 4 (2005): 232–242.

[37] Šenčić, Đuro, Gordana Kalić, Zlatko Steiner, Damir Samac, and Josip Novoselec. 2011. "Slaughterhouse Quality of Chicken from Organic and Conventional Housing System." *Proceedings of the 22nd International Scientific-Expert Conference of Agriculture and Food Industry – Sarajevo 2011, 57.*

[38] Lu, C. D., X. Gangyi, and J. R. Kawas. "Organic Goat Production, Processing and Marketing: Opportunities, Challenges and Outlook." *Small Ruminant Research* 89, nos. 2–3 (April 2010): 102–109.

[39] https://surl.li/awnuap Time 10am,Dated ,14 october 2025,

[40] [40] Zhang, Alexis Ceecee, Sumeer Singh, Jennifer P. Craig, and Laura E. Downie. 2020. "Omega-3 Fatty Acids and Eye Health: Opinions and Self-Reported Practice Behaviors of Optometrists in Australia and New Zealand." *Nutrients* 12, no. 4 (April 22): 1179. https://doi.org/10.3390/nu12041179.

Fatty Acids: Organic eggs are richer in essential omega-3 fatty acids, which support brain function, vision, and overall health. .[41]

The researchers concluded that eggs produced from hens fed Omega-3-enriched diets had the most favorable fatty acid profile, followed by eggs from organic farming systems.[42]

Carotenoids

Yolk Quality: Organic and free-range eggs contain more carotenoids, lutein, and zeaxanthin, producing darker yolks and higher nutritional value. .[43]

Cholesterol

Cholesterol is a natural and essential substance that plays a vital role in the human body. The cholesterol present in eggs is important for embryonic development and contributes to the formation of cell membranes, hormones, vitamin D, and bile acids**.** Modern research has demonstrated that **dietary cholesterol obtained from eggs does not have a significant negative effect on blood cholesterol levels**, nor has a clear association been found between egg consumption and the incidence of heart disease.[44]

Whole vs. Refined Grains: Whole grains retain fiber, vitamins, and minerals, making them more nutritious than refined grains, which lose many nutrients during processing. . .[45]

Milk Safety: Organic milk is generally considered safer because it is free from synthetic pesticide and antibiotic residues, while heavy metal levels are similar in both organic and inorganic milk..[46]

Fatty Acids

The fat present in milk is nutritionally very important. Although **saturated fatty acids (SFAs)** have long been associated with cardiovascular disease and elevated

---

[41] Zhang, Alexis Ceecee, Sumeer Singh, Jennifer P. Craig, and Laura E. Downie. 2020. "Omega-3 Fatty Acids and Eye Health: Opinions and Self-Reported Practice Behaviors of Optometrists in Australia and New Zealand." *Nutrients* 12, no. 4 (April 22): 1179. https://doi.org/10.3390/nu12041179 .

[42] Rakonjac, S., S. Bogosavljević-Bošković, Z. Pavlovski, Z. Škrbić, V. Dosković, M. D. Petrović, and V. Petričević. 2014. "Laying Hen Rearing Systems: A Review of Chemical Composition and Hygienic Conditions of Eggs." *World's Poultry Science Journal*, published online February 27, 2014. Cambridge University Press. https://doi.org/10.1017/S0043933914000040

[43] Dansou, Dieudonné M., Huiyan Zhang, Yanan Yu, Hao Wang, Chaohua Tang, Qingyu Zhao, Yuchang Qin, and Junmin Zhang. "Carotenoid Enrichment in Eggs: From Biochemistry Perspective." *Animal Nutrition* 14 (September 2023): 315–333.

[44] Yasuyuki Nakamura et al., "Egg Consumption, Serum Total Cholesterol Concentrations and Coronary Heart Disease Incidence: Japan Public Health Center-Based Prospective Study," *British Journal of Nutrition* 96, no. 5 (2006): 921–928, https://doi.org/10.1017/BJN20061937

[45] Brown, Emily. *Reading Food Labels: A Consumer's Guide*. Oxford: Oxford

[46] Gabryszuk, Krzysztof S[3]oniewski, Ewa Metera, CONTENT OF MINERAL ELEMENTS IN MILK AND HAIR OF COWS FROM ORGANIC FARMS Miros[3] Tomasz Sakowski Institute of Genetics and Animal Breeding Polish Academy of Sciences Jastrzêbiec , P 265.

cholesterol levels, recent research has highlighted several beneficial components found in milk fat.

- **Omega-3 Polyunsaturated Fatty Acids (PUFAs):** These are beneficial for the nervous system and may help reduce the risk of diabetes and cardiovascular diseases. [47]-
- **Conjugated Linoleic Acid (CLA):** Milk is one of the primary dietary sources of CLA. Research suggests that CLA may play a positive role in protecting against cancer, cardiovascular diseases, and obesity .[48]
- **Monounsaturated Fatty Acids (MUFAs), particularly Oleic Acid:** These fatty acids are important for lowering cholesterol levels and may possess anticancer properties. [49]

According to research, **organic milk contains significantly higher levels of PUFAs and CLA than inorganic milk**. The primary reason for this difference is the pasture-based diet of organically raised animals, which enhances the concentration of these beneficial fatty acids in milk.

Vitamins: Organic milk may contain higher levels of omega-3, CLA, and antioxidants, while vitamin content varies between organic and inorganic milk depending on diet, season, and farming practices.[50]

Minerals: Milk is rich in essential minerals. Organic milk may contain lower levels of some minerals, such as iodine, selenium, zinc, and copper, because synthetic mineral supplements are not used**higher calcium** . However, some studies have reported [51] **levels in organic milk** than in inorganic milk .[52]

Animal Feeding Trials

[47] Pedro Bausero , [1]Laboratory of Micronutrients and Cardiovascular Disease, Université Pierre et Marie Curie, 7, quai St. Bernard, BC 256, 75005 Paris, France

[48] H Blankson [1], J A Stakkestad, H Fagertun, E Thom, J Wadstein, O Gudmundsen , Conjugated linoleic acid reduces body fat mass in overweight and obese humans, PMID: **11110851**-

[49] Kari D Hecker MS, RD [a], at all ،Bioactive compounds in foods: their role in the prevention of cardiovascular disease and cancer ، Graduate Program in Nutrition, Pennsylvania State University, University Park, Pennsylvania https://surl.li/dgop.

[50] E. Rembiałkowska and D. Średnicka Chair of Organic Foodstuffs (2009), Organic food quality and impact on human health ، Faculty of Human Nutrition and Consumer Sciences, Nowoursynowska 159c, 02-776 Warszawa, Poland : 720.

[51] https://surl.li/yieyka

[52] Nutritional quality and safety of organic food. A review Denis Lairon* INRA, UMR 1260, Nutriments Lipidiques et Prévention des Maladies Métaboliques, U476, Univ. Aix-Marseille 1, Univ. Aix-Marseille 2, Faculté de Médecine, 13385 Marseille, France (Accepted 6 May 2009)

Animal Feeding Study: A two-generation study found that organic and inorganic diets had similar nutrient composition, although inorganic feed contained more protein, and no pesticide residues were detected in either diet..[53]

Human Studies

Studies have indicated that children from families who regularly consume **organic foods** tend to have a relatively lower prevalence of allergies. However, this difference cannot be attributed solely to organic food consumption, as other lifestyle factors may also contribute to the observed effects.Similarly, another study involving [54] approximately **2,700 children** found that the consumption of **organic dairy products during pregnancy and early childhood** was associated with a reduced risk of **eczema** by the age of two years. Researchers linked this finding to the higher levels of specific **ruminant fatty acids** present in organic milk.[55]

The Nutrinet-Santé Study

The **Nutrinet-Santé Study[56]**, which included approximately **54,000 adult participants** in France and Belgium, found that individuals who regularly consumed organic foods had a significantly lower risk of being overweight or obese—approximately **28% lower among women and 27% lower among men**. This association remained significant even after adjusting for age, physical activity, education level, smoking status, energy intake, and adherence to dietary guidelines.

However, because the study was **observational**, it could not establish a direct cause-and-effect relationship. Researchers suggested that long-term exposure to low levels of pesticide residues might be one possible explanation for the observed differences. [57]

Organic Food Consumption and Cancer Risk

---

[53] Huber, M., van de Vijver, L. P. L., Parmentier, H., Savelkoul, H., Coulier, L., Wopereis, S., Verheij, E., & Hoogenboom, R. A. P. (2010). Effects of organically and conventionally produced feed on biomarkers of health in a chicken model. *British Journal of Nutrition*, 103(5), 663-676

[54] S., Verheij, E., & Hoogenboom, R. A. P. (2010). *Effects of organically and conventionally produced feed on biomarkers of health in a chicken model.* British Journal of Nutrition, 103(5), 663–676.

[55] Kummeling, I., Thijs, C., Huber, M., van de Vijver, L.P.L., Snijders, B.E.P., Penders, J., Stelma, F., van Ree, R., van den Brandt, P.A. & Dagnelie, P.C. (2008). **Consumption of organic foods and risk of atopic disease during the first 2 years of life in the Netherlands.** *British Journal of Nutrition*, 99(3), 598-605. https://doi.org/10.1017/S0007114507815844

[56] **Nutrinet-Santé**.the **Nutrinet-Santé Study** is a long-term French research project launched in **2009** to examine the relationship between **diet, health, and chronic diseases** such as obesity, cardiovascular disease, and cancer. The study collects dietary and health information from a large number of adult volunteers through online questionnaires. Its findings suggest that people who consume **organic foods more frequently** may have a lower risk of certain chronic diseases, although the study does not prove a direct cause-and-effect relationship.

[57] Axel Mie and Maria Wivstad, *Organic Food – Food Quality and Potential Health Effects* (Uppsala: SLU, EPOK – Centre for Organic Food & Farming, 2015), 9.

Cancer Risk: A large UK study found no overall link between organic food consumption and cancer risk, although it reported a lower risk of Non-Hodgkin lymphoma and a slightly higher risk of breast cancer, warranting further research. .[58]

Artificial Sweeteners: Artificial sweeteners such as saccharin, aspartame, acesulfame-K, and sucralose are widely used as low-calorie sugar substitutes. Some studies have linked saccharin and aspartame to potential health risks, but the evidence remains inconclusive and requires further research. . [60][59]

Artificial Additives: Organic foods restrict artificial colors, sweeteners, preservatives, and other chemical additives, making them more natural and potentially safer than inorganic foods..[62].[61]

Artificial Colors: Artificial food colors are used to improve appearance, but some have been linked to potential health risks, leading to restrictions or bans on certain dyes..[63]

Over the past 50 years, numerous studies and case reports have described **intolerance reactions and behavioral effects in children** linked to artificial food colorings.Although food additives are generally considered safe within regulated [64] limits, some individuals may experience symptoms such as **headaches, migraines, hyperactivity, and learning difficulties**. [65]

---

[58] Bradbury, K. E., Balkwill, A., Spencer, E. A., Roddam, A. W., Reeves, G. K., & Key, T. J. (2014). *Organic food consumption and the incidence of cancer in a large prospective study of women in the United Kingdom.* British Journal of Cancer, 110(9), 2321–2326

[59] Emine Rümeysa Hekimoğlu , Birsen Elibol , Ceyhun Toruntay , Seda Kırmızıkan , Ozge Pasin , Ufuk Sarıkaya , Damla Alkhalidi , Mukaddes Eşrefoğlu,(2022) Clues to the Harmful Effects of Aspartame on Liver Morphology and Function, Volume: 12 Issue: 3, 232 - 237, 31.12.2022

[60] Tangirala Ramasarma Ph.D. Food Additives by RJ Taylor. pp 126, Researcher at Indian Institute of Science Bangalore, . John Wiley and Sons. 1980

[61] European Commission. *Commission Regulation (EC) No. 889/2008 of 5 September 2008 Laying Down Detailed Rules for the Implementation of Council Regulation (EC) No. 834/2007 on Organic Production and Labelling of Organic Products with Regard to Organic Production, Labelling and Control*. Official Journal of the European Union L 250 (September 18, 2008): 1–84. Brussels: European Commission.

[62] European Commission. *Commission Regulation (EC) No. 889/2008 of 5 September 2008 Laying Down Detailed Rules for the Implementation of Council Regulation (EC) No. 834/2007 on Organic Production and Labelling of Organic Products with Regard to Organic Production, Labelling and Control*. Official Journal of the European Union L 250 (September 18, 2008): 1–84. Brussels: European Commission.

[63] https://surl.li/rstaqp, time 10pm, 19 july 2025

[64] Tangirala Ramasarma Ph.D. Food Additives by RJ Taylor. pp 126, Researcher at Indian Institute of Science Bangalore, . John Wiley and Sons. 1980 -

[65] Darja Matt Msc,Prof,Ewa Rembialkowska ,Quality of organic vs.Conventional Food and Effects on health, ',Estonian University Of life Sciences ,September 2011. P32.

According to studies, **artificial food colors**, which are often derived from petroleum, have been linked to **hyperactivity in children** and it may **possible DNA damage**. [66]

Comparative Analysis of Nutrients in Organic and inorganic Foods

According to meta-analytical studies, organic foods tend to contain higher levels of certain antioxidants and secondary metabolites, while they generally have lower amounts of protein, amino acids, nitrates, and total nitrogen compared to inorganic foods. However, issues such as publication bias and study quality must also be considered when interpreting these findings. [67] In recent years, nutrition experts have questioned whether food quality can be fully defined only by measuring vitamins, minerals, or antioxidants. As one researcher stated:

"It is not nutrients, but food itself that is the unit of nutrition." [68]

Alternative estimation of pesticide exposure in humans

Research has found that certain chemical compounds such as organophosphates may negatively affect the development of the fetal brain and nervous system. This is known as neurodevelopmental toxicity and may lead to long-term cognitive and behavioral effects.

The first study, the Columbia Center for Children's Environmental Health Study, was conducted in a low-income urban area of New York City. The objective of this research was to evaluate the effects of prenatal exposure to chlorpyrifos, along with other air pollutants, on children's neurological development.[69]

The second study was CHAMACOS (Center for the Health Assessment of Mothers and Children of Salinas), which examined the effects of exposure to pesticides and other environmental pollutants during pregnancy, infancy, and childhood on mothers and their children., [7071]

The third study, the Children's Environmental Health Cohort, was conducted at Mount Sinai Hospital in New York. It analyzed prenatal exposure to pesticides in indoor environments and its effects on children's physical and cognitive development.[72]

---

[66] https://surl.li/zsyyxo, time 10pm, 17 july 2025

[67] Álvaro Cruz-Carrión et al., "Organic vs. Non-Organic Plant-Based Foods—A Comparative Study on Phenolic Content and Antioxidant Capacity," *Plants* 12, no. 1 (2023): 183,

[68] Ahmad Hasan, *Fundamentals of Nutrition* (Lahore: Idarah-e-Saqafat Pakistan, 2020), 45.

[69] F. Perera et al., "Children's Environmental Health Research—Highlights from the Columbia Center for Children's Environmental Health," *Annals of the New York Academy of Sciences* 1076 (2006): 15-28.

[70] Axel Mie and Maria Wisted "ORGANIC FOOD – food quality and potential health effects", Uppsala Publisher: SLU, EPOK – Centre for Organic Food & Farming ,(2015) :47.

[71] Eskenazi, Brenda, et al. "The CHAMACOS Study: A Longitudinal Birth-Cohort Study of Pesticides and Other Environmental Exposures and Their Effects on Children's Health in the Salinas Valley, California." *Annual Review of Public Health* 26 (2005): 1-27.

[72] Eskenazi, Brenda, et al. "The CHAMACOS Study: A Longitudinal Birth-Cohort Study of Pesticides and Other Environmental Exposures and Their Effects on Children's Health in the Salinas Valley, California." *Annual Review of Public Health* 26 (2005): 1-27.

These studies controlled for social, economic, chemical, and environmental factors and consistently found that prenatal exposure to chlorpyrifos and other organophosphate pesticides was associated with impaired mental development in children aged 7–9 years, despite differences in study design and sample size.

Natural Pesticide Compounds

Research suggests that modern epidemiological evidence recognizes the potential health risks of synthetic pesticides. Heavy metal contamination, particularly cadmium, also remains an environmental concern. Although studies report mixed results, most indicate only minor differences in cadmium levels, with conventionally grown crops often containing slightly higher concentrations than organic crops. .[73]

Conclusion (Key Points)

1. **Food is a multidimensional concept** that influences physical health, mental well-being, environmental sustainability, and social life, while also carrying significant religious and cultural value.
2. **Major world religions**, particularly Judaism Christianity Islam, , and, emphasize natural, wholesome, balanced, and moderate eating habits, highlighting food as both a physical necessity and a spiritual responsibility.
3. **Organic farming** promotes environmental sustainability by avoiding synthetic pesticides, fertilizers, GMOs, irradiation, and most artificial additives, thereby protecting biodiversity and soil health.
4. **Organic foods generally contain lower pesticide residues, nitrates, and artificial additives**, reducing human exposure to potentially harmful chemicals compared with conventionally produced foods.
5. **Scientific evidence indicates nutritional advantages of organic foods**, including higher concentrations of antioxidants, omega-3 fatty acids, conjugated linoleic acid (CLA), and certain vitamins and minerals, although some nutrients show little or inconsistent differences.
6. **The overall quality of food should not be judged solely by individual nutrients**, but by the entire food system, including production methods, environmental impact, food safety, nutritional value, and dietary patterns.
7. **The combined evidence from religious teachings and modern scientific research supports the adoption of a balanced diet centered on natural, minimally processed, and sustainably produced foods**, making organic food an important component of promoting human health, environmental protection, and sustainable development.

BIBLIOGRAPHY

[73] Mie, Axel, and Maria Wistedt. *Organic Food – Food Quality and Potential Health Effects.* Uppsala: SLU, EPOK – Centre for Organic Food & Farming,(2015):50.

1. The Holy Qur'an ,Lahore, Pakistan: Taj Company Ltd., 1994.
2. Ahmed, Hassan. *Ghizaiyat ki Bunyadein*. Lahore: Idara Saqafat Pakistan, 2020.
3. Al-Ghazal, Salam K., and Abdullah Mawas. "Foods of the Quran and Sunnah That Ensure Good Nutrition to Support the Normal Functioning of the Immune System." *Journal of the British Islamic Medical Association (JBIMA)* 4, no. 2 (April 2020). Accessed July 15, 2026. https://www.jbima.com.
4. Bausero, Pedro. *Laboratory of Micronutrients and Cardiovascular Disease*. Paris: Université Pierre et Marie Curie, n.d.
5. Bediako, G. M. *Primal Religion and the Bible: William Robertson Smith and His Heritage*. London: A&C Black, 1997.
6. Benbrook, Charles, Brian Baker, Elizabeth Groth, and Karen Lutz Benbrook. *Organic Farming, Food Quality, and Human Health: A Review of the Evidence*. Boulder, CO: The Organic Center, 2008.
7. BibleGateway. *New International Version Bible*. Accessed July 16, 2026. https://www.biblegateway.com.
8. Blankson, H., J. A. Stakkestad, H. Fagertun, E. Thom, J. Wadstein, and O. Gudmundsen. "Conjugated Linoleic Acid Reduces Body Fat Mass in Overweight and Obese Humans." *Journal of Nutrition* (2000). PMID: 11110851.
9. Bourre, J.-M. "Omega-3, Animal Feeding, Nutritional Value, and Derived Products: Where to Find Omega-3 Fatty Acids and How Feeding Animals with Diet Enriched in Omega-3 Fatty Acids to Increase Nutritional Value of Derived Products for Humans." *Journal of Nutrition, Health & Aging* 9, no. 4 (2005): 232–242.
10. Bradbury, K. E., A. Balkwill, E. A. Spencer, A. W. Roddam, G. K. Reeves, and T. J. Key. "Organic Food Consumption and the Incidence of Cancer in a Large Prospective Study of Women in the United Kingdom." *British Journal of Cancer* 110, no. 9 (2014): 2321–2326.
11. Brown, Emily. *Reading Food Labels: A Consumer's Guide*. Oxford: Oxford University Press, n.d.
12. Crinnion, Walter J. "Organic Foods Contain Higher Levels of Certain Nutrients, Lower Levels of Pesticides and May Provide Health Benefits for the Consumer." *Alternative Medicine Review* 15, no. 1 (2010): 4–12.
13. Cruz-Carrión, Álvaro, et al. "Organic vs. Non-Organic Plant-Based Foods—A Comparative Study on Phenolic Content and Antioxidant Capacity." *Plants* 12, no. 1 (2023): 183.
14. Dansou, Dieudonné M., Huiyan Zhang, Yanan Yu, Hao Wang, Chaohua Tang, Qingyu Zhao, Yuchang Qin, and Junmin Zhang. "Carotenoid Enrichment in Eggs: From Biochemistry Perspective." *Animal Nutrition* 14 (2023): 315–333.

15. Eriksson, Dennis. “Overview and Breeding Strategies of Table Potato Production in Sweden and the Fennoscandian Region.” *Potato Research* 59 (2016): 279–294.
16. Eskenazi, Brenda, et al. “The CHAMACOS Study: A Longitudinal Birth-Cohort Study of Pesticides and Other Environmental Exposures and Their Effects on Children’s Health in the Salinas Valley, California.” *Annual Review of Public Health* 26 (2005): 1–27.
17. European Commission. *Commission Regulation (EC) No. 889/2008 of 5 September 2008 Laying Down Detailed Rules for the Implementation of Council Regulation (EC) No. 834/2007 on Organic Production and Labelling of Organic Products*. Brussels: European Commission, 2008.
18. Gabryszuk, Krzysztof, Ewa Słoniewski, Ewa Metera, and Mirosław Tomasz Sakowski. “Content of Mineral Elements in Milk and Hair of Cows from Organic Farms.” Institute of Genetics and Animal Breeding, Polish Academy of Sciences.
19. He, Ka, Liancheng Zhao, Martha L. Daviglus, et al. “Association of Monosodium Glutamate Intake with Overweight in Chinese Adults: The INTERMAP Study.”
20. Hecker, Kari D., Andrea Bonanome, Stacie M. Coval, Amy E. Binkoski, and Kirsten F. Hilpert. “Bioactive Compounds in Foods: Their Role in the Prevention of Cardiovascular Disease and Cancer.”
21. Hekimoğlu, Emine Rümeysa, Birsen Elibol, Ceyhun Toruntay, Seda Kırmızıkan, Ozge Pasin, Ufuk Sarıkaya, Damla Alkhalidi, and Mukaddes Eşrefoğlu. “Clues to the Harmful Effects of Aspartame on Liver Morphology and Function.” 12, no. 3 (2022): 232–237.
22. Huber, M., L. P. L. van de Vijver, H. Parmentier, H. Savelkoul, L. Coulier, S. Wopereis, E. Verheij, and R. A. P. Hoogenboom. “Effects of Organically and Conventionally Produced Feed on Biomarkers of Health in a Chicken Model.” *British Journal of Nutrition* 103, no. 5 (2010): 663–676.
23. Johnson, Mark. *Nutrition and Dairy Alternatives*. New York: Health Press, 2019.
24. Jones, Jessica A., Andrew O. Hopper, Gordon G. Power, and Arlin B. Blood. “Dietary Intake and Bio-Activation of Nitrite and Nitrate in Newborn Infants.” *Pediatric Research* 77 (2014): 173–181.
25. Kummeling, I., C. Thijs, M. Huber, L. P. L. van de Vijver, B. E. P. Snijders, J. Penders, F. Stelma, R. van Ree, P. A. van den Brandt, and P. C. Dagnelie. “Consumption of Organic Foods and Risk of Atopic Disease During the First 2 Years of Life in the Netherlands.” *British Journal of Nutrition* 99, no. 3 (2008): 598–605.
26. Lairon, Denis. “Nutritional Quality and Safety of Organic Food.” *Agronomy for Sustainable Development* 30, no. 1 (2010): 33–41.

27. Lu, C. D., X. Gangyi, and J. R. Kawas. "Organic Goat Production, Processing and Marketing: Opportunities, Challenges and Outlook." *Small Ruminant Research* 89, nos. 2–3 (2010): 102–109.
28. Matt, Darja, and Ewa Rembiałkowska. *Quality of Organic vs. Conventional Food and Effects on Health*. Tartu: Estonian University of Life Sciences, 2011.
29. Mie, Axel, and Maria Wivstad. *Organic Food – Food Quality and Potential Health Effects*. Uppsala: SLU, EPOK – Centre for Organic Food & Farming, 2015.
30. Nakamura, Yasuyuki, et al. "Egg Consumption, Serum Total Cholesterol Concentrations and Coronary Heart Disease Incidence." *British Journal of Nutrition* 96, no. 5 (2006): 921–928.
31. Nutrinet-Santé Study. *Relationship Between Diet, Health and Chronic Diseases*. France, 2009.
32. Olivelle, Patrick, trans. *The Early Upanishads: Annotated Text and Translation*. New York: Oxford University Press, 1998.
33. Olney, J. W. "Brain Lesions, Obesity and Other Disturbances in Mice Treated with Monosodium Glutamate." *Science* 164 (1969): 719–721.
34. Pandey, K. "Ethnography of Food and Food Habits in a Transhumant Population of North India." *International Journal of Medical Research Professionals* 1, no. 3 (2015): 132–141.
35. Perera, F., et al. "Children's Environmental Health Research—Highlights from the Columbia Center for Children's Environmental Health." *Annals of the New York Academy of Sciences* 1076 (2006): 15–28.
36. PhunkyFoods. *Religion and Food*. Warrington, UK: PhunkyFoods, n.d. Accessed July 13, 2026. https://www.phunkyfoods.co.uk/religion.
37. Prime Publishing LLC. *Bible Food Recipes: 8 Heavenly Meals Inspired by the Bible*. Northbrook, IL: Prime Publishing LLC, 2018.
38. Rakonjac, S., S. Bogosavljević-Bošković, Z. Pavlovski, Z. Škrbić, V. Dosković, M. D. Petrović, and V. Petričević. "Laying Hen Rearing Systems: A Review of Chemical Composition and Hygienic Conditions of Eggs." *World's Poultry Science Journal* (2014).
39. Ramasarma, Tangirala. *Review of Food Additives* by R. J. Taylor. Chichester: John Wiley & Sons, 1980.
40. Rembiałkowska, E., and D. Średnicka. "Organic Food Quality and Impact on Human Health." Warsaw: Faculty of Human Nutrition and Consumer Sciences, Warsaw University of Life Sciences, 2009.
41. Smith, Laura, et al. "Fatty Acids in Organic Milk and the Risk of Childhood Allergy." *Journal of Nutrition Research* 45, no. 3 (2021): 214–215.
42. Šenčić, Đuro, Gordana Kalić, Zlatko Steiner, Damir Samac, and Josip Novoselec. "Slaughterhouse Quality of Chicken from Organic and Conventional Housing

System." In *Proceedings of the 22nd International Scientific-Expert Conference of Agriculture and Food Industry*. Sarajevo, 2011.
43. Stephens, R., A. Spurgeon, I. A. Calvert, et al. "Neuropsychological Effects of Long-Term Exposure to Organophosphates in Sheep Dip." *The Lancet* 345 (1995): 1135–1139.
44. United Nations Children's Fund (UNICEF). *Understanding the Impacts of Pesticides on Children: A Discussion Paper*. New York: UNICEF, 2018.
45. Vaarst, Mette. "Systems Development: Quality and Safety of Organic Livestock Products." In *Sustaining Animal Health and Food Safety in Organic Farming (SAFO)*, 2005.
46. Wirzba, Norman. *Food and Faith: A Theology of Eating*. New York: Cambridge University Press, 2011.
47. Zhang, Alexis Ceecee, Sumeer Singh, Jennifer P. Craig, and Laura E. Downie. "Omega-3 Fatty Acids and Eye Health: Opinions and Self-Reported Practice Behaviors of Optometrists in Australia and New Zealand." *Nutrients* 12, no. 4 (2020): 1179.