



ISLAM AND FOOD SYSTEMS



Position Paper

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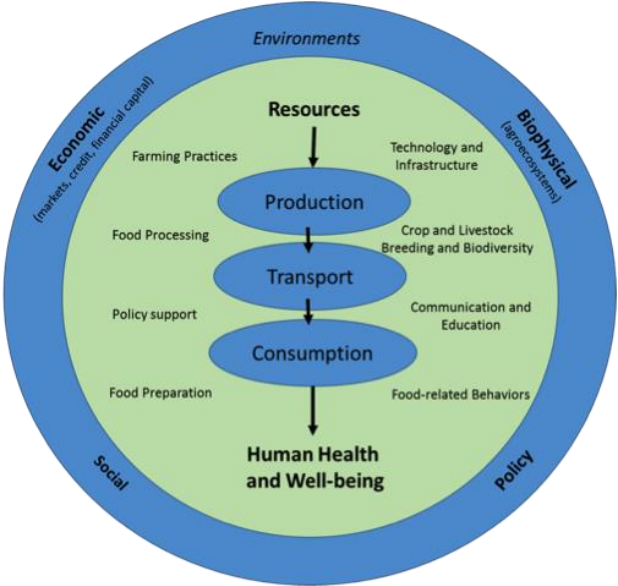
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Food plays cultural and spiritual roles for Muslims. The Qur'an makes special references to pure and lawful food and to the principles of balance, justice and health. However, our current extractive approach to food and development have led to injustices against our fragile environment and ecosystems. We present an Islamic perspective on our current food systems, that focuses on balance and health. Islam promotes the ethical production, transport and consumption of food that goes beyond halal designations only. We propose the promotion of halal and tayyib foods and food systems that promote these concepts, and encourage the implementation of farming practices with guidance from Qur'an and Sunnah.

Introduction

The world's crises including political, economical, social, environmental, all converge on one common denominator common--food. The complex web of activities on how we produce our food, process, transport, distribute, advertise it all converges on our food system (Figure 1). A food system includes all processes and infrastructure involved in feeding a population: this includes growing, harvesting, processing, packaging, transporting, marketing, consumption, distribution and disposal of food and food-related items. It also includes the inputs needed and outputs generated at each of these steps¹.



In 2019, *The Lancet* published the dietary risk-factors in 195 countries based on the effects of diet on health, covering a twenty-seven year period. They concluded that a diet without enough healthy foods and with too many ultra-processed foods accounted for 11 million deaths and 255 million years of disability and life years lost. Most striking was the finding that the lack of protective foods (or real unprocessed foods) was

¹ JR. Porter, et al. 'Food security and food production systems', *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects*'. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B et al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom, 2014 pp. 485-533.

as or more important in determining risk of death than the overconsumption of processed foods². For the first time in history, there are more overweight than underfed people on Earth, as two billion people are overweight and 800 million are hungry, mostly in the low–middle income countries³. The World Health Organization (WHO) has formally recognized obesity as a global epidemic⁴.

Organizations like the WHO and FAO produce guidance and education/awareness campaigns on healthy foods and diets. The UN is organizing a Food Summit in November 2021 to evaluate our current food systems and how to prepare for an increasing world population.

However, lobbyists’ influence over policy makers has put corporations at the center of every aspect of the food system, leading to the current uncoordinated and conflicting food policies. Our current food system is controlled by just a few dozen companies and makes it one of the largest collective industries in the world⁵. Food waste and our industrial agriculture (meat and palm oil production) is the single biggest cause of climate change as it contributes to about 56% of non-carbon dioxide emissions and contributes up to 29% of the total greenhouse gas emissions⁶.

Fixing the food system is critical to the health of the planet, its people, its environment, its climate and its future. There is no one solution that will solve this food crisis; therefore, a holistic framework can help to improve our food systems and promote a regenerative food system. Protecting our food and our planet is seen as a duty upon each Muslim:

“O you who have believed, eat from the good things which We have provided for you and be grateful to God, glorified and exalted, if it is [indeed] Him that you worship”.
(Qur’an 2: 172)

“This Day [all] Tayyib/Pure food has been made lawful...And whoever denies the faith- His work has become worthless, and he, in the Hereafter, will be among the losers.”
(Qur’an 5:5)

“Then let mankind look at his food” (Qur’an 80:24)

There are 1.9 billion Muslims globally, 20% of the world’s population. Muslim represents numerous different ethnicities and cultures. Islam is the state religion of 25 countries. For all Muslims, what they eat, how they eat and regular periods of fasting all form a core part of faith practice. This relationship with food is viewed as a trust/covenant with God, even allowing people to attain God-consciousness because of the enormous blessings associated with food. But not just any food; pure quality food packed with nutrients are the foundational building blocks to flourishing societies. However, certain foods can create imbalances that lead to disease and several downstream problems: toxic food environments that contribute to chronic disease, climate change, poverty, violence, social injustice and even threatening national security.

² GBD 2017 Diet Collaborators. ‘Health effects of dietary risks in 195 countries’, 1990–2017: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet* 393(10184) pp,1958–1972. [https://doi.org/10.1016/S0140-6736\(19\)30041-8](https://doi.org/10.1016/S0140-6736(19)30041-8)

³ NG, Fleming, “Global, Regional, and National Prevalence of Overweight and Obesity in Children and Adults during 1980–2013: A Systemic Analysis for Global Burden on Disease Study 2013,” *Lancet*. 30;384 (9945), 2013 pp, 766–81.

⁴ B, Caballero ‘The global epidemic of obesity: An overview’ *Epidemiol Rev*. 29: 1– 5, 2007 doi:10.1093/epirev/mxm012. PMID 17569676

⁵T, Novicio ‘Ten Biggest Industries in the World in 2021’ *Yahoo Finance*, March 2021, <https://libraryguides.vu.edu.au/oxford-referencing/internet-websites>

⁶UN News, ‘Food Systems Account for over One-Third of Global Greenhouse Gas Emissions’, *United Nations News*, March 2021, news.un.org/en/story/2021/03/1086822

In Islam, the concept of food has both a spiritual and physical element to it. In this hadith by Sahih Muslim, ‘The Prophet (PBUH) ordered us not to leave anything in the plate and he said: “You do not know in which portion of your food God has put the barakah [blessing].”’ This saying of the Prophet Muhammad (PBUH) shows that food is a blessing from God and therefore we should pay due attention to avoid food waste.

In this paper we offer insights and proposed future directions for a sustainable food system incorporating the Islamic principles of balance, justice and health based on three themes: food production, transport, and consumption.

*We would like to note that in our current food system, GMOs are utilized. This document is not intended to discuss GMOs.

1. Production

A. Soil

And when it is said to them, “Do not cause corruption on the earth,” they say, “We are but reformers.” Unquestionably, it is they who are the corrupters, but they perceive [it] not. (Qur’an 2: 11–12)

“As for the pure land, vegetation comes out by its Lord’s will, but poor land produces in agony. We explain Our messages in various ways to those people who are grateful.” (Qur’an 7:58)

Evil has appeared on land and sea because of what the hands of people have earned [by oppression and evil deeds], that God may make them taste a part of that which they have done, in order that they may return. (Qur’an 30: 41)

As human beings we rely on the soil to grow much of our food, even our animal-based sources as they rely on the soil to extract their food. Islam promotes balance and God has created soils in the best balance. Soil science teaches us there are different types of soils and different stages of soil development and degradation. In their undisturbed states, the majority of soil types are alive. As little as 2 cubic centimeters of soil will have more microbial diversity than anything in the universe⁷. Soils contain microflora (bacteria and fungi), microfauna (tiny insects and animals, and earthworms) that break down organic matter and return it to its elemental form ready for absorption by plant roots. Healthy soil can hold hundreds of thousands of gallons of water per acre, protect against droughts and floods⁸. Soil is also the biggest carbon sink on the planet.

We are currently losing about 24 billion tons of topsoil a year⁹ by deforestation, urban industrialization, overfertilization, monocrop agriculture, bad crop rotation, tilling, industrialized agriculture and livestock overgrazing. Modern food production methodologies have treated soil as an inert, non-living medium from which mineral elements are absorbed by roots of crops, and into which mineral elements in the form of chemical fertilizers can be pumped to maintain fertility for crop plants. With chemical and industrial farming, the loss of half of topsoil has occurred in the last 150 years⁷, and the loss of our natural ecosystems

⁷ L, Domeignoz-Horta *et al.* ‘Microbial Diversity Drives Carbon Use Efficiency in a Model Soil.’ *Nature News*, Nature Publishing Group, 23 July 2020, www.nature.com/articles/s41467-020-17502-z.

⁸ NRCS ‘Natural Resources Conservation Service Soil Health Key Points.’ NRCS, www.nrcs.usda.gov/wps/portal/nrcs/site/national/home/.

⁹ UN News ‘24 Billion Tons of Fertile Land Lost Every Year, Warns UN Chief on World Day to Combat Desertification’ *United Nations News*, June 2019 news.un.org/en/story/2019/06/1040561

(leading to the loss of nutrients, minerals and biodiversity), increased desertification, killing of marine life, depleting our sources for freshwater all lead to disease. Fertilizing soil via modern methods requires a large amount of energy, as it is the biggest consumer of natural gas from fracking, releasing 40-50% more methane into the atmosphere¹⁰. Research shows that by 2050, increasing CO2 levels and poor soil quality will worsen the nutrient composition of the food we grow, leading to world wide nutrient deficiencies¹¹.

The increasing interest in organic, regenerative and sustainable agriculture is a reflection of returning back to the inherent intelligent design of soil created by God. Human societies across the world are returning to 'working with what God created' instead of wielding/manipulating it as we have been. Restoring our soil balance can help to draw out carbon from the atmosphere and environment, requires us to eliminate the excess use of pesticides and fertilizers, and adds more nutrients to the earth. Not only does this benefit humans, but also all life on earth. The regenerative, restorative use of soils is consistent with Islamic principles of balance, justice and health.

B. Water

“We made from water every living thing....” (Qur’an 21: 30)

*“It is God who sends the Winds, and they raise the Clouds: then does He spread them in the sky as He wills, and break them into fragments, until you see rain-drops issue from the midst thereof: then when He has made them reach such of his servants as He wills, behold, they do rejoice!”
(Qur’an 30:48)*

Water is a blessing from God and an integral part of our life and religion (e.g., the well of Zamzam). The Qur’an presents the natural water cycles on Earth as creations of God, as science has elucidated the molecular and biological impacts of the water cycle on the wellbeing of all living beings.

When water is viewed as a commodity that only humans have rights in and dominion over, it has downstream negative effects. We have degraded the quality of and polluted freshwater in streams, rivers, ponds and lakes, and saltwater in seas and oceans. Entire ocean ecosystems and numerous species are suffering long-term damage and destruction. Seventy percent of human use of freshwater is used to grow food (most of which is for feed animals on factory farms for human consumption)¹². The World Economic Forum declared water scarcity the fourth-biggest global threat¹³.

We need the oceans to help us protect against climate change, as coastal plants can store 20 times more carbon than rainforests on land. Ninety-three percent of all the world’s carbon dioxide (CO2) is stored in the oceans¹⁴ with the help of marine vegetation, algae, and coral. Chemicals, like fertilizers, and increased acidification of the oceans lead to marine death and decreased biodiversity of the planet. Unfortunately, the

¹⁰ CIWF, ‘Ending Factory Farming -- Environmental damage’, <https://www.ciwf.org.uk/factory-farming/environmental-damage/>

¹¹ International Food Policy Research Institute. ‘Rising CO2, climate change projected to reduce availability of nutrients worldwide: Protein, iron, zinc to be 19.5%, 14.4%, and 14.6% lower, respectively, than without climate change.’ *ScienceDaily*, July 2019, www.sciencedaily.com/releases/2019/07/190718085308.htm

¹² USGS ‘Irrigation water use’, USGS (n.d) https://www.usgs.gov/special-topic/water-science-school/science/irrigation-water-use?qt-science_center_objects=0#qt-science_center_objects

¹³ K, Van Der Heijden, A ‘Water is a growing source of global conflict. here's what we need to do’. *World Economic Forum*, March 2019, <https://www.weforum.org/agenda/2019/03/water-is-a-growing-source-of-global-conflict-heres-what-we-need-to-do/>

¹⁴ Water Encyclopedia, ‘Carbon dioxide in the ocean and atmosphere’ *Water Encyclopedia* (n.d.). Retrieved May 09, 2021, <http://www.waterencyclopedia.com/Bi-Ca/Carbon-Dioxide-in-the-Ocean-and-Atmosphere.html>

industrial crops of corn and wheat are reliant on 400 billion pounds of nitrogen fertilizer globally a year, that ends up in our bodies of water leading to about 400 marine dead zones around the world, as large as the size of Europe combined¹⁵. If we continue the current trajectory, we will lose 90% of our coral reefs by 2050¹⁶

Microplastics are now found in the ocean and freshwater fish, animals and plants. They have even been found in the snow in the north and south poles¹⁷. Plastics not only increase the risk of autoimmunity, cancer and other chronic conditions¹⁸, but fossil fuels are used in the production of these plastics which contributes to greenhouse gas production. It is estimated that 1-2 million tons of plastic enters our oceans each year, creating a massive Pacific Ocean garbage patch the size of Texas, USA!¹⁹

As a species, our current practices are endangering the safety of our water sources, as well as all life on Earth. Remembering that water is a blessing and protecting its sanctity is consistent with Islamic principles of balance, justice and health.

C. Air

“And He it is Who sends the winds as glad tidings before His mercy, when they bear a heavy cloud, We drive it to a dead land; then We send down water therefrom and We bring forth fruits of every kind. In like manner do We bring forth the dead that you may remember.” (Qur’an 7:57).

“And We send the winds fertilizing” (Qur’an 15:22).

The Qur’an mentions air and wind in many verses, referring to its different purposes: pollination (Qur’an 15:22); blowing light particles (e.g. sand) (Qur’an 51:1); lifting heavy weights (rain) (Qur’an 51:2); moving with gentleness (Qur’an 51:3); dividing and distributing by command (sound taking several paths) (Qur’an 51:4).

Air pollution affects water, air and soil, and as a result, biodiversity and food quality. Air pollution from gases produced from waste management and smoke and fumes from wildfires change the composition of the rain that is sent down and carried by the wind, leading to many negative health impacts: asthma, lung disease and cancer^{18,20}. Acid rain, another type of pollution, negatively impacts people, animals, vegetation, and the planet’s ecosystems and species diversity²¹. Agriculture, particularly livestock, is responsible for emitting huge amounts of methane into the atmosphere²². Food waste in landfills undergoes the same

¹⁵ J, Howard. ‘Dead zones, facts and information’. *National Geographic*, July 2019,

<https://www.nationalgeographic.com/environment/article/dead-zones>

¹⁶ E, Becataros. ‘More than 90 percent of coral reefs will die out by 2050’. *The Independent*, March 2017,

<https://www.independent.co.uk/climate-change/news/environment-90-percent-coral-reefs-die-2050-climate-change-bleaching-pollution-a7626911.html>

¹⁷ LDK, Kanhai, *et al.* ‘Microplastics in sea ice and seawater beneath ice floes from the Arctic Ocean.’ *Scientific Reports* 10, 5004. 2020,

¹⁸ C, Campanale *et al.* ‘A Detailed Review Study on Potential Effects of Microplastics and Additives of Concern on Human Health’. *Int J Environ Res Public Health*. 2020;17(4) February 2020, pp1212

¹⁹ S, Snowden. ‘300-Mile swim through the great pacific garbage patch will collect data on plastic pollution’, *Forbes*, May 2019, <https://www.forbes.com/sites/scottsnowden/2019/05/30/300-mile-swim-through-the-great-pacific-garbage-patch-will-collect-data-on-plastic-pollution/>

²⁰ M, Denchack. ‘Fossil Fuels: The Dirty Facts’ *NRDC*, June 2018, <https://www.nrdc.org/stories/fossil-fuels-dirty-facts>

²¹ C, Nunez, ‘Acid Rain, Explained’, *National Geographic*, April 2019, <https://www.nationalgeographic.co.uk/2019/03/acid-rain-explained>

²² C, Lindwall. ‘Industrial Agricultural Pollution 101’, *NRDC*, July 2019, <https://www.nrdc.org/stories/industrial-agricultural-pollution-101>

process when decomposing. Burning waste, including the packaging our food comes in, releases all manner of toxins into the air. Greenhouse gases (CFCs and HCFCs, methane, etc.) continue to be produced and released into the atmosphere causing increasing heat retention and driving the greenhouse effect which traps the sun's heat and melts the ice caps²³. Industrial and conventional agriculture practices are major sources of these destructive pollutants being released into Earth's atmosphere and negatively affecting air quality and driving destructive climate change. Protecting air quality as a blessing of God is consistent with Islamic principles of balance, justice and health.

D. Farming with Guidance from Qur'an and Sunnah

“For that We pour forth water in abundance, And We split the earth in fragments, And produce therein corn, And grapes and nutritious plants, And olives and dates, And enclosed gardens, dense with lofty trees, And fruits and fodder — For use and convenience to you and your cattle. (Qur'an, 80:25–32)

Our current food system is based on large farms producing the bulk of our foods, which are largely the same crops grown every year. In order to do this, they utilize a lot of chemical fertilizer and pesticides, while also manipulating the soil in ways that it is not regenerated, and more fertilizer is required²⁴. Sustainable or Regenerative agriculture is a system of farming principles and practices that increases biodiversity, to regenerate soil, and enables it to store massive amounts of carbon and water. These practices center the farmers, our communities, our health and the environment: “increase profitable farm income, promote environmental stewardship, enhance quality of life for farm families and communities, increase production for human food and fiber needs.”²⁵

Indigenous communities provide a wonderful model from which we can learn: “Over the centuries, indigenous peoples have provided a series of ecological and cultural services to humankind. The preservation of traditional forms of farming knowledge and practices help maintain biodiversity, enhance food security, and protect the world's natural resources.”²⁶ Some examples of these practices are: agroforestry, crop rotation, mixed cropping, polyculture, and water harvesting.

Sustainable, regenerative practices in the utilization of natural resources, for food and other products, are consistent with Islamic values of balance, justice and health. These practices can reduce the need for the modern farming practice of excessive mineral fertilizer use and polluting chemical pesticides and herbicides that deplete the soil. The use of livestock in managed holistic grazing plays a role in stimulating root structures, plant growth and soil fertility by adding manure, saliva and urine. These practices can draw out enough carbon from the atmosphere to result in a 15-100 percent reduction in all carbon released since the industrial revolution. As a result, this offers more nutrient dense foods, increasing biodiversity, increased yields, more profit and improved health for the ranching and farming communities and consumers²⁷.

The Prophet (PBUH) said: “If the Resurrection were established upon one of you while he has in his hand a sapling, then let him plant it” (Sahih, Musnad Ahmad 12491).

²³ CDC, 'Air Pollution' CDC, December 2021, https://www.cdc.gov/climateandhealth/effects/air_pollution.htm

²⁴ UCSUSA, 'What is sustainable agriculture', UCSUSA, April 2021, <https://ucsusa.org/resources/what-sustainable-agriculture>

²⁵ USDA-NIFA 'Sustainable Agriculture', USDA-NIFA, (n.d.) <https://nifa.usda.gov/topic/sustainable-agriculture>

²⁶ E, Perroni, 'Five Indigenous Farming Practices Enhancing Food Security', *Resilience*, August 2017, <https://www.resilience.org/stories/2017-08-14/five-indigenous-farming-practices-enhancing-food-security/>

²⁷ Global One, 'Islamic Farming', *Global One*, (n.d.) <https://globalone.org.uk/islamic-farming/>

Islamic Farming²⁵

Out of 910 million people in sub-Saharan Africa, 248 million are Muslim, and many are small-scale farmers. Alliance of Religions and Conservation (ARC) and Global One 2015 began working with Muslim faith partners in Africa to develop a faith-based manual and training programme inspired by Islamic teachings and beliefs. The first step was a thorough theological assessment of Islamic scriptures. Focus group meetings were held with Muslim clerics and scholars in Kampala and Nairobi to consider issues around Islam and farming and there was tremendous enthusiasm for the project from all involved.

“The Islamic Farming” handbook was launched in Nairobi in March 2014 to great enthusiasm from the Muslim community. This was the first manual specially designed for Muslim farmers using the practical principles of conservation agriculture (a way of farming promoted by the UN’s Food and Agriculture Organization as being both environmentally sustainable and climate smart) but with a spiritual foundation that is entirely based upon Islamic scriptures and teachings. What makes Islamic Farming different is that it speaks to Muslim farmers in the language of the Qur’an and the Sunnah. By integrating Islamic scriptures with practical teaching in conservation agriculture, the manual helps farmers grow food while also protecting the environment in a way that makes sense to them as Muslims.

2. Food Preparation and Transport

A food system guided and shaped by Islamic principles can fairly and justly address multiple aspects of the food system (listed below) where there is promotion of what is healthy and clearly emphasizes what products are harmful to the people and the planet. Although one of the most significant food concepts in Islam is the permissibility of food (halal or haram), food systems that are just and equitable go far beyond food just being halal. Concepts like Israf (corruption) and Tabzir (waste) are discussed in Islam, where society is guided against waste, superfluous spending and not meeting basic necessities for others (Qur’an 7:31, 17:27). Here we discuss other aspects of the food system prior to actual consumption.

A. Growing, Harvesting and Employee Rights

Islam acknowledges that every human being has rights that must be upheld and respected. These rights were given to them by God. However, the drive for profit-making can become inconsistent with upholding human rights. Our current food systems rely on farm workers, but they face many human rights violations: unsafe working conditions, low wages, child labor and sexual violence^{28,29}.

Islamic principles of balance and justice would promote fairness in workplace conditions and contracts: fair wages and safe working conditions, respectful treatment of employees by employers and possibly even workforce sharing in profits³⁰.

²⁸ NFWM, ‘Issues Affecting Farm Workers’, *NFWM*, 2020, <http://nfwm.org/farm-workers/farm-worker-issues/>

²⁹ S, Khokia, ‘Silenced by status, farmers face rape, sexual abuse’, *NPR*, November 2013, <https://www.npr.org/2013/11/05/243219199/silenced-by-status-farm-workers-face-rape-sexual-abuse>

³⁰ K, Pfeifer. ‘Islam and Labor Law: Some Precepts and Examples’, in S, Bhedad and Nomani, F. (eds) *Islam and Everyday Life: Public Policy Dilemmas*. London: Routledge Press, 2006.

B. Processing, Machinery and Fossil fuels

Islamic principles of balance, justice and health are consistent with improving the manner by which food processing is performed, so that there is a reduction in pollution and fossil fuel consumption. Processing food on an industry and country level requires construction of appropriately equipped facilities and production laboratories that use electricity or fossil fuels to operate machinery. This is often performed with significant pollution and waste generation that ends up in landfills and waterways³¹. Many stabilizing chemicals or compounds added to processed foods are harmful to human health³². The same issues of labor force justice and safety concerns apply in processing as well.

C. Packaging, Materials and Disposal

Food packaging has increasingly become a major source of harmful pollution which affects human health and development, as well as that of every other living being that comes in contact with it. Most prevalent among food packaging materials are different types of plastics, cardboard, and many different types of glues, sealants, and adhesives. Plastic packaging is found polluting different environments: land, oceans, and inside animals, particularly as they degrade into small particles, called microplastics^{33,34}. Many chemicals leach out of plastics and disrupt the normal functions of animals' bodies. As an example, phthalates are a class of chemical compounds that are endocrine disruptors which scientific research has also linked to abnormal child brain development, not to speak of their impacts on other animals in the Earth's ecosystems³⁵. In fact, there is a very large body of scientific evidence condemning the effects of today's most popular packing materials on the environment and human development³⁶. Improving our food packaging system is consistent with Islamic principles of balance and health (Hadith, Nawawi 32).

D. Distribution and Marketing

Islamic principles promote justice and health, particularly when it comes to feeding the less privileged (Qur'an 36:47). Food distribution is a major component of equity within a food system. There is a prevailing culture where developed countries are involved in excess consumption, excess extraction of and exploitation of natural resources of other, less developed countries³⁷. Food distribution in societies governed by this culture leads to disadvantaged members of society living in food deserts (a form of food apartheid) with unhealthy, fast food available to them, which is driving many diseases and organ dysfunction³⁸. It is estimated that approximately 17% of global food production may go to waste³⁹, suggesting deficits in the

³¹ M, Denchack. 'Fossil Fuels: The Dirty Facts' *NRDC*, June 2018, <https://www.nrdc.org/stories/fossil-fuels-dirty-facts>

³² Harvard School of Public Health, 'Processed Foods and Health', HSPH Harvard, (n.d.)

<https://www.hsph.harvard.edu/nutritionsource/processed-foods/>

³³ Supply Chain Solution Center, 'Packaging Waste 101: the problem', *SCSC*, (n.d.)

<https://supplychain.edf.org/resources/sustainability-101-packaging-waste-the-problem/>

³⁴ L, Parker, 'Plastic pollution facts and information'. *National Geographic*, June 2019,

<https://www.nationalgeographic.com/environment/article/plastic-pollution>

³⁵ E, Diamanti-Kandarakis *et al.* 'Endocrine-disrupting chemicals: an Endocrine Society scientific statement'. *Endocrine Review*;30(4), 2004, pp, 293-342.

³⁶ RC, Thompson *et al.* 'Plastics, the environment and human health: current consensus and future trends'. *Philos Trans R Soc Lond B Biol Sci.* ;364(1526), 2009, pp. 2153-2166.

³⁷ Hickel, J. 'Aid in Reverse: How poor countries develop rich countries', *The Guardian*, January 2017,

<https://www.theguardian.com/global-development-professionals-network/2017/jan/14/aid-in-reverse-how-poor-countries-develop-rich-countries>

³⁸ Z, Bahadoran *et al.* 'Fast Food Pattern and Cardiometabolic Disorders: A Review of Current Studies'. *Health Promotion Perspectives*. 5(4), 2016, pp.231-240.

³⁹ N, Marchant. 'The world's food waste problem is bigger than we thought – here is what we can do about it'. *World Economic Forum*, March 2021, <https://www.weforum.org/agenda/2021/03/global-food-waste-solutions/>

equitable distribution of food. The marketing of food plays a major role in consumption patterns⁴⁰. If cheaper and unhealthier food is being marketed, that can lead to increased consumption and therefore negative health impacts. This is being witnessed in disadvantaged communities suffering from obesity in areas where marketing of fast foods and unhealthy food options is prevalent³⁰. The American Journal of Clinical Nutrition explored the science of ultra-processed foods and food addiction that might be contributing to overeating and obesity. In one study involving more than 500 people, they found that foods like pizza, chocolate, potato chips, ice cream, french fries, cheeseburgers and cookies, elicited “addictive-like” eating behaviors, intense cravings, like loss of control, inability to cut back despite experiencing harmful consequences and a wanting to strongly stop eating them⁴¹. The researchers in these studies argue that overeating is driven in part by the food industry marketing more than 20,000 new products every year. By abiding to Islamic principles of justice and health, we can ensure equitable food distribution and the promotion of healthy foods (Hadith, Nawawi 32; Qur’an, 17:35; Qur’an 2:279).

3. Consumption

O mankind! Eat the lawful and good things out of what is in the earth, and do not follow the footsteps of the shaytan; surely he is your open enemy. (Qur’an 2: 168)

“O you who have believed, eat from the good things which We have provided for you and be grateful to God if it is [indeed] Him that you worship. (Qur’an 2: 172)

And eat of what God has provided for you [which is] lawful and good. And fear God, in whom you are believers. (Qur’an 5: 88)

Those who follow the Messenger, the unlettered prophet, whom they find written in what they have of the Torah and the Gospel, who enjoins upon them what is right and forbids them what is wrong and makes lawful for them the good things and prohibits for them the impure things and relieves them of their burden and the shackles which were upon them. So they who have believed in him, honored him, supported him and followed the light which was sent down with him – it is those who will be the successful. (Qur’an 7: 157)

Then eat of what God has provided for you [which is] lawful and good. And be grateful for the favour of God, if it is [indeed] Him that you worship. (Qur’an 16: 114)

As discussed, there are multiple factors involved in the production of our food. How we actually eat food also reflects our modern food systems. Food consumption has to go beyond eating halal and also focus on healthy foods, while eliminating overconsumption and waste. We have examples in the Qur’an and Sunnah of what foods to eat and how food should be treated and consumed.

A. The Importance of Tayyib, not just Halal

And We shaded you with clouds and sent down to you manna and quails, [saying], "Eat from the pure things with which We have provided you." And they wronged Us not - but they were [only] wronging themselves. (Qur’an 2:57)

⁴⁰ WD, Jerome, ‘The role of food culture and marketing activity in health disparities’, *Preventive Medicine*, Volume 55, Issue 5, 2012, pp. 382-386.

⁴¹ EM, Schulte *et al.*. ‘Which foods may be addictive? The roles of processing, fat content, and glycemic load’. *PLoS One*. 10(2) February, 2015. e0117959.

“Eat from the pure things which we have provided you”. And they wronged Us not, but they were [only] wronging themselves” (Qur’an 7:160)

“And eat of what God has provided for you [which is] lawful and pure And fear God, in whom you are believers.” (Qur’an 5:88)

Tayyib is a very comprehensive word that has an important place in the Qur’an and Sunnah. The word “*tayyib*” means to be pure, good, clean, wholesome, gentle, excellent, fair. The Qur’an references these types of foods: gourds (Qur’an 37:146), garlic, lentils, onions (Qur’an 2:61), figs, olives (Qur’an 95:1-4), dates, grapes (Qur’an 16:11), pomegranate (Qur’an 55:68), bananas (Qur’an 56:29-31), jujube (Qur’an 53:13-16). These foods are considered plant-based, and science is now revealing the numerous health benefits of a plant-based diet.⁴² These include weight loss, reducing inflammation and supporting the immune system, which all lead to improvements in health and a reduction in chronic medical illnesses. Organizations like the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) stress the importance of healthy diets, that include fruits and vegetables^{43,44}.

Much of our modern food system may have food that is legally Halal, but with all the processing to maintain shelf life, addition of preservatives, the unknown history of how the plant or animal was grown or raised, and how harvesting was conducted; it can be difficult to determine which is actually “*tayyib*.” This has implications for our health. The World Cancer Research Foundation (WCRF) highlights that the consumption of diets low in fiber, high in processed red meats, and high-nitrite diet have been associated with cancers of the colon, breast, and pancreas⁴⁵. The Middle East and North Africa have the second highest increase in diabetes globally – the number of people with the disease is projected to soar more than 95% by 2035⁴⁶.

The opposite of foods that are *tayyib* is an issue that has many social, economic and political influences. However, due to the emergency of the climate crisis, improving our food systems can no longer be political discussions. International bodies like the Intergovernmental Panel on Climate Change (IPCC) and the World Health Organization (WHO) promote the consumption of plant-based diets and decreasing the greenhouse gas emissions associated with agriculture and food processing and transport⁴⁷.

The food we consume can improve our health and promote balance in the larger environment; or it can lead to devastating health impacts and unsustainable environments for humans, animals and all beings in the natural world. Eating halal and *tayyib* foods promotes the Islamic principles of balance, justice and health for human beings and the planet.

⁴² H, Alexander. ‘5 benefits of a plant based diet’. *MDAnderson*, November 2019, <https://www.mdanderson.org/publications/focused-on-health/5-benefits-of-a-plant-based-diet.h20-1592991.html>

⁴³ ODPHP, ‘How to build a healthy eating pattern’, *Dietary Guideline for Americans 2015-2020 Eighth Edition*, December 2020, https://health.gov/sites/default/files/2019-10/DGA_Healthy-Eating-Pattern.pdf.

⁴⁴ WHO, ‘Healthy Diet’, *WHO*, April 2020, <https://www.who.int/news-room/fact-sheets/detail/healthy-diet>

⁴⁵ World Cancer Research Fund International. ‘Continuous Update Project Report: Diet, Nutrition, Physical Activity and Kidney Cancer’. 2015. <https://www.wcrf.org/sites/default/files/Kidney-Cancer-2015-Report.pdf>

⁴⁶ B, Abuvassin, and I, Laher. ‘Diabetes Epidemic Sweeping the Arab World.’ *World Journal of Diabetes*. 25;7 (8), 2016, pp. 165–74.

⁴⁷ JR. Porter, et al. ‘Food security and food production systems’, *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects*. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B et al. (eds.)]. Cambridge University Press, Cambridge, United Kingdom, 2014 pp. 485-533.

⁴⁷ GBD 2017 Diet Collaborators. ‘Health effects of dietary risks in 195 countries’, 1990–2017: A systematic analysis for the Global Burden of Disease Study 2017. *Lancet* 393(10184) pp,1958–1972. [https://doi.org/10.1016/S0140-6736\(19\)30041-8](https://doi.org/10.1016/S0140-6736(19)30041-8)

B. Waste avoidance

“Eat and drink but waste not by excess, for God loveth not the wasters.” (Qur’an 7:31)

Currently, food waste is an enormous problem as 40% of our food is wasted and sent to landfills. From an economic perspective, taking into account the amount that is wasted from growing, transporting, distributing and buying food that ends up being wasted, there is a minimum of 2 trillion dollars a year lost⁴⁸. Food waste contributes directly to environmental pollution and negative climate change impacts due to food waste in waste disposal sites being a major source of methane and other gases resulting from decomposition of organic matter. This food waste can also lead to diseases and animal populations that can be vectors of disease to often nearby human populations.

The irony of food waste is the simultaneous prevalence of hunger throughout the world. As we waste food, millions of people around the world suffer from malnourishment and starvation⁴⁹. It is projected that this will only worsen as extreme weather events lead to more drought, flooding of crops and variations in the economy⁴⁰.

One method to combat food waste is through composting. Composting consists of repurposing food waste so that organic matter in food waste decomposes such that it can improve soil quality⁵⁰. Composting can divert food waste from landfills and also serve as a workforce development tool. It can improve carbon uptake in the soil, improve agriculture crop yields, decrease the need for chemical fertilizers⁴².

During these times of climate change and struggling economies in the midst of COVID-19, we can learn again about the Islamic principles of balance and health. The Prophet (PBUH) said: ‘The child of Adam has not filled any receptacle worse than his stomach. It is sufficient for the child of Adam to eat small bits of food that keep him healthy. Now if he wants to eat much anyway, he should give a third to the food, a third to the drink and a third (of his stomach) to let him breathe comfortably’ (Ahmad).

C. Impact of Etiquette

‘O Prophet of God, we eat but we never eat our full.’ He said: ‘It might be that you are eating separately.’ They replied: ‘Yes.’ Thereupon, the Prophet said: ‘Get together when you eat, and mention the Name of God (when you start eating), God will bless your food.’ (Abu Dawood)

There are examples in the Sunnah of how the Prophet (PBUH) not only ate food, but interacted with it: food etiquette. This involved certain duas recited prior to consuming food, the physicality of eating from what was nearest on the plate to the person, gratitude towards the food, eating with others to promote the concept of community. Rethinking how we interact with food can make us more aware of how we view our food systems.

⁴⁸ FAO, ‘Food Wastage Footprint Full-cost Accounting Report’, 2014. <http://www.fao.org/nr/sustainability/food-loss-and-waste/en/>.

⁴⁹ H, Kretchmer. ‘Global hunger fell for decades, but its rising again’, *World Economic Forum*, July 2020 <https://www.weforum.org/agenda/2020/07/global-hunger-rising-food-agriculture-organization-report/>

⁵⁰ US-EPA. ‘Reducing the impact of wasted food by feeding the soil and composting’ *United States Environmental Protection Agency*, (n.d.) <https://www.epa.gov/sustainable-management-food/reducing-impact-wasted-food-feeding-soil-and-composting>

D. Ramadan lessons

O believers! Fasting is prescribed for you—as it was for those before you—so perhaps you will become mindful of God. (Qur’an 2:183)

The purpose of Ramadan is to attain God-consciousness, but fasting also teaches self-discipline, self-restraint and empathy with the suffering of the poor and hungry. Ramadan provides a spiritual and physical opportunity to rethink how we interact with food, while abstaining from food or drink. We are reminded of how dependent we are on food as human beings and how food is a blessing from God. We are also reminded that we have a duty to feed the less privileged and the error in failing to do so is not consistent with belief, as illustrated in the Surah Ya Sin: And when it is said to them, ‘Spend from that which God has provided for you,’ those who disbelieve say to those who believe, ‘Should we feed one whom, if God had willed, He would have fed? You are not but in clear error.’” (Qur’an 36:47).

More research is revealing the health benefits of fasting, such as decrease in inflammation, improvements in chronic health illnesses like heart disease and diabetes⁵¹. There is much that the Qur’an and Sunnah spiritually teach us about respecting food that science helps us to understand from a physical perspective.

Conclusion

Our Islamic religious traditions have a great deal to offer the world in the 21st century, if we take the time to reflect upon them. God describes our blessing, so we may be grateful. We as Muslims can show our gratitude by protecting our planet and our bodies, and it all starts with food.

By building a food system that is regenerative and restorative, we can restore our planet, build resilient communities, and most importantly, provide the planet with real tayyib foods that can address the obesity epidemic, chronic illness and hunger issues. When we eat real tayyib foods and eat less meat or meat that is grass-fed, we are respecting the Earth that is a gift to us and respecting our bodies with which we have a covenant with the Creator. By limiting food waste, we can save trillions of wasted dollars that can be redirected to solve problems like social injustice, poverty, chronic disease, violence, lack of education and even reverse climate change. When we view our food not only as a right but as a responsibility and part of a larger food system, we can focus more on reusable packaging, avoiding single-use plastics, using our purchasing power for positive change and supporting local agriculture and farmworkers’ rights. All these concepts are consistent with Islamic principles of balance, justice and health. We can bring balance and health to our spiritual, physical and social lives and justice to all beings oppressed by our current food systems by reminding us to share our blessings and act responsibly for the sake of God.

⁵¹ NIH, ‘Research on intermittent fasting shows health benefits’, *National Institute on Aging*, February 2020, <https://www.nia.nih.gov/news/research-intermittent-fasting-shows-health-benefits>

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