

Prophet Medicine and Modern Medicine: A Structured Review of Bioactive Health Practices

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Abstract

Background:

Prophetic medicine encompasses health-related guidance derived from the Qur'an and the teachings of Prophet Muḥammad (PBUH) concerning nutrition, hygiene, disease prevention, and balanced living. Although articulated more than fourteen centuries ago in a pre-scientific context, many of these recommendations reflect principles that modern biomedical science now recognizes as central to preventive medicine and lifestyle-based health promotion.

Objective:

This review examines selected health practices emphasized in Prophetic teachings and evaluates their concordance with contemporary biomedical evidence, with the aim of illustrating the relevance of these teachings to modern medicine.

Methods:

A structured narrative review was undertaken integrating classical Islamic sources (Qur'an and authenticated ḥadīth literature) with contemporary biomedical research from peer-reviewed journals. Key domains examined include intermittent fasting, natural therapeutic foods (honey, *Nigella sativa*, dates, olive oil, and whole grains), oral hygiene with *Salvadora persica* (miswak), sleep hygiene and circadian regulation, midday napping (qaylūlah), abstinence from alcohol, and public health measures including quarantine, sanitation, and hand hygiene.

Results:

Accumulating scientific evidence supports many of these traditional practices. Intermittent fasting improves metabolic regulation, insulin sensitivity, inflammatory pathways, and cellular repair mechanisms such as autophagy. Natural products emphasized in Prophetic traditions contain bioactive compounds with antioxidant, antimicrobial, anti-inflammatory, cardiometabolic, and neuroprotective properties. Practices such as sleeping in darkness and midday napping demonstrate benefits for circadian rhythm regulation, cognitive function, and cardiovascular risk reduction. Additionally, Prophetic teachings on hygiene, quarantine, and sanitation closely parallel modern infection-control principles fundamental to public health.

Conclusion:

The convergence between Prophetic guidance and contemporary biomedical research highlights the enduring relevance of Islamic health teachings. These findings suggest that Prophetic medicine offers a historically rooted framework for preventive healthcare that complements modern scientific understanding and supports a holistic model integrating physical, spiritual, and public health dimensions.

In the recent past the world has been hit by pandemics like corona virus disease 2019 (COVID-19), Monkeypox and epidemics like Ebola Virus Disease (EVD) Marburg among others in different parts of the world. It has also been observed that employing public health measures specifically disease prevention and Health Promotion are fundamental pillars in preventing, controlling and managing these global threats. Integrating religious teachings and practices, particularly Islamic principles, offers a culturally rooted and spiritually meaningful pathway to advancing these public health strategies. This paper explores and presents how Islamic teachings, principles and practices—derived from the Qur'an and Sunnah—align with and enhance disease prevention and health promotion across primary, secondary, and tertiary levels. It also highlights practical health-related behaviors advocated for in Islam, including hygiene, nutrition, sexual conduct, and spiritual wellness, and their application in controlling preventing and responding to epidemics communicable and non-communicable diseases. A call to action is made for Muslim medical professionals to integrate Islamic teachings, guidance and practices into public health and medical teaching and practice in the training of health care professionals. More scientific research studies should be done to align prophetic medicine (Twibb a Nabbaw) with modern scientific medical knowledge. Further research should explore behavioral outcomes from faith-based health education programs and assess their effectiveness across populations.

Introduction

Prophetic medicine refers to the collection of health-related teachings attributed to Prophet Muḥammad (PBUH) concerning illness, prevention, nutrition, hygiene, and healthy living. These teachings, preserved primarily in the corpus of *ḥadīth* literature, represent a unique intersection between spiritual guidance and practical recommendations for maintaining physical well-being.

Prophet medicine laid the foundation for many aspects of preventive medicine, ideas of diet, and environmental health; matters that are pertinent in the current era.¹

It is important to distinguish Prophetic medicine from the broader tradition of Islamic medicine. While Islamic medicine evolved as a sophisticated scientific discipline developed by Muslim physicians such as Al-Rāzī, Ibn Sīnā, and Al-Zahrāwī during the classical Islamic civilization, Prophetic medicine specifically refers to health guidance conveyed directly through the sayings and practices of the Prophet (PBUH). These teachings formed an early ethical and preventive framework that influenced later Muslim medical scholarship and public health thinking.

From the earliest centuries of Islam, scholars recognized the medical significance of these teachings and dedicated entire sections of their works to health-related narrations.

The resulting literary genre, known as *al-ṭibb al-nabawī* (Prophetic medicine), began to emerge in the third Islamic century. One of the earliest known treatises in this genre was written by the Andalusian scholar Abd al-Malik ibn Ḥabīb (d. 853 CE), followed later by notable compilations such as those by Ibn al-Qayyim al-Jawziyyah and others.² These works preserved numerous prophetic teachings addressing diet, hygiene, disease prevention, and environmental health.

The Prophet (PBUH) is reported to have said: “Make use of medical treatment, for Allah has not made a disease without appointing a remedy for it, except one disease, namely old age”.³ This statement reflects an early encouragement of medical treatment and scientific inquiry while affirming the concept that illness is neither arbitrary nor beyond investigation. Such teachings fostered an intellectual environment within early Islamic civilization that encouraged the pursuit of medical knowledge, clinical observation, and pharmacological discovery.

A question often raised in discussions of Prophetic medicine concerns whether these teachings constitute divine revelation (*wahy*) or personal guidance based on the knowledge and practices of the time. Classical Islamic scholarship generally distinguishes between matters of pure religious legislation and matters related to worldly experience. Many scholars hold that health-

related guidance conveyed by the Prophet (PBUH) was inspired by divine wisdom, while some scholars (such as Ibn Khaldun) argued that the Prophet's medical advice was based on the prevailing knowledge of his time and culture, rather than being part of the divine message.

The present review provides a structured, interdisciplinary analysis of several key Prophetic health practices and evaluating their concordance with modern scientific findings. By synthesizing classical Islamic sources with contemporary biomedical research, this work highlights the remarkable alignment between Prophetic teachings and current concepts in preventive medicine, nutrition science, circadian biology, and public health. The novelty of this study lies in its integrative approach, demonstrating that many principles articulated in the Prophetic tradition anticipate modern scientific insights into disease prevention and health promotion. Such a perspective not only enriches the understanding of Prophetic medicine but also offers a culturally meaningful framework for integrating faith-informed health practices into contemporary medical discourse.

Intermittent Fasting:

Fasting holds a central place in Prophetic teaching. The Qur'an commands, "*Fasting has been prescribed for you as it was prescribed for those before you, that you may attain taqwā.*" (Q 2:183). The Prophet (PBUH) further emphasized, "*Fast and you will become healthy.*"⁴

The Prophet loved to be in a state of fasting when his deeds were presented on Mondays and Thursdays, so Muslims are encouraged to fast on these days as well. The Prophet also advised fasting on the 13th, 14th, and 15th of each lunar month (known as the White Days or Ayyam al-Bid), though fasting any three days is acceptable. The Prophet was asked which deed is best, to which he replied, "Take to fasting, for there is nothing equal to it"⁵

Contemporary biomedical evidence strongly corroborates these assertions. Intermittent fasting has recently become a topic -in- focus worldwide, since it has been shown to improve health, enhance metabolic process, and slow the progression of several illnesses. Numerous studies demonstrate that intermittent fasting improves insulin sensitivity, reduces inflammatory cytokines, enhances autophagy, and promotes cardiovascular resilience.⁶ Evidence is accumulating that eating in 6 hours and fasting for 18 hours can trigger a metabolic switch from glucose-based to ketone-based energy with increased stress resistance, increased longevity, and

decreased incidence of diseases, including cancer and obesity.⁷ Fasting twice a week is not only a tradition of the Prophet, but is shown to be a healthy routine for the body.

Ramadan intermittent fasting (RIF) presents a unique model due to its structured, religiously mandated practice, which involves daily fasting from dawn to sunset for a month. Despite extensive research on fasting, RIF offers distinct insights due to its periodic dry fasting nature, which differentiates it from water-based intermittent fasting protocols. One of the most significant findings is the role of RIF in enhancing metabolic health, characterized by favorable changes in glucose homeostasis, lipid metabolism, and body composition. Studies have demonstrated that fasting-induced metabolic shifts can be leveraged to manage conditions such as diabetes, obesity, and cardiovascular disease; however, individual variability necessitates further exploration.⁸

During Ramadan, fasting helps the body control glucose levels, break down fats, and become more sensitive to insulin. It also induces autophagy, a process that helps cells recycle damaged parts and repair tissue, which are both linked to living longer and preventing disease. Fasting impacts the immune system by lowering pro-inflammatory cytokines and boosting antioxidant defenses. These effects may help the immune system work better and lower oxidative stress.⁹ Beyond biological benefits, fasting enhances psychological resilience, mindfulness, and empathy, fostering stronger family and community bonds. The Prophet (PBUH) said: "Fasting is a shield".¹⁰ The Hadith emphasizes that fasting is a comprehensive form of protection for both the body and the soul.

Honey:

Honey occupies a distinguished position in both the Qur'an and Sunnah as a symbol of divine healing. The Qur'an declares: "There emerges from their bellies a drink, varying in colors, wherein is healing for mankind." (*Sūrat al-Nahl* 16:69)

The Prophet Muhammad (PBUH) reaffirmed this divine wisdom, saying: "Healing is in three things: a drink of honey, cupping, and cauterization but I forbid cauterization."¹¹ The Qur'anic verse describing honey as "a cure for mankind" and the Prophet's emphasis on its healing virtues have been substantiated through modern biochemistry, clinical trials, and global medical practice. Honey is recently described as a multivitamin tonic enriched with antimicrobial, antioxidant, cough-

preventing, hepato-protective, wound-healing, and immune-modulating properties.¹²

Honey has gained increasing recognition for its potent antimicrobial properties, particularly against antibiotic-resistant pathogens such as Methicillin-resistant *Staphylococcus aureus* and *Pseudomonas aeruginosa*. The antimicrobial action of honey is multifactorial, involving hydrogen peroxide production, phenolic compounds, high sugar concentrations, and the presence of bee defensin-1.¹³ Moreover, honey's ability to improve wound healing, reduce inflammation, and promote tissue regeneration highlights its broad therapeutic profile. As antibiotic resistance continues to challenge modern healthcare, honey offers a promising complementary treatment in antimicrobial therapy.¹³ Honey has been shown to be effective in the treatment of a broad range of wound types, including leg ulcers, traumatic boils, varicose ulcers, and abdominal wounds, septic and surgical wounds.¹⁴ However, further clinical studies are warranted.

Recent scientific research has focused on its antioxidant capacity, which is linked to a variety of bioactive compounds such as phenolic acids, enzymes (e.g., glucose oxidase, catalase), flavonoids, ascorbic acid, carotenoids, and amino acids. Together, these components work synergistically to neutralize free radicals, regulate antioxidant enzyme activity, and reduce oxidative stress.¹⁵ Honey may exhibit neuroprotective properties by attenuating oxidative stress, alleviating neuroinflammation, and enhancing neuronal survival and regeneration. However, more research is warranted to clarify the specific compounds responsible for their neuroprotective effects.¹⁶

Experimental studies have also demonstrated that honey plays a significant role in tumor inhibition through the suppression of angiogenesis, cell cycle, and induction of apoptotic pathways. Despite promising data, issues remain about standardizing its active components, pharmacokinetics, and lack of large-scale human trials.¹⁷ In his review, Kmail supports honey's incorporation into evidence-based oncology paradigms pending additional robust validation.¹⁷

Although Manuka honey gained early prominence, multiple studies confirm that therapeutic efficacy extends to other natural honeys, including Saudi Sidr, Turkish pine, and German acacia honey. The biological potency of each variety depends on floral origin, geographical environment, and phytochemical composition, particularly phenolic and flavonoid profiles.^{13,18} However, comprehensive clinical studies are needed to

fully investigate the potential health benefits of honey, including its efficacies, safety, bioavailability, and underlying mechanisms of action.¹⁹

Nigella sativa (Black Seed, black cumin):

Among the most comprehensive statements of Prophetic medicine is the *ḥadīth* concerning the black seed (*Nigella sativa* L.) (NS), in which the Prophet (PBUH) said: "This black seed is a healing for every disease, except Death."²⁰ The Prophetic statement that the black seed is "a healing for every disease except death" should not be interpreted as a literal negation of medical science. Classical Muslim scholars emphasized that such universal expressions in Arabic denote generality within a specific context, not absolute comprehensiveness. The phrase "every disease" thus refers to categories of treatable ailments, not an unqualified eradication of all illnesses. A similar linguistic principle is found in the Qur'ānic verse: "[The wind] destroyed everything by the command of its Lord, so they became such that nothing was seen except their dwellings." (*Sūrat al-Aḥqāf* 46:25). The expression "destroyed everything" clearly does not signify the annihilation of all existence, as the verse itself continues: "so nothing was seen except their dwellings." Analogously, the Prophetic expression concerning the black seed denotes its broad therapeutic efficacy within the scope of human physiology and divine causation.

In recent years, advances in pharmacology have revealed a diverse array of bioactive compounds within *Nigella sativa*, such as thymoquinone, p-cymene, α -thujene, longifolene, β -pinene, α -pinene, and carvacrol. The bioactive component thymoquinone is responsible for the pleiotropic pharmacological properties of the seeds, including antioxidant, anti-inflammatory, anti-hypertensive, anti-hepatotoxic, hypoglycemic, and lipid-lowering properties. *N. sativa* influences immune cells by modulating their parameters such as the ability to produce cytokines or nitric oxide, phagocytic and cytotoxic activity both in vivo and in vitro. By modulating the NF- κ B and Nrf2 pathway, core regulators of inflammation and oxidative stress, *Nigella sativa* addresses the fundamental biological "drivers" common to many chronic diseases.^{21,22} A recent meta-analysis showed that *N. sativa* significantly reduced the risk of all-cause mortality in patients with COVID-19 compared to the control group (RR 0.27).²³ *Nigella sativa* has been incorporated in some prevention and treatment protocols for Covid-19 patients.²⁴ *N. sativa* supplementation may also provide additional benefits for the treatment of asthma.²⁵ However, there is a need for more extensive research and clinical trials with clearly established

objectives so that the mechanism of action of the active substances in NS is much better understood.²⁶

Date Palm:

Dates (*Phoenix dactylifera L.*) occupy a unique position in Islamic tradition, being explicitly praised in both the Qur'an and the Prophetic Sunnah. Among the various cultivars, 'Ajwah, a variety native to al-Madīnah al-Munawwarah, holds special distinction. The Prophet Muhammad (PBUH) stated: "Whoever eats seven Ajwah dates in the morning will not be harmed by poison or magic that day."²⁷

While the metaphysical dimensions, protection from "poison or magic", remain beyond laboratory verification, the observable biological mechanisms provide a rational framework by which divine wisdom manifests in the material world. Dates contain anthocyanins, phenolics, sterols, carotenoids, and flavonoids.²⁸ Their reported metabolic activities include anti-inflammatory, antioxidant, antihypertensive, antihyperlipidemic, antitumor, hepatoprotective, antibacterial, and antiviral effects.²⁹

Notably, the polysaccharides in dates exhibit prebiotic properties, supporting beneficial gut microbiota. Dates promote the growth of helpful bacteria, including *Bifidobacterium* and *Lactobacillus*, which enhance intestinal health, improve barrier function, and increase the production of short-chain fatty acids.³⁰ Date palm may confer neuroprotective effects through antioxidant, anti-inflammatory, and anti-apoptotic pathways, with potential implications for neurodegenerative disorders such as Alzheimer's and Parkinson's disease.³¹

Research on Ajwa dates effects in cancer has gained significant momentum, primarily through invitro (cell culture) and in vivo (animal) studies. While clinical trials in humans are still limited, the existing evidence suggests that Ajwa dates may combat cancer cells.³² While these results are promising, most research has been conducted in laboratories or on animals. Ajwa dates should be viewed as a complementary dietary choice and not a replacement for conventional medical treatments like chemotherapy or surgery.

A meta-analysis of 16 clinical trials demonstrated that consuming approximately seven dates daily (~80 g) for 2–4 weeks before delivery was associated with improved cervical dilation, stronger uterine contractions, and a reduced need for labor induction.³³

Date palm is a precious source of bioactive ingredients that could be utilized for development of nutraceuticals for protection and treatment of different chronic diseases. However, further prospective clinical studies are required to confirm such health benefits and the underlying mechanisms of action.³⁴

Olive oil

Remarkably, more than fourteen centuries earlier, the Prophet Muhammad (PBUH) said:

*"Eat olive oil and anoint yourselves with it, for it comes from a blessed tree."*³⁵ The verse, "And [We produced] the tree that emerges from Mount Sinai which produces oil and is a condiment for those who eat" (Qur'an 23:20), likewise affirms this blessing.

For decades, dietary guidelines focused heavily on reducing total fat intake, assuming that all fats were harmful to the heart. Olive oil, being 100% fat, was frequently restricted along with saturated fats. The PREDIMED Trial showed that a Mediterranean diet supplemented with extra-virgin olive oil reduced the incidence of major cardiovascular events by roughly 30% in high-risk individuals.³⁶ Regular consumption of Extra Virgin Olive Oil (EVOO) has been linked to a significant reduction in major cardiovascular events. This protective effect is attributed to its high content of monounsaturated fatty acids (MUFAs) and its abundance of bioactive compounds, particularly polyphenols like hydroxytyrosol, oleocanthal and oleuropein.^{37,38} These compounds collectively exert antioxidant, anti-inflammatory, vasodilatory, and lipid-modulating effects. Numerous clinical and preclinical studies have demonstrated that EVOO's properties reduce major modifiable cardiovascular risk factors, including hypertension, dyslipidemia, obesity, and type 2 diabetes.³⁹

Olive oil has been shown to have the potential to regulate gene expression and modulate pathways involved in cell proliferation. However, despite growing evidence on the anticancer effects of olive oil polyphenols the precise molecular mechanisms underlying their effects remain poorly understood. Most current studies are preclinical, with limited clinical trials confirming efficacy in humans.⁴⁰

EVOO is a promising dietary strategy for managing Metabolic dysfunction-associated steatosis liver disease (MASLD), due to its hepato-protective effects.⁴¹ Higher consumption of virgin olive oil was associated with cognitive preservation, possibly mediated by favorable

alterations in gut microbiota composition.⁴²Promoting regular EVOO consumption within the Mediterranean diet could represent a simple and sustainable public health strategy to support healthy aging.⁴³

In the second part of the Hadith (*and anoint yourselves with it*), the Prophet encouraged "massaging" with olive oil. A recent systematic review indicated that olive oil has a wide range of potential therapeutic uses for skin, including wound healing, dermatitis management, prevention and treatment of pressure ulcers and skin cancers, improvement of epidermal barrier function, relief from pruritus, and reduction of friction between the skin and personal protective equipment.⁴⁴Additional research should be done to ensure that the use of o as a therapeutic agent will be beneficial to patients before being implemented for use to treat a multitude of conditions. The use of olive oil has the potential to improve the outcomes and experiences of numerous dermatological patients soon.⁴⁴The Prophetic encouragement to use this oil internally and externally aligns with modern nutritional and dermatological evidence supporting it as a "superfood" with several health properties.

Wheat Bran:

The twentieth-century surgeon Denis Burkitt often called "*the Fiber Man*" established the "dietary-fiber hypothesis," linking low-fiber Western diets to rising rates of colon cancer, diverticulosis, diabetes, and ischemic heart disease. He proposed that diets low in fiber increase the risk of CHD, obesity, diabetes, dental caries, various vascular disorders and large bowel conditions such as cancer, appendicitis and diverticulosis. His observations of African populations consuming unrefined grains revolutionized nutritional epidemiology.⁴⁵

Contemporary studies confirm and expand Burkitt's thesis, positioning wheat bran as a functional food with multiple physiological benefits. Consuming whole grains (processed cereal grains containing all the bran, germ and endosperm), and whole-grain foods such as bread, porridge and pasta made from them, is now universally recognized as beneficial for health.⁴⁶

Long before the concept of dietary fiber entered scientific discourse, the Prophet Muhammad (PBUH) exemplified a diet centered on whole, unrefined grains. *Sahl ibn Sa'd* reported:

"Allah's Messenger (PBUH) never saw white flour since Allah sent him as an Apostle till He took him unto Him". When asked if sieves were used at that time, he replied, "Allah's Messenger (PBUH) never saw a sieve since Allah sent him as an Apostle until He took him unto Him."⁴⁷

This narration reflects a profound nutritional insight: the Prophet's household bread retained its bran and germ, providing natural fiber and essential micronutrients. What was once ordinary sustenance has become, in modern research, a cornerstone of gastrointestinal, metabolic, and cardiovascular health.

Lifestyle

The lifestyle that the Prophet adopted goes along with current heart-healthy best practices throughout the practice of spiritual activities, eating food in moderation, performing regular exercise, and avoiding forbidden drinks and foods.^{48,49}The habit of overeating is strongly disliked in the Qur'an. "Eat and drink but be not excessive. Indeed, He does not like those who commit excess." (Quran 7:31). The prophet strongly advises his followers to fill one-third of the stomach with food, the second third for drink, and to leave the last third empty. "A human being fills no worse vessel than his stomach. It is sufficient for a human being to eat a few mouthfuls to keep his spine straight. But if he must (fill it), then one-third of food, one third for drink and one third for air".⁵⁰

The Prophet emphasized moderation in every aspect of life. When the Prophet was told that one of his companions had been fasting all day and praying all night, he strongly disliked this behavior and said: Fast and break your fast, pray during the night, and then sleep. Verify, your body has a right over you".⁵¹

Alcohol

In classical Islamic jurisprudence, alcohol is strictly forbidden. The Prophet Muhammad (PBUH) stated "Whatever intoxicates is forbidden; and a little of it is forbidden too".⁵²This dictum reflects a comprehensive preventive stance, prohibiting not only excess, but also minimal consumption, thereby avoiding the harm associated with any degree of intoxication.

For decades, some Western studies suggested that modest alcohol consumption, particularly red wine, might confer cardiovascular benefits. Contrary to common belief, accumulating evidence shows that alcohol is not beneficial for cardiovascular and cerebrovascular health. It elevates risk of hypertensive heart disease,

cardiomyopathy, atrial fibrillation, and stroke. Even in small quantities, alcohol consumption can raise cancer risk due to acetaldehyde, a carcinogenic ethanol metabolite.”⁵³

In 2023, the WHO released a definitive statement declaring that "no level of alcohol consumption is safe for our health". The WHO notes that the risk of developing cancer starts from the first drop of any alcoholic beverage.⁵⁴

In early 2025, the U.S. Surgeon General issued a pivotal advisory specifically linking alcohol to cancer risk. The advisory states that alcohol is a causal factor for at least seven types of cancer. It highlights that for some cancers particularly breast, mouth, and throat cancer, the risk begins to increase at one drink or fewer per day.⁵⁵ Taken together, this mounting evidence supports the conclusion that even low-level alcohol use carries significant health risks, undermining earlier claims of “cardio-protection.”

Sleeping in darkness

Prophetic teachings emphasize the importance of sleeping in darkness, reflecting a profound harmony between spiritual practice and physiological balance. The Prophet Muḥammad (PBUH) instructed believers to extinguish lights before sleep. The Prophet said: “When you intend going to bed at night, put out the lights...”⁵⁶

Some narrations provide a specific reason for this command (preventing fire). One night a house in Medina was burnt with its occupants. The Prophet (PBUH) spoke about them, saying, "This fire is indeed your enemy, so whenever you go to bed, put it out to protect yourselves."⁵⁷ Other narrations give a broader instruction for the end of the day that include extinguishing lights, but also covering food and closing doors "Extinguish the lamps when you go to bed, close the doors, tie the water skins, and cover the food and drink..."⁵⁸

Contemporary evidence demonstrates that artificial light at night (ALAN) is a significant environmental factor with negative effects on human health. ALAN disrupts the circadian rhythm, mainly by suppressing melatonin, leading to endocrine and metabolic disorders.⁵⁹ Emerging epidemiological evidence links night-time light pollution to the development of cardiovascular risk factors, including hypertension, obesity, diabetes, and atherosclerosis, as well as overt cardiovascular disease.⁵⁹ Chronic ALAN exposure also alters gut microbiota composition and increases intestinal

permeability, suggesting a light-gut-liver axis in MASLD pathogenesis.⁶⁰

Light at night disrupts circadian rhythms, and circadian disruption is a risk factor for type 2 diabetes. A prospective study of 85,000 UK Biobank participants found that higher levels of ALAN are associated with a significantly increased risk of developing type 2 diabetes by up to 50%. Avoidance of light at night could be a simple and cost-effective recommendation that mitigates risk of diabetes, even in those with high genetic risk.⁶¹

Exposure to artificial light at night, particularly blue light, is associated with an increased risk of certain cancers, notably breast, prostate, and thyroid cancers, due to the suppression of melatonin and disruption of circadian rhythms.⁶²

A meta-analysis conducted with ten studies (691,851 participants) revealed that compared to participants with low or no ALAN exposure, those in the highest exposure group had a 27 % higher risk for sleep disturbance (Pooled PR: 1.27 [1.12; 1.45]). However, current research is still limited by methodological challenges.⁶³

This convergence between Prophetic instruction and biomedical findings highlights the timeless wisdom of aligning human behavior with natural cycles of light and darkness, a principle echoed in the Qur’ānic verse: “And We made the night as a covering (garment)” (*wa-ja’alnā al-layl libāsā*, Q 78:10). The choice of the word *libās* (garment) is particularly striking because a garment is intimate; it touches the skin and provides comfort. It suggests that the night isn't just a period of time, but a functional tool designed for human well-being. The absence of light triggers the pineal gland to release melatonin, the hormone responsible for signaling the body to repair itself.⁶⁴

Midday Napping:

More than fourteen centuries ago, the Prophet Muhammad (PBUH) advised his followers to take a midday nap, saying: “Take the noon nap, for the Shayṭān (Devil) does not nap.”⁶⁵

This prophetic recommendation, known as *qaylūlah*, has gained increasing scientific support in recent years. Neuroscience reveals that midday napping improves memory, enhances alertness, boosts wakefulness and performance, and recovers certain qualities of lost night sleep.⁶⁶

The cardiovascular benefits of this practice have been shown in large-scale epidemiological studies. In a Greek cohort of 23,681 adults followed over six years, regular midday nappers exhibited a 37% lower risk of cardiac mortality compared with non-nappers.⁶⁷ The Lausanne Study followed 3,462 subjects. It concluded that individuals who nap 1–2 times weekly have a 48% lower risk of incident cardiovascular disease events compared to non-nappers.⁶⁸

Similarly, a case–control study involving 206 participants found that regular siesta significantly reduced the risk of ischemic stroke (OR 0.58, $p = 0.031$), concluding that habitual midday napping was independently associated with a lower incidence of ischemic stroke.⁶⁹

What the Prophet (PBUH) recommended as a simple act of rest and balance is now recognized by neuroscience and epidemiology as a practice that enhances mental performance and protects cardiovascular health.

Siwak (*Salvadora persica*)

The Prophet placed profound emphasis on oral cleanliness as part of faith and daily worship. He said: “The Miswak cleanses and purifies the mouth and pleases Allah.”⁷⁰

He also stated: “Had I not thought it difficult for my Ummah, I would have commanded them to use the Miswak before every Salat.”⁷¹

The Prophet (PBUH) was known to use the miswak at every prayer, upon waking, entering the house, or before reciting Qur’an, emphasizing consistency rather than force. Aisha narrated: “Whenever Allah's Messenger entered his house, he used Miswak first of all.”⁷²

Hudhaifa narrated: “Whenever the Messenger of Allah got up (from sleep), he would rub his teeth with Miswak.”⁷³

Siwak’s effectiveness is attributed to a combination of mechanical cleansing (fibrous brush-like action) and bioactive chemical constituents. Compounds identified in *S. persica* include benzyl isothiocyanate, alkaloids, essential oils, silica, bicarbonate, fluoride, sulfated compounds, and other phytochemicals, many of which exhibit antimicrobial, antifungal, anti-inflammatory, and antiseptic properties. These constituents may inhibit cariogenic bacteria, reduce plaque formation, enhance saliva secretion, thereby increasing buffering capacity, and contribute to oral-microenvironment homeostasis.

The positive effects of miswak include an anti-plaque, anti-gingivitis, anti-cariogenic, promotion of gingival wound healing, whitening properties, orthodontic chain preservation, and biocompatibility with oral cells.⁷⁴

The lack of standardized miswak usage techniques contributed to variable outcomes across studies. As such, future work on safe and effective siwak practice is to be advocated among its users. Most studies focus on short-term outcomes (weeks to months); high-quality long-term data (years) on periodontal health, tooth integrity, and effects on subgingival microbiota remain limited.⁷⁵

Prevention of spread of communicable disease

Decades before discovering microorganism’s theory behind disease, the foundation of controlling the expansion of infectious diseases was laid down by the Prophet Muhammad in his sayings, both at an individual level and the society at large. He strongly advocated quarantine in the era of plague and this is practiced by his companions. The Prophet advised his companions that “If you become aware of a plague in a land, do not enter that land; and if you were therein, stay there and do not get out (and thus spread it elsewhere).”⁷⁶ Based on this hadith, Muslims considered adherence to precautions and vigilance against epidemics as the command of God.⁷⁷ Similar practices of isolation in response to the COVID-19 pandemic were adopted worldwide. This concept of home quarantine was introduced by the Prophet when little was known about the way of controlling the spread of communicable disease.

Hygiene:

Hand washing:

The Prophet sanctioned washing hands before and immediately after a meal. He said, “The blessing of food is the washing of hands before it, and the washing of hands after it.”⁷⁸

Despite the established efficacy of hand hygiene in mitigating infectious disease transmission for over a century, its implementation as a consistent public health mandate has historically been intermittent, often oscillating with the emergence of pandemic-scale threats. The early clinical advocacy for antiseptics is most notably associated with the Hungarian physician Ignaz Semmelweis (1818–1865). Semmelweis demonstrated that hand disinfection significantly reduced the incidence of puerperal fever; however, his findings were met with

substantial professional skepticism and institutional resistance. It was not until the Crimean War that Florence Nightingale (1820–1910) systematically integrated hygiene and handwashing protocols into military medical care. The subsequent application of these sanitary measures resulted in a dramatic reduction in mortality rates among wounded soldiers, which fell from 42% to 2%. This historical inflection point underscored the critical role of non-pharmacological interventions in infection control.^{79,80}

Islam preceded all these discoveries by centuries. Ablution (*wudu*) was made a prerequisite for prayer, and the Prophet Muhammad (PBUH) recommended washing hands upon waking, before and after meals, and five times a day.

Sanitation:

The Prophet strongly advised against micturition or defecation in water, under trees, or in public areas. He said: “Be on your guard against three things which provoke cursing: easing in the watering places, in the road, and the shade (of tree)”.⁸¹

Pollution with sewage or direct defecation near water and under trees is a source of water pollution leading to parasitic and bacterial infection. Approximately 1.5 billion people are infected with soil-borne parasitic worms worldwide.⁸² The Prophet’s teaching will help combat the spread of several infectious diseases caused by fecal contamination.

Seventy-nine countries are affected with schistosomiasis, with at least 253.7 million people required preventive treatment in 2024.⁸³ *Entamoeba histolytica* is a protozoan that causes intestinal amebiasis as well as extra-intestinal manifestations. Although 90 percent of *E. histolytica* infections are asymptomatic, nearly 50 million people become symptomatic, with about 100,000 deaths yearly.⁸⁴ Cholera and Hepatitis A are also other examples. If the Prophet’s recommendations are followed, millions of people would have been saved from contracting these diseases. These teachings not only highlight the importance of personal hygiene but also demonstrate a profound understanding of public health principles. By establishing clear guidelines for cleanliness and sanitation, the Prophet’s advice continues to be relevant in modern discussions about disease prevention and healthy living. Adopting such practices could significantly reduce the risk of infectious diseases and promote overall well-being in communities worldwide.

Limitations

Several limitations should be considered when interpreting the findings of this review. First, this study is primarily a narrative review integrating classical Islamic sources with contemporary biomedical literature rather than a systematic review or meta-analysis. As such, the selection of studies may not capture all available evidence related to the health practices discussed.

Second, many of the scientific studies evaluating natural substances highlighted in Prophetic teachings, such as honey, *Nigella sativa*, dates, and olive oil, are derived from experimental, observational, or preclinical research, with relatively fewer large-scale randomized controlled trials in humans. Consequently, while the biological plausibility and preliminary findings are promising, the strength of clinical evidence for some therapeutic claims remains limited.

Third, the interpretation of Prophetic statements within a biomedical framework requires careful contextualization. Prophetic teachings were primarily conveyed as ethical and lifestyle guidance rather than as technical medical prescriptions.

Finally, differences in study design, populations, and outcome measures across the biomedical literature make direct comparisons challenging. Future research, particularly well-designed clinical trials and interdisciplinary studies, may help clarify the mechanisms and clinical implications of many of these traditional health practices.

Conclusion

The health guidance contained in the teachings of Prophet Muhammad (PBUH) presents a comprehensive framework emphasizing prevention, moderation, hygiene, and balanced living. Although articulated more than fourteen centuries ago, many of these practices, including intermittent fasting, natural foods such as honey, *Nigella sativa*, dates, and olive oil, oral hygiene with miswak, adequate sleep, midday napping, and abstinence from alcohol, are increasingly supported by contemporary biomedical research. In addition, Prophetic recommendations regarding sanitation, hand hygiene, and quarantine closely parallel modern principles of public health and infection control. While further rigorous clinical research is needed to clarify mechanisms and therapeutic applications, the convergence between Prophetic guidance and modern scientific evidence highlights the enduring relevance of these teachings and

their potential contribution to preventive and holistic healthcare. The remarkable alignment between Prophetic teachings and contemporary scientific discoveries underscores the timeless wisdom embedded within these traditions and highlights their continuing relevance in guiding modern approaches to health, prevention, and holistic well-being.

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