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Prophetic Medicine (Al-Tibb al-Nabawi), Intermittent Fasting, and Circadian-Metabolic Synchronization: A Narrative Review of Cardiometabolic and Neuroendocrine Mechanisms

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Abstract

Modern cardiometabolic and neuroendocrine disorders are increasingly understood as pathologies of temporal disruption, driven by continuous caloric availability, nocturnal light exposure, and misalignment between central hypothalamic pacemakers and peripheral metabolic clocks. While contemporary chrononutrition and intermittent fasting (IF) regimens—such as early time-restricted eating (eTRE) and periodic 5:2 energy restriction—have emerged as leading clinical interventions to restore metabolic flexibility, their core temporal architectures remarkably mirror the traditional fasting and dietary practices codified in Prophetic Medicine (*Al-Tibb al-Nabawi*). This narrative review synthesizes mechanistic, clinical, and chronobiological evidence published between 2020 and 2026 examining how Prophetic fasting paradigms—specifically the diurnal fast of Ramadan (*Sawm*), voluntary bi-weekly Monday–Thursday fasts, the tri-monthly *Ayyam al-Bid* (White Days), and the alternate-day fast of Prophet Dawud—interact with molecular circadian clocks and neuroendocrine signaling. Specifically, it delineates how cyclical fasting and pre-dawn (*Suhoor*) feeding entrain peripheral oscillators in the liver, adipose tissue, and skeletal muscle via nutrient-sensing pathways (AMPK, SIRT1, mTOR, and NAMPT/NAD+) that directly modulate core clock transcription factors (BMAL1, CLOCK, PER, CRY). Furthermore, the review interrogates how Prophetic behavioral practices—including early sleep onset after *Isha*, pre-dawn awakening for *Tahajjud* and *Suhoor*, postprandial ambulation, and prophetic functional foods (*Phoenix dactylifera*, *Nigella sativa*, *Olea europaea*)—reinforce vagal tone, optimize diurnal cortisol and melatonin rhythmicity, and attenuate systemic oxidative stress. Critical paradoxes—most notably nocturnal overfeeding and delayed sleep phase during contemporary urbanized Ramadan

observance—are analyzed to distinguish authentic Prophetic circadian-metabolic alignment from culturally induced circadian misalignment.

Keywords: Prophetic medicine (*Al-Tibb al-Nabawi*); Intermittent fasting; Circadian-metabolic synchronization; Ramadan fasting; Chrononutrition; AMPK–SIRT1–BMAL1 axis; Neuroendocrine regulation; Cardiometabolic health

Introduction

Global epidemiology has undergone a profound paradigm shift in understanding the etiology of obesity, type 2 diabetes mellitus (T2DM), metabolic dysfunction-associated steatotic liver disease (MASLD), and atherosclerotic cardiovascular disease (Kivimäki et al., 2020; Magge et al., 2020). Beyond total caloric intake and macronutrient composition, the *temporal organization* of feeding, fasting, sleep, and physical activity across the 24-hour solar cycle has emerged as a primary determinant of cardiometabolic homeostasis (Chaix et al., 2019; Manoogian et al., 2022; Panda, 2019). Modern urban lifestyles—characterized by erratic eating windows extending late into the biological night, pervasive exposure to artificial light at night (ALAN), and chronic sleep restriction—induce **circadian misalignment**, uncoupling the light-entrained master pacemaker in the hypothalamic suprachiasmatic nucleus (SCN) from nutrient-entrained peripheral clocks in the liver, pancreas, skeletal muscle, and adipose tissue (Bumgarner et al., 2023; Chellappa et al., 2021; Mason et al., 2020).

To counteract this temporal pathology, contemporary biomedical science has advanced **chrononutrition** and **intermittent fasting (IF)**—including early time-restricted eating (eTRE), periodic fasting, and alternate-day fasting—as non-pharmacological strategies to restore metabolic switching, enhance insulin sensitivity, and resynchronize peripheral clock gene expression (de Cabo & Mattson, 2019; Sutton et al., 2018; Wilkinson et al., 2020). Yet, long before the discovery of molecular transcription–translation feedback loops (TTFLs), the medical and lifestyle corpus of **Prophetic Medicine (*Al-Tibb al-Nabawi*)**—derived from the traditions (*Sunnah*) of Prophet Muhammad (peace be upon him) and systematically compiled by classical polymaths such as Ibn Qayyim al-Jawziyya—prescribed structured, cyclical fasting regimens paired with disciplined sleep–wake hygiene, portion moderation, and targeted functional foods (Auda, 2021; Nazri & Ibrahim, 2024; Saeed et al., 2023).

Crucially, Prophetic Medicine does not isolate fasting as a purely caloric maneuver; rather, it embeds voluntary and obligatory fasting within a comprehensive **24-hour behavioral rhythm**. This includes waking prior to dawn (*Fajr*) for hydration and nutrient intake (*Suhoor*), abstaining from food and drink from dawn until sunset (*Maghrib*), breaking the fast promptly at dusk (*Iftar*) with low-glycemic dates (*Phoenix dactylifera*)

and water, avoiding late-night overeating, retiring shortly after the night prayer (*Isha*), and engaging in postprandial ambulatory movement (*Taraweeh* and brisk walking) (Al-Bar & Chamsi-Pasha, 2021; Faris et al., 2020; Jahrami et al., 2020). However, contemporary clinical studies of Ramadan fasting frequently yield heterogeneous cardiometabolic and neuroendocrine findings—a paradox driven largely by modern urbanized behaviors such as nocturnal feasting, refined sugar consumption, and severe sleep inversion (Faris et al., 2020; Lessan & Ali, 2019; Madkour et al., 2021).

This narrative review synthesizes mechanistic and clinical literature published between 2020 and 2026 to evaluate Prophetic intermittent fasting through the lens of modern circadian biology, neuroendocrinology, and cardiometabolic medicine. Specifically, this review addresses four core objectives: (1) mapping the diverse fasting typologies of *Al-Tibb al-Nabawi* onto contemporary chrononutrition models; (2) elucidating the intracellular nutrient-sensing pathways (AMPK, SIRT1, NAD+, mTOR) through which Prophetic fasting entrains core circadian clock proteins (BMAL1, CLOCK, PER, CRY); (3) examining neuroendocrine, autonomic, and cardiometabolic adaptations across HPA, SAM, adipokine, and gut–liver axes; and (4) resolving the clinical paradox between authentic Prophetic circadian alignment and modern urbanized Ramadan misalignment.

Typology of Prophetic Fasting Regimens and Chrononutritional Equivalents

Unlike unidimensional secular weight-loss diets that focus exclusively on energy deficits, Prophetic Medicine prescribes a graduated spectrum of fasting protocols varying in frequency, duration, and seasonal periodicity. Each regimen imposes distinct temporal boundary conditions on metabolic fuel switching and circadian clock entrainment (Faris et al., 2020; Jahrami et al., 2020; Patterson & Sears, 2017).

Prophetic Fasting Regimen (Al-Tibb al-Nabawi)	Temporal Structure & Frequency	Contemporary Chrononutrition Equivalent	Primary Metabolic & Circadian Mechanisms
Obligatory Ramadan Fast (*Sawm Ramadan*)	Daily dawn-to-sunset (*Fajr* to *Maghrib*) absolute abstinence from food and fluid (11–18 hr/day) for	Diurnal Dry Time-Restricted Eating (dTRE) with seasonal phase shift	Sustained hepatic glycogen depletion; ketone body elevation (β-hydroxybutyrate); autophagy induction;

Prophetic Fasting Regimen (Al-Tibb al-Nabawi)	Temporal Structure & Frequency	Contemporary Chrononutrition Equivalent	Primary Metabolic & Circadian Mechanisms
	29–30 consecutive days annually		circadian phase resetting when sleep is preserved
Bi-Weekly Voluntary Fast (*Monday & Thursday*)	Two non-consecutive dawn-to-sunset fasting days per week (Mondays and Thursdays) separated by 2–3 fed days	Periodic Intermittent Fasting (Modified 5:2 / Twice-Weekly TRE)	Recurrent activation of AMPK/SIRT1 without chronic adaptive metabolic slowdown; sustained insulin sensitization and hepatic lipid clearance
Tri-Monthly White Days (*Ayyam al-Bid*)	Three consecutive dawn-to-sunset fasting days per lunar month (13th, 14th, and 15th of each Hijri month)	Monthly Periodic Fasting-Mimicking Cycle (3-Day Monthly Pulse)	Periodic multi-day cellular autophagy, mitochondrial biogenesis, and reductions in systemic inflammatory cytokines (IL-6, hs-CRP)
Fast of Prophet Dawud (*Sawm Dawud*)	Alternating one day of dawn-to-sunset fasting with one day of normal diurnal feeding continuously	Alternate-Day Time-Restricted Fasting (ADF-TRE)	Maximal metabolic flexibility; continuous oscillation between anabolic (mTOR-driven) and catabolic/reparative (AMPK-driven) states
Prophetic	Dividing gastric	Caloric	Prevents postprandial

Prophetic Fasting Regimen (Al-Tibb al-Nabawi)	Temporal Structure & Frequency	Contemporary Chrononutrition Equivalent	Primary Metabolic & Circadian Mechanisms
Portion Rule (*Thuluth* Principle) & Early *Suhoor*	capacity into thirds (1/3 food, 1/3 water, 1/3 air); pre-dawn meal (*Suhoor*) prior to *Fajr*	Moderation + Early Morning Circadian Anchoring (eTRE)	gastric distension and endoplasmic reticulum stress; anchors peripheral hepatic/intestinal clocks to morning solar onset

Table 1. Comparative Architecture of Prophetic Fasting Paradigms and Contemporary Chrononutritional Models.

A critical distinction separates **Prophetic diurnal fasting** from popular secular **late time-restricted eating (lTRE)** protocols (such as skipping breakfast and eating from 12:00 PM to 8:00 PM). By mandating the pre-dawn meal (*Suhoor*) prior to solar twilight, Prophetic fasting preserves an **early-day nutrient anchor** that synchronizes gastrointestinal and hepatic peripheral clocks with the morning rise of the central SCN pacemaker (Chellappa et al., 2021; Manoogian et al., 2022). Furthermore, the prophetic injunction to break the fast immediately at sunset (*Ta'jil al-Iftar*) followed by nocturnal restraint avoids the prolonged late-night feeding windows that desynchronize peripheral organs during the biological night (Garaulet et al., 2020; Sutton et al., 2018).

Molecular Crosstalk: Entraining Peripheral Circadian Clocks via Fasting

At the molecular level, circadian rhythms are generated by an autoregulatory transcription–translation feedback loop (TTFL) present in nearly all nucleated cells. During the active biological day, the heterodimeric transcription factor complex **BMAL1:CLOCK** binds to E-box promoter elements to drive transcription of **Period (*PER1, PER2, PER3*)** and **Cryptochrome (*CRY1, CRY2*)** genes, alongside nuclear receptors **REV-ERBα/β** and **RORα/γ** (Hastings et al., 2019; Panda, 2019). As PER and CRY proteins accumulate in the cytoplasm, they translocate to the nucleus to inhibit BMAL1:CLOCK activity, establishing a self-sustaining ~24-hour oscillation that rhythmically governs up to 15% of the tissue-specific transcriptome (Reinke & Asher, 2019; Sinturel et al., 2020).

While the central SCN clock is entrained predominantly by retinal melanopsin phototransduction, peripheral oscillators in the liver, white and brown adipose tissue, pancreatic islets, and skeletal muscle are entrained primarily by **feeding–fasting cycles** via intracellular energy and redox sensors (Chaix et al., 2019; Poggiogalle et al., 2020). Prophetic intermittent fasting reinforces this bidirectional coupling through four interconnected molecular pathways:

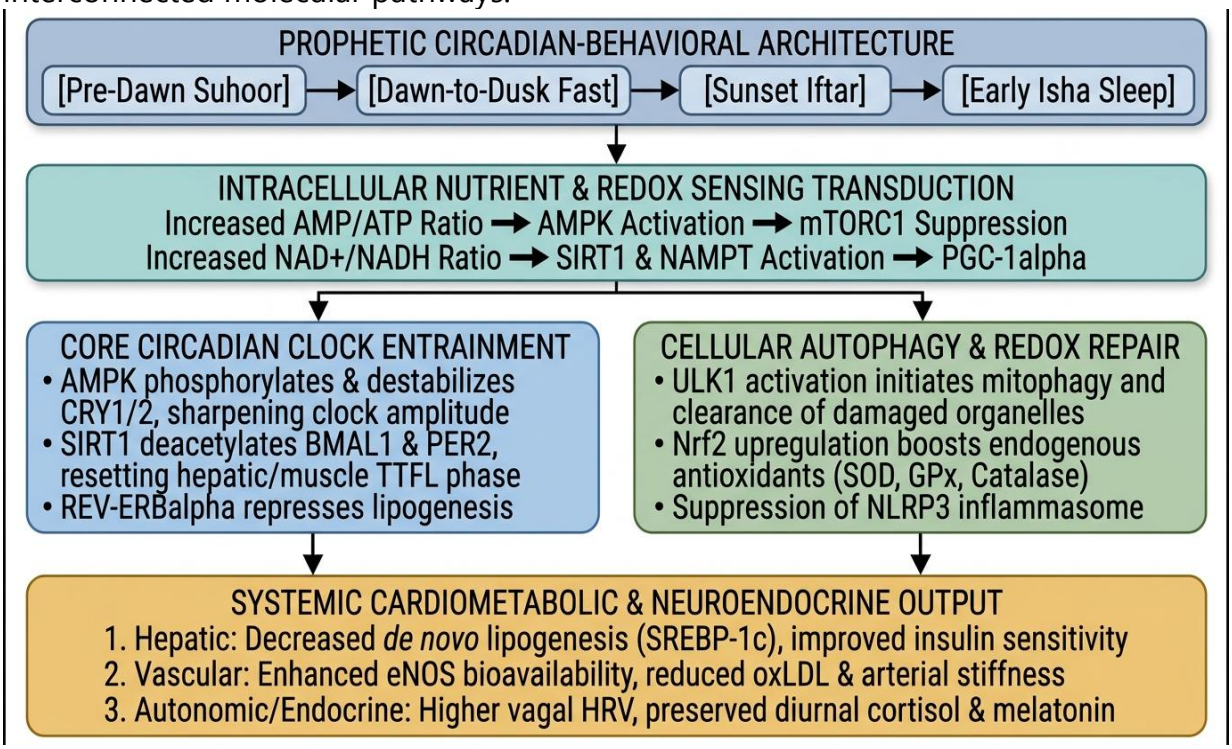


Figure 1. Molecular Mechanism Linking Prophetic Fasting and Circadian Meal Timing to Intracellular Nutrient Sensors (AMPK/SIRT1), Core Clock Gene Oscillations (BMAL1/CLOCK/PER/CRY), and Systemic Cardiometabolic Protection.

The AMPK–CRY and NAMPT–SIRT1–BMAL1 Signaling Axes

During the 12- to 16-hour diurnal fasting window characteristic of Prophetic fasts, hepatic glycogen depletion elevates the intracellular **AMP/ATP** and **NAD+/NADH** ratios (de Cabo & Mattson, 2019; Manoogian et al., 2022). Elevated AMP activates **AMP-activated protein kinase (AMPK)**, which directly phosphorylates **CRY1** and **CRY2**, targeting them for ubiquitin-mediated proteasomal degradation (Reinke & Asher, 2019; Sinturel et al., 2020). Simultaneously, elevated NAD+ activates the NAD+-dependent deacetylase **SIRT1**, which deacetylates **BMAL1** and **PER2**, modulating chromatin remodeling and resetting the transcriptional amplitude of core clock genes (Chaix et al., 2019; Chen et al., 2025).

Recent experimental evidence confirms that intermittent fasting restores dampened *CLOCK* and *BMAL1* expression in vascular endothelial and smooth muscle cells via the **AMPK/SIRT1** axis, suppressing reactive oxygen species (ROS) and mitogen-activated protein kinase (MAPK)-driven vascular inflammation (Chen et al., 2025). By alternating defined fasting states (high AMPK/SIRT1, low mTOR) with bounded postprandial states (high insulin/mTOR, low AMPK), Prophetic fasting sharpens the peak-to-trough transcriptional amplitude of peripheral circadian clocks—a hallmark of metabolic resilience that is blunted by continuous grazing (Panda, 2019; Wilkinson et al., 2020).

REV-ERBα and Circadian Gating of Hepatic Lipid Metabolism

High-amplitude oscillation of BMAL1: CLOCK drives robust rhythmic expression of the nuclear heme receptor **REV-ERBα** (*NR1D1*), a master transcriptional repressor of hepatic lipogenesis and cholesterol synthesis (Poggiogalle et al., 2020; Sinturel et al., 2020). During fasting windows, REV-ERBα recruits the NCoR–HDAC3 corepressor complex to suppress sterol regulatory element-binding protein 1c (**SREBP-1c**), fatty acid synthase (**FASN**), and HMG-CoA reductase, while activating peroxisome proliferator-activated receptor alpha (**PPARα**) and fibroblast growth factor 21 (**FGF21**) to stimulate mitochondrial β-oxidation and ketogenesis (de Cabo & Mattson, 2019; Hasan et al., 2022).

Circadian-Gated Autophagy and Prophetic Phytochemical Synergy

Prolonged activation of AMPK and suppression of mechanistic target of rapamycin complex 1 (**mTORC1**) during diurnal fasting phosphorylates **ULK1**, initiating macroautophagy and mitophagy to clear misfolded proteins and dysfunctional mitochondria (de Cabo & Mattson, 2019; Mindikoglu et al., 2020). Remarkably, classical Prophetic functional foods consumed at *Iftar* and *Suhoor*—specifically **black seed (*Nigella sativa*, rich in thymoquinone)**, **extra-virgin olive oil (*Olea europaea*, rich in oleuropein and hydroxytyrosol)**, and **Ajwa/Medjool dates (*Phoenix dactylifera*, rich in polyphenols and soluble fiber)**—act as pharmacological mimetics of fasting signaling (Nazri & Ibrahim, 2024; Saeed et al., 2023). Thymoquinone and olive polyphenols independently activate AMPK, upregulate nuclear factor erythroid 2-related factor 2 (**Nrf2**) antioxidant defenses, and inhibit nuclear factor kappa-B (**NF-κB**) and the **NLRP3 inflammasome**, synergizing with fasting-induced autophagy to attenuate endothelial oxidative stress (Al-Bar & Chamsi-Pasha, 2021; Nazri & Ibrahim, 2024).

Neuroendocrine and Cardiometabolic Adaptations

When Prophetic fasting is practiced with preserved nocturnal sleep architecture, it orchestrates coordinated adaptations across the hypothalamic-pituitary-adrenal (HPA)

axis, autonomic nervous system, pancreatic islets, and adipose-vascular networks (Faris et al., 2020; Jahrami et al., 2020).

Physiological Domain	Biomarkers & Endocrine Mediators	Authentic Prophetic Alignment (Preserved Sleep + Early Suhoor)	Urbanized Ramadan Misalignment (Nocturnal Feasting + Sleep Inversion)
Pineal & Circadian Phase	Dim-light melatonin onset (DLMO), nocturnal melatonin amplitude	Preserved nocturnal melatonin peak; stable SCN phase anchored by early *Fajr* light and *Isha* sleep	Blunted nocturnal melatonin amplitude; 1.5–3 hr phase delay in DLMO driven by late-night screen/ALAN exposure
HPA Axis & Stress Reactivity	Diurnal salivary cortisol slope, morning awakening peak	Maintained steep diurnal cortisol slope; adaptive morning alertness with low evening nadir	Flattened diurnal cortisol slope; elevated nocturnal cortisol driven by sleep fragmentation and late meals
Autonomic Nervous System	Heart rate variability (RMSSD, HF-HRV), resting heart rate, systolic/diastolic BP	Enhanced parasympathetic (vagal) tone; increased HRV; reductions in ambulatory systolic and diastolic BP	Sympathetic predominance; blunted nocturnal blood pressure dipping; elevated resting heart rate
Glucose & Pancreatic β-Cells	Fasting glucose, HOMA-IR, HbA1c, postprandial glycemic excursion	Enhanced skeletal muscle GLUT4 sensitivity; reduced HOMA-IR; avoidance of melatonin–insulin	Exaggerated postprandial hyperglycemia when large carbohydrate meals are eaten

Physiological Domain	Biomarkers & Endocrine Mediators	Authentic Prophetic Alignment (Preserved Sleep + Early Suhoor)	Urbanized Ramadan Misalignment (Nocturnal Feasting + Sleep Inversion)
		antagonism	during high nocturnal melatonin
Appetite & Adipokine Axis	Ghrelin, leptin, adiponectin, resistin, β-hydroxybutyrate	Entrained pre-meal ghrelin pulses; increased insulin-sensitizing adiponectin; mild physiological ketosis	Hyperleptinemia, erratic ghrelin spikes, elevated visceral lipogenesis, and nocturnal free fatty acid spillover
Vascular & Inflammatory Tone	hs-CRP, IL-6, TNF-α, PCSK9, oxidized LDL, triglycerides	Significant reductions in hs-CRP, IL-6, TNF-α, PCSK9, and atherogenic triglycerides; improved HDL	Neutral or worsened postprandial lipemia and systemic inflammation when fried/sugary *Iftar* feasts predominate

Table 2. *Divergent Neuroendocrine and Cardiometabolic Outcomes Under Authentic Prophetic Alignment Versus Urbanized Ramadan Misalignment.*

Melatonin–Insulin Interactions and Glycemic Control

A pivotal discovery in human chronobiology is the direct inhibitory interaction between pineal **melatonin** and pancreatic β-cell insulin secretion (Garaulet et al., 2020; Mason et al., 2020). Pancreatic islets express **MT1** and **MT2** melatonin receptors; when circulating melatonin rises during the biological night, receptor activation inhibits adenylate cyclase and cAMP signaling, suppressing glucose-stimulated insulin release (Garaulet et al., 2020). In authentic Prophetic practice, breaking the fast promptly at sunset (*Maghrib*) with a modest portion of dates and water occurs *before* the nocturnal melatonin surge, allowing physiological insulin secretion and skeletal muscle GLUT4 glucose uptake to clear postprandial glucose efficiently (Faris et al., 2020; Sutton et al., 2018). Conversely, consuming heavy, refined-carbohydrate meals late at night (between

11:00 PM and 2:00 AM) delivers a high glycemic load while melatonin is elevated, inducing functional glucose intolerance and β-cell strain (Chellappa et al., 2021; Garaulet et al., 2020).

Meta-analyses of Ramadan intermittent fasting in healthy adults and individuals with metabolic syndrome or T2DM demonstrate significant reductions in fasting blood glucose, serum insulin, HOMA-IR, and HbA1c—particularly when total nocturnal caloric intake is controlled and postprandial physical activity (such as *Taraweeh* prayers, which involve ~60–90 minutes of structured standing, bowing, and prostration equivalent to moderate-intensity aerobic exercise) follows the evening meal (Faris et al., 2020; Fernando et al., 2019; Lu et al., 2025).

4HPA Axis Rhythmicity, Autonomic Tone, and Adipokine Remodeling

The HPA axis exhibits a pronounced circadian rhythm, with cortisol peaking shortly after morning awakening to mobilize energy and declining to a nadir around midnight to permit restorative slow-wave sleep (Sinturel et al., 2020). Clinical studies tracking diurnal neuroendocrine profiles during Ramadan reveal that when individuals maintain structured pre-dawn *Suhoor* and early nocturnal sleep, the steep diurnal cortisol slope is preserved, while daytime catecholamine surges stabilize (Almeneessier et al., 2020; Jahrami et al., 2020). Furthermore, acute and intermittent fasting enhances cardiac vagal modulation—evidenced by increased high-frequency heart rate variability (HF-HRV), improved baroreflex sensitivity, and significant reductions in ambulatory systolic and diastolic blood pressure among both normotensive and medication-adherent hypertensive patients (Al-Shafei, 2021; Mzoughi et al., 2022).

Concurrently, cyclical fasting remodels adipose tissue endocrine signaling. By lowering chronic hyperinsulinemia and stimulating lipolysis during the latter half of the diurnal fast, Prophetic fasting shifts adipokine secretion away from pro-inflammatory **resistin**, **visfatin**, and **TNF-α** toward anti-inflammatory, insulin-sensitizing **adiponectin** (Dwaib et al., 2021; Faris et al., 2020). Clinical lipidomic investigations further demonstrate that Ramadan intermittent fasting favorably modulates hepatic lipid trafficking—reducing circulating proprotein convertase subtilisin/kexin type 9 (**PCSK9**), lowering atherogenic small-dense LDL and triglycerides, and elevating high-density lipoprotein (HDL) cholesterol (Hasan et al., 2022; Jahrami et al., 2020).

Resolving the Urbanized Ramadan Paradox: Alignment vs. Misalignment

A central tension in the 2020–2026 empirical literature is why some Ramadan cohorts exhibit marked reductions in visceral adiposity, blood pressure, and inflammatory cytokines, whereas others show neutral glycemic outcomes, weight gain, or flattened cortisol slopes (Faris et al., 2020; Lessan & Ali, 2019; Madkour et al., 2021). Mechanistic

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chronobiology resolves this paradox by contrasting **authentic Prophetic temporal alignment** with **contemporary urbanized Ramadan culture**.

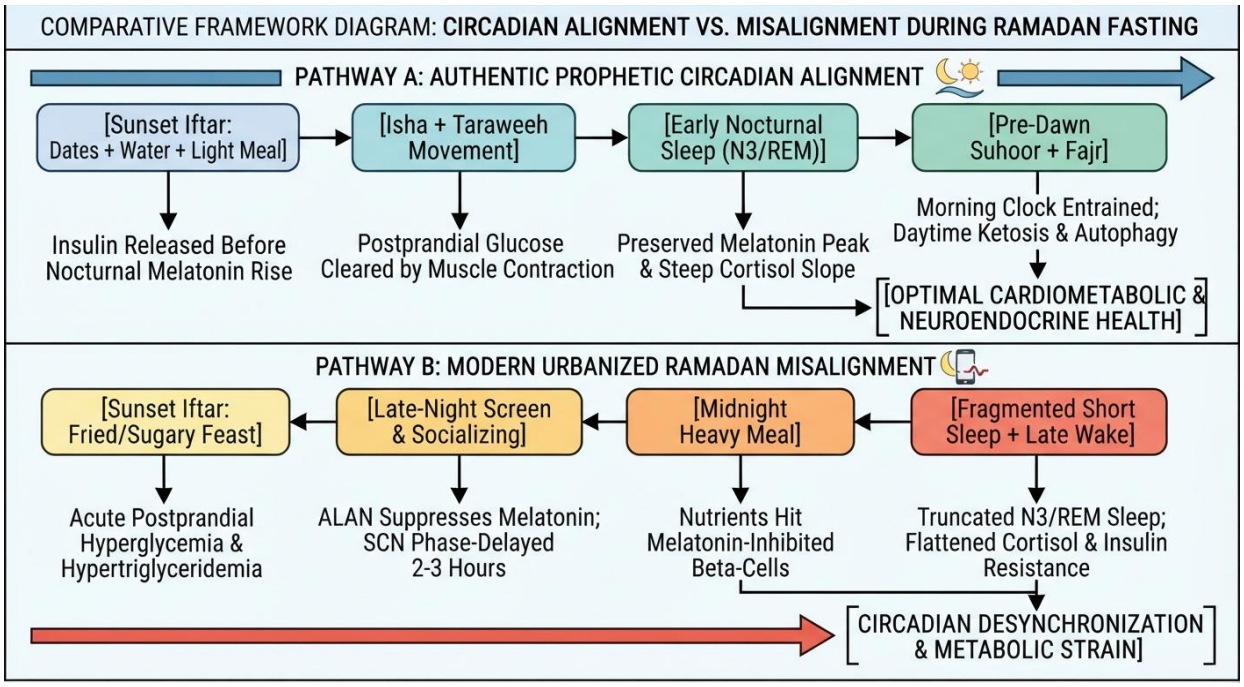


Figure 2. Contrasting Physiological Trajectories Between Authentic Prophetic Circadian-Behavioral Alignment (Pathway A) and Modern Urbanized Ramadan Misalignment (Pathway B).

In many contemporary urban centers across the Middle East, South Asia, and Southeast Asia, commercial and social norms have inverted the nocturnal schedule during Ramadan: families consume hyper-caloric, deep-fried, and sucrose-laden *Iftar* banquets, remain awake past midnight under bright indoor LED lighting and television screens, consume a heavy second meal prior to sleeping, and sleep through the morning hours (Lessan & Ali, 2019; Qasrawi et al., 2021). This behavioral inversion truncates restorative slow-wave (N3) and rapid eye movement (REM) sleep, delays dim-light melatonin onset (DLMO) by up to 2–3 hours, flattens diurnal cortisol rhythmicity, and forces peripheral clocks to process nutrients during the biological night (Almeneessier et al., 2020; BaHammam & Almeneessier, 2020; Qasrawi et al., 2021).

Conversely, adhering closely to the Prophetic Sunnah—breaking the fast modestly at *Maghrib*, avoiding late-night screens and heavy nocturnal feasting, retiring early after *Isha* and *Taraweeh*, and waking for a nutrient-dense, high-fiber *Suhoor* prior to *Fajr*—eliminates sleep inversion and aligns fasting–feeding cycles with endogenous circadian

physiology (BaHammam & Almeneessier, 2020; Faris et al., 2020). Furthermore, extending Prophetic fasting beyond Ramadan through weekly Monday–Thursday fasts or monthly *Ayyam al-Bid* fasts delivers sustained cardiometabolic and circadian benefits without disrupting seasonal sleep architecture (Jahrami et al., 2020; Wilkinson et al., 2020).

Methodological Limitations and Clinical Translation

To advance the scientific rigor of Prophetic chrononutrition research, several methodological limitations in existing studies must be addressed:

Confounding of Fasting Duration with Sleep Architecture and Caloric Composition: Most observational Ramadan studies measure metabolic biomarkers pre- and post-Ramadan without objectively monitoring sleep timing via wrist actigraphy, quantifying nocturnal light exposure, or controlling for macronutrient shifts (BaHammam & Almeneessier, 2020; Lessan & Ali, 2019). Future trials must incorporate continuous glucose monitoring (CGM), actigraphy, and salivary DLMO/cortisol profiling to isolate the independent effects of fasting from sleep phase shifts.

Under-Investigation of Non-Ramadan Prophetic Fasts: While Ramadan is extensively studied, randomized controlled trials evaluating voluntary Monday–Thursday fasting, *Ayyam al-Bid*, and *Sawm Dawud* remain scarce compared to secular 16:8 TRE or 5:2 diets (Jahrami et al., 2020; Song et al., 2025). Comparative trials are needed to determine optimal fasting periodicity across diverse metabolic phenotypes.

Clinical Risk Stratification and Individualized Medical Guidance: While Prophetic fasting confers substantial benefits for healthy individuals and patients with well-controlled metabolic syndrome or early T2DM, high-risk populations—including individuals with insulin-dependent type 1 diabetes, advanced chronic kidney disease, frail elderly adults, and pregnant women—require structured pre-Ramadan medical risk stratification and pharmacotherapy adjustment in accordance with established clinical consensus guidelines and Islamic bioethical exemptions (*Rukhsah*) (Hassanein et al., 2022; Mardian et al., 2021).

Conclusion

Prophetic Medicine (*Al-Tibb al-Nabawi*) offers a sophisticated, culturally anchored behavioral framework that anticipates core discoveries of modern circadian biology and chrononutrition. By uniting cyclical dawn-to-sunset fasting with early-morning *Suhoor* nutrient anchoring, modest sunset breaking of the fast, postprandial ambulatory prayer, early nocturnal sleep, and polyphenol-rich functional foods, Prophetic practices activate the AMPK–SIRT1–BMAL1 signaling axis, sharpen peripheral circadian clock oscillations, enhance vagal tone, and attenuate systemic inflammation and insulin resistance.

Realizing these cardiometabolic and neuroendocrine benefits in contemporary societies requires disentangling authentic Prophetic temporal alignment from modern urbanized nocturnal overfeeding and sleep disruption—positioning *Al-Tibb al-Nabawi* as a rigorous, evidence-based paradigm for culturally congruent preventive medicine.

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