



# Getting Up Early as Practiced in Islam and the Scientific Response of Our Bodies:

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**Abstract:** *The Quran has a lot of verses where Allah (S.W.T.) states that day is for work and night is for relaxation. Furthermore, Hadiths indicate that as Allah is the sole one who created the cosmos and humanity, He is aware of what is best for them and how they should live. Everything that Allah says in the Quran is good for all of humanity. Comparing it to human physiology, we uncover an abundance of further data demonstrating the detrimental effects of disrupting routine against the cycle mentioned in the Quran and Sunnah. In the current review, we have compiled verses from the Quran and the Sunnah to illustrate how the body responds to early wakefulness. We have also used scientific evidence in our research. One can learn about the beneficial and dangerous consequences of early and late wakefulness on the human body by reading the complete article.*

**Keywords:** *Wakefulness, Islam, Quran, Cortisol, Melatonin, Sunnah.*

## 1. INTRODUCTION

### The Islamic Perspective:

#### Reference from Quran

Islam provides us with a comprehensive lifestyle, and the teachings mentioned in the Quran are true and trustworthy. We must accept and implement these teachings in order to succeed in this world and the afterlife. The following scriptures may refer to the verses that deal with daily shift working.

There are verses in the Quran that underline the significance and function of day and night, highlighting their natural system.

○ Surah Al-Furqan (25:47)

"And He is the One who has made the night an apparel for you, the sleep a means of rest, and the day a means of revival," declares Allah.

The night is characterized as an "apparel" that offers rest and peacefully and covers everything. After a long day at work, sleep helps us recover. The day is meant to be spent pursuing activity and rejuvenation.

○ Surah Naba (78:9,10,11)

And made your sleep for rest, and made the night as a cover, and made the day for livelihood,

○ Surah Al-Qasas (28:73)

The alternating of day and night is a sign of Allah's kindness. We can work during the night to support our livelihood by getting some rest after the day's labour. For this wonderful favor, we should be thankful.

○ Surah Ghafir (40:61)

Allah created the day for brightness and the night for relaxation. While there are opportunities for fabricating throughout the day, the night gives a natural time for rest.

○ Surah Al-An'am (6:96):

Allah brings about the breaking of dawn, which signifies the change from night today. Allah has wisely arranged the night, sleep, and the sun and moon for reckoning time.

In summary, the Quran recognizes that day and night have a deliberate design. While nighttime offers relaxation and renewal, daytime is dedicated to work and productivity. Let's be grateful for these gifts and live our lives in accordance with them.

### **Reference from Hadith**

The entirety of the Holy Prophet's life exemplifies the teachings of the Quran; thus, we may find the routine here as well as in the Hadiths. In numerous Hadiths, scholars quote, some of them are,

Sahih al-Bukhari 1471, Book 24, Hadith 74 When Allah the Almighty created time,

○ He divided it into day and night, and in the Holy Quran Allah ordered Muslims to seek work in the morning and to have rest at night, Allah says: "And made the night as a cover and made the day for livelihood."

In Sahih al-Bukhari 1471, Book 24, Hadith 74, it is mentioned that "Allah ordered Muslims to seek work in the morning and to have rest at night <sup>2</sup>".

Abu Hurayrah (may Allah be pleased with him) reported Hadith:

○ "During your sleep, Satan ties three knots at the back of the head of each one of you, and he seals each knot with the following words: 'The night is long, so keep on sleeping.' When that person wakes up and remembers Allah, one knot is undone; when he makes ablution the second knot is undone; and when he prays, all his knots are undone, and he gets up in the morning active and in good spirits, otherwise he gets up in bad spirits and sluggish."

### **Reference from Sunnah**

Many of us work in the early hours of the day, which often starts from Fajr, get to work on time, and then have an effect on the rest of the day. So, what is a morning or daily routine in Islam? A positive morning habit affects the entire day. We have received wisdom from the Prophet Muhammad (PBUH) through his Sunnah. Muhammad (peace be upon him), the

Prophet of Allah, modeled for us how to set up the most affluent life possible through his daily practice.

1. Get up an hour early before Fajr prayer: The Prophet Muhammad (Peace and blessings be upon him) would awaken and begin his day in the third part of the night. Put otherwise, he would begin prior to Salat-e-Fajr, the third part of the night begins one hour prior to the Fajr prayer. It's the ideal time to wake up since it's the most tranquil part of the night, which lets you reflect on life. This is the moment when your mind is at its most sharp and energetic, and you feel prepared to face the day.

Zikr o Askar after getting up: Praise for Allah should be the first thought that enters your mind when you wake up, as this is what the prophet of Allah (peace and blessings be upon him) did each and every morning right after he awoke.

Alhamdulillah'shilathiahya' naba'da ma amaata'nawailaihiannushoor

Meaning: All praise is due to Allah who has given me life, after taking it and to him is the final return.

Praising Allah at the beginning of the day is a meaningful objective. You were made to adore Allah, and the greatest kind of worship is gratitude.

3. Make Wadu: Wudu is an act of worship and spiritual purification; hence the Prophet of Allah (peace and blessings be upon him) would perform it as soon as he woke up. Water wipes away all traces of sleep and refreshes and exhilarates the body.

4. Offer up the Night Prayer (Salat al-Tahajjud).It's re-establishing our connection to our Creator. Consequently, until his ankles swelled, the Messenger of Allah (Peace Be upon him) would stand in prayer and offer the night prayer. Standing till your ankles swell is not like that, but it does highlight the significance of standing in prayer when everyone else is asleep.

5. The Salat Al Fajr prayer.The Prophet Muhammad (Peace and blessings be upon him) Learn to focus your thoughts and your mind on your Creator by performing the two Raka'atSunnah prayers. Praying Fajr effectively sets the tone for the rest of the day.

6. Do the Dhikr Every Morning Reciting the morning of Adhkar, or "The remembrance of Allah," the Prophet Muhammad (Peace and blessings be upon him) would sit and recall Allah. You may have noticed that a large number of the morning Adhkars are centred on thankfulness.

Being grateful is acknowledging and appreciating all of the blessings you are now experiencing in your life.

7. Build an Intentional Day Plan Setting a plan for the day is one of the practices of successful Muslims in the morning. Make today a purposeful one. When you plan your day in advance, you may start the day knowing exactly how you want it to go. You've made up your mind about what matters that day. And what you ought to attempt to accomplish that day. Your actions today should be in line with your life's bigger objectives. Perhaps your annual, monthly, or weekly objectives.

8. Let's Begin the Day. If you completed the morning ritual and made a connection to your mission first thing in the morning, you should already be in a fantastic frame of mind. You're ready to take on the world and do great things, insha'Allah.and nobody just stumbles into a morning routine like this. Standing till his ankles swelled, the Prophet of Allah (Peace and

blessings upon him). That takes a lot of labour. Therefore, making such a morning will need to be uncomfortable but not painful. It will be challenging at first to get out of your cosy bed.

### **Scientific Point of View:**

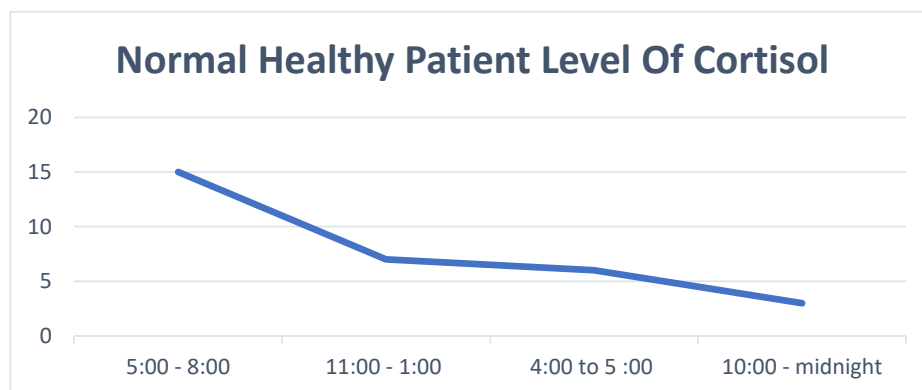
#### **Hormones Activated in the Early Morning: Scientific Evidence**

The scientific relevance and proof of how hormones function in accordance with the body's internal clock and the negative effects of going against the daily cycle are explained in depth. Here, we discussed about how two hormones function, how they affect everyday life cycles, and so on. Research has also provided a detailed explanation of the detrimental effects on health issues that arise when normal cycles are disrupted.

### **Day and Night Hormone:**

Cortisol and melatonin are the two hormones that are triggered by daylight and darkness respectively below is a discussion of their working.

Before dawn, at the close of the sleep phase, the renin-angiotensin system becomes active. Before cortisol rises, this increase induces aldosterone to rise as well. In the morning, light on the retinas tells the SCN to turn off melatonin.



One by one the detail workings of hormones are given as below.

Time	Normal Healthy Patient Level of Cortisol	Normal Range
5:00 - 8:00	15	13_24
11:00 - 1:00	7	5_10
4:00 to 5 :00	6	3_8
10:00 - midnight	3	1_4

### **1.The Working of Cortisol and its Imbalance Impact on Health.**

Normal levels of cortisol occur in the evening when you go to sleep and peak in the morning just before you wake up. This shows that cortisol affects your body's circadian rhythm and is important for the start of awake. Life and the maintenance of several body processes depend on optimal cortisol levels. It might be detrimental to your general health if your cortisol levels are habitually high or low. Normally, cortisol levels peak in the early morning and then gradually decrease until they reach their lowest point at midnight. If you work late at night and get your sleep at different times of the day, this pattern may alter.

The normal level of cortisol in blood is.

- 6 a.m. to 8 a.m.: 10 to 20 micrograms per deciliter (mcg/dL).
- Around 4 p.m.: 3 to 10 (mcg/dL)

<b>Regular intervals for cortisol activation and function determined by the internal body clock.</b>	
Morning:	The morning cortisol peak occurs at 5 a.m., so that's the time people wake up
Early afternoon	Cortisol levels start to decline during the afternoon.
Late afternoon:	The levels of cortisol begin to increase once more, reaching a minor high about 4 p.m.
Night:	Around midnight, cortisol levels start to decline.

The hormone cortisol is responsible for maintaining blood pressure, normal blood sugar management, and sleep-wake cycles.

- Assists in boosting high levels of energy.
- Controls the way your body breaks down carbohydrates, proteins, and lipids to make energy.
- Studies reveal that a battery of neuropsychological tests measuring cortisol levels is useful for evaluating language, memory, and attention. either lowering cortisol levels hampered cognitive function or demonstrating an increase in cortisol levels were worse on tasks assessing explicit memory and selective attention.

Symptoms of low cortisol levels include.

- Light-headedness or dizziness.
- Hyper pigmentation refers to dark patches on the skin.
- Decreased blood pressure
- Cravings for salt.
- Loss of weight.
- Arthritis and reduced immunity
- Allergies
- Poor memory
- low stress tolerance
- and asthma

Signs of excessive cortisol production include:

- Weakness in your proximal muscles
- Anxiety and depression
- Memory loss
- Back discomfort
- Insomnia
- Weight gain
- GERD
- Acne, eczema
- Irregular periods
- Lower immune function
- Frequent urination

## **2. The Working of Melatonin & its Imbalance Effect on Health:**

The hormone melatonin is produced by the body as a natural reaction to darkness. Its main purpose, as produced by the pineal gland in your brain, is to support and moderate sleep. In order to assist you get ready for sleep, melatonin closely cooperates with your body's circadian cycle. In reaction to darkness at night, melatonin levels increase, and in response to light in the morning, they fall.

- In addition to helping to promote sleep, melatonin regulates blood pressure, cortisol levels, and immune system performance.
- Studies on humans and animals have demonstrated that melatonin, which has a high antioxidant content, can heal eye problems such retinopathy and age-related macular degeneration. Melatonin might enhance eye health.



- Lessen the seasonal effective disorder (SAD) symptoms and indicators.
- It eases the symptoms of acid reflux.
- There Could Be an Increase in Melatonin One sort of hormone that is essential for development and cellular regeneration is human growth hormone (HGH).
- Melatonin may be useful in treating disorders such as gastroesophageal reflux disease (GERD), which is characterised by the reflux of stomach acid into the oesophagus, causing symptoms such as heartburn, nausea, and regurgitation.
- Antioxidants are abundant in melatonin.

Deficiency of melatonin cause:

Your ability to enjoy life may be impaired with by a melatonin shortage, which can lead to a variety of health problems.

- Depressive and anxious • Migraine • Lack of sleep Issues with focus agitation • Changes in mood • The symptoms of menopause • Bowel irritability an increase in ageing • Delay in flight • Sleep-related issues • Heart-related illness elevated blood pressure.
- Sleep disruption can weaken the immune system, which can lead to the production of cytokines that stimulate cancer. [9]
- The correlation between Alzheimer's disease (AD) and melatonin imbalance and ageing. Reduced melatonin levels are linked to ageing, particularly in nocturnal individuals.
- Numerous AD patients frequently experience circadian rhythm disturbances, which include agitation during the day and restlessness at night. Circadian rhythm abnormalities in AD are frequently so severe that they can play a role in mental impairment. Nevertheless, there is currently no effective medication to address the circadian disruptions associated with AD. [10]

Causes of melatonin imbalance

- Artificial lighting. The natural cycles of light and darkness dictate how the brain functions throughout sleep and wakefulness. The body can become confused by artificial light and awaken prematurely.
- Working late at night. People who work night shifts frequently have irregular circadian rhythms, which throw off their melatonin levels.
- Often experiencing jet lag. People who travel a lot also suffer from melatonin shortage, similar to shift workers. As they acclimatise to shifting day-night cycles, their internal clock becomes confused.

### **Evidence by Research:**

- A study was conducted to examine the relationship between the circadian rhythm of body temperature and cortisol, in addition to self-reported clock times of sleep onset and offset on weekdays and weekends. At 22:30, the lights were turned out to allow for sleep, and then they were switched back on at 6:00 to wake the patients. In comparison to the morning Ness group, the eveningness group's cortisol rhythm had a smaller amplitude ( $P = n.s.$ ). In[2]
- Our inner clock plays a role in both the process of falling asleep and waking up since it generates the circadian rhythm that regulates our sleep-wake cycle. The cortisol awakening response (CAR) occurs simultaneously with awakening. Between spontaneous awakening,





awakening by a known alarm, and awakening by an unknown alarm, we compared cortisol data, which characterises the CAR, and IMU characteristics, which characterises pre-awakening movement. Cortisol and IMU data showed substantial differences across the three research circumstances, with higher cortisol reactivity and less movement if participants were awakened by an unknown alarm. The idea that our internal clock predicts when we should get up is supported by all of our studies. Based on our findings, this work establishes the framework for the creation of automatic classification models intended to ascertain.[3]

- The molecular interactions of important "clock genes" produce 24-hour rhythms. Recently discovered photoreceptors within the eye modify this molecular clockwork in response to the outside world. The knowledge and treatment of many diseases, including mental illness, are being significantly impacted by this new biological understanding. [4]

## **2. RELATED WORK**

This is a comparative review study. This article contains several articles of papers relevant to the work. At around 50 articles, and the most pertinent 15 articles chosen for the purpose of reference and corresponding works has been excluded, additionally books and The Hadith book for legitimate references has been added. In the first section of this article, the researcher selected comparable content associated to the Islamic perspective; for this purpose, Quranic verses from various chapters of the Quran are enclosed. Furthermore, the manner of the Sunnah fundamentals are stated, and in the concluding portion of the first half, the Hadith from the book of Hadith, Sahih al-Bukhari, are added for further referencing. The second section, which the researcher incorporated to compare scientific studies, includes various articles relevant to human physiology investigation. These involve the body's response towards sunrise and late wake-up times, addition to evidence-based publications. Several research-based papers have contributed depth to the working of hormones responsible for working in daylight as well as dim light, their impact in the interaction to light, and their beneficial and detrimental impact on health in the case of interrupting the routine effect of the circadian cycle. Finally, a comparison has been conducted between the first section of the paper, which centers on Islamic perspectives, and the second section, which is based on scientific data. A significant number of articles with similar findings are enclosed for reference.

## **3. METHODOLOGY**

A comparative literature review is the methodology applied to this article. The principles for living that the Sunnah and teachings from an Islamic perspective offer, as multiple scientific articles have further demonstrated. The primary researcher who developed the article's basic idea included and gathered information in the first section of the article, further included the perspectives provided by Hadith and Sunnah in Islam. The researchers' main task is to organize reviews of several articles that are relevant to the work; the first author compiles all the data that is supported by science and contradicted by religion. Whereas the secondary researcher work on the abstract part of the article .The methodology utilized for this study's



comparison is akin to those of comparable linked work articles that illustrate the Islamic road of faith in contrast to scientifically associated hormonal regular research. Additionally, the benefits and drawbacks of not following the recommended paths are derived from several research studies. The teachings from the Quran, the Sunnah guidelines, and the methodical research of various researchers on the physiology of the human body have all been incorporated. This issue, which was analyzed by the Islamic belief that people should work during the day and use the night for relaxation. This belief is supported by verses in the Quran and the most well-known Jama Tarmizi Hadiths, which are included for further reference. It is also explained in detail by the Sunnah, or the way of life taught by the Prophet (S.A.W.). Now, in the second section, the scientific studies analyze the statement. Approximately fifty articles are sorted, with the most relevant fifteen selected for reference; similar works have been omitted. Thus, the scientific evidence regarding human mental health is being affected by this. Impacting the regular time In this post, we'll talk about two hormones specifically: melatonin and cortisol. Cortisol's effects are felt during the day. A chart of activation activity has been added from the research article for further reference. It shows that cortisol is most active during the day at around 5 am, and that its activity decreases as the day progresses into dim light. Additionally, people who avoid waking up during the daytime cause their cortisol levels to become out of balance, which has a negative impact on the body's physiological processes. Furthermore, this publication provides numerous scientific evidence that reinforce the argument that melatonin, or night hormones, is detrimental to the body if individuals work over the night.

#### **4. RESULT AND DISCUSSION**

Several Quranic verses indicate that, with gratitude to Allah Subhan Allah, the daylight is for labor and the night is for relaxation. It reference in several Hades, specific ones which have already been documented. Furthermore, Islamic teachings instruct for day-time labor and night-time for rest. This is the primary section of the article. On the other hand, extensive research regarding the physique of humans reveals clear evidence. Numerous studies of further studies indicate that interrupting patterns despite the aforementioned cycles is undesirable to the health of humans. To put it succinctly, opposing the body's natural sleep schedule, which dictates that people should go to bed at night and rise early, is one of the primary causes of hormone imbalance in the body. The hormone that is predominantly responsive by early sunlight is "Cortisol" which is elevated according to the body's internal clock (high at around 5 a.m.). So, if an individual wakes up late, like at 11 a.m., it is clear that their cortisol level is lower or exaggerated. Furthermore, it boosts energy levels by breaking down carbs, proteins, and lipids. According to research studies, neurological tests observing cortisol levels proves useful for evaluating memory, thinking, and focus, and when cortisol levels downs it hampered cognitive function. "Melatonin" (which is activated in the dawn) levels in the body respond differently when an individual follows a late-night sleep pattern (approximately triggered following sunset 8.p.m. thereafter). Disturbances in their regularity can cause them to repress, which can result in imbalance and incorrect secretion, both of which can cause various illness states. Final result which has to be proof that in the content Islamic teaching thoughts has been compared with human physiques, and we find the



accurate result. In case of following the pattern which are mentioned in Islamic teaching it further proof by scientific evidences. The several research projects are enclosed for reference.

### **Discussion**

Allah (S.W.T.) says in numerous passages of the Quran that the day is for work and the night is for rest. Furthermore, Hadiths suggest that since Allah alone is the creator of the universe and humans, He knows best for them and how they should live. All that Allah states in the Quran is beneficial to all people. This is further represented in other Islamic literature, as well as by Sunnah, the Hadiths & scholars, as stated above. On the other hand, and as a scientific reviewer of various articles, including physiological working of human body. When we compare it to human body physiology; we find a wealth of additional evidence that highlights the negative consequences of upsetting regularity in opposition to the cycle that is referenced in the Quran and Sunnah. To demonstrate how the body reacts to early wakefulness, we have included passages from the Quran and the Sunnah in the current review. . In our investigation, we have also made use of scientific proof. The hormone "Cortisol" is the most responsive to early sunshine and is boosted according to the body's internal clock. Therefore, if a person wakes up late. it is obvious that their cortisol level is low or raised. Furthermore, it boosts energy levels by decomposing sugars, amino acids, and triglycerides. According to research studies, neurological tests which gauge cortisol levels are useful to evaluate reasoning, recall, and focus, and when cortisol levels fall, cognitive function declines. The levels of "melatonin" (which is activated close to dawn) in the body adapt differently when anyone follows the late hours sleep time frame. In our investigation, we have also made use of scientific proof. Interruptions in their regularity can cause them to minimize, which causes disharmony and inappropriate secretion, both of which can cause various kinds of disorders. The end result must be proof that in the content Islamic teaching concepts have been compared to human physiology, and we reached the right conclusion. Following the pattern outlined in Islamic doctrine provides further proof from science. Several investigations serve as citations.

### **5. CONCLUSION**

The Quran repeatedly states in numerous verses that the day is for work and the night is for repose, all thanks to Allah Subhan a wa Tallah. And inquire about indications in the shift between day and night. Many of the Ahadiths, some of which were already mentioned—also make reference to it. Since Allah is the sole one who created the universe and humans, He knows what is best for humanity, what will be the standard of living, and much more. For these reasons, Allah made reference to these things in the Quran, which will help Muslims adhere to the teachings of Islam. When we compare it to the human physiology, we find a wealth of additional research demonstrating that disrupting routines against the cycles mentioned in the Quran and Sunnah has a negative impact on people. This can be summed up as follows: one of the main causes of hormone imbalance in the body is going against the sleep pattern cycle, which calls for people to wake up early and go to bed at night. These two hormones' (cortisol & melatonin) levels function differently throughout the day and at night. When their regularity is disturbed, they may suppress, which can lead to imbalance and



inappropriate secretion, which can result in many disease states. Enclosed for reference includes the many research projects.

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