

Wonders of Creation



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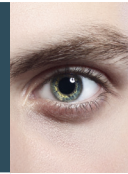


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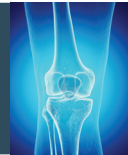
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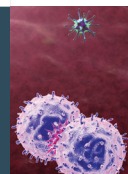
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Introduction

With praise and gratitude to Hashem, we are honored to publish a Chassidic elucidation of the prayer *Nishmat Kol Chai* (The Soul of Every Living Being). This liturgical hymn (*piyyut*) is recited on Shabbat and festivals just before the blessings of the Shema; it is also part of the Haggadah for Passover.


This prayer is an outstanding celebration of praise and thanksgiving to the Creator for the wonders inherent in creation and the miracles that He has performed for us and our forefathers. It gives voice to the infinite distance between man and God, stressing that as noble as man's accolades and gratitude may be, they can never do justice to the praise God deserves.

Praying *Nishmat* with even just its basic meaning in mind excites the heart, but like all other areas of Torah and Judaic life, Chassidic interpretations open us to a deeper and richer dimension. Chassidut is part of the Torah's inner teachings and as such, explores the manner in which God's Providence can be seen in creation, unveils processes that occur in celestial worlds, and expounds on the unique bond between God and His people. Meditating on the Chassidic interpretation of *Nishmat* intensifies one's commitment to exalt God and to be nullified to Him whole-heartedly.

In order to make the commentary accessible, We have simplified and modernized some of the Chassidic terminology.

The book is divided into four parts.

1. An interlinear English-Hebrew text of *Nishmat Kol Chai*.
2. An in-depth introduction to the Ascent of the Worlds on Shabbat, and to the ten Divine *sefirot* with the transcendent crown (*keter*), as a prelude to the Chassidic interpretation of the prayer.
3. A dual commentary on the prayer. The concise linear commentary presents the literal meaning of the text. We usually suggest a single interpretation, in rare cases, two. The comprehensive in-depth commentary is based mainly on Chassidic texts as well as other early commentaries.

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4. Wonders of Creation. The text of *Nishmat* overflows with expressions of awe at the grandeur of the Creator and the marvels of creation. Following the verse, “How abundant are your actions, O’God,” we deemed it appropriate to provide more detail on some of these wonders.

*

This book was edited by the staff of the Ma’ayanotecha Publication Society, chaired by Rabbi Moshe Shilat. The commentary, introduction, preface, and in-depth foreword on the Ascent of the Worlds on Shabbat, and that of the Ten *Sefirot*, were authored by Rabbi Menachem Mendel Brod.

Assistance in compiling assorted resources and in preparing the text for publication was provided by Rabbi Yehuda Cohen, Rabbi Chaim-Zvi HersHKovitz, and Rabbi Shmuel Waller. We would also like to thank Rabbi Zvi-Hirsch Zalmanov for his useful comments.

May this book advance the study of the inner-life of Torah and the dissemination of the wellsprings of Chassidut, and may the coming of Mashiach be hastened speedily in our time.

The Ma’ayanotecha Library

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Preface

Nishmat Kol Chai is a unique liturgical poem – known in Hebrew as a *piyyut* – that is recited at special junctures: during Shabbat morning service, at the end of *Pesukei Dezimra*– the chapters and verses of praise that make up part of the morning service, and on Passover night, concluding the Haggadah.

This liturgical poem is an expression of gratitude to the Creator for His greatness and eminence, for His great benevolence toward us as a people– from the Exodus from Egypt through the wanderings in the desert and the wars we endured, and for all the benevolence He bestows on every single person.

The underlying emotion felt throughout the *piyyut* is one of intense longing and affection for God, flooding the chambers of the heart with yearning for the Creator.

Who was the author of *Nishmat Kol Chai*?

Nishmat is considered is one of the most ancient prayers. It is already referenced in the Mishnah and the Talmud, with one opinion referring to it as the “Blessing of the Song.” The Talmud¹ asks: “What is the Blessing of the Song [which is recited in the Haggadah of Passover]?” and mentions two opinions. “Rav Yehuda said: [It is the blessing that begins with] ‘They shall praise You, *Havayah*, our God.’ And Rabbi Yochanan said, ‘The soul of every living being.’” *Tosfot*, a compilation of medieval commentaries on the Talmud, asserts that it is called *Nishmat Kol Chai* because it is recited on Shabbat after *Pesukei Dezimrah* (the Verses of Praise). It follows that *Nishmat* was part of Shabbat services since Talmudic times.

An excerpt of *Nishmat* appears elsewhere in the Talmud as part of a prayer of thanksgiving for rain. The Talmud asks: “What blessing does one recite? Rav Yehudah said, ‘We thank You for each and every drop that You have brought down for us.’ And Rav Yochanan concludes the blessing as follows, ‘If our mouths were as full of song as the sea ... we could not sufficiently praise You

1. *Pesachim* 118a.



Hashem our God,' and one continues [with the words of *Nishmat*] until '[every knee] shall bow to You.’”²

Some³ ascertain that *Nishmat* was composed by the Mishnaic sage Rabbi Shimon Ben-Shetach.⁴ Others⁵ argue that its author is Rabbi Shimon Bar-Yochai. A hint that the author's name may be Shimon (שמעון) can be found in a reverse acrostic found in the first words of the prayer's sections (שוכן עד; מי ידמה; עד הנה; ואלו פיני; נשמת).

Another opinion⁶ suggests that “the sage who composed it was named Isaac and his wife's name was Rebecca. He composed the prayer in honor of the biblical Isaac and Rebecca, who are alluded to in the initial letters of some words towards the end of the prayer, all in order to remind us of their merits.”

According to Rabbi Abraham ben Isaac de Narbonne,⁷ the complete text of *Nishmat* was compiled during the Gaonic era out of three separate texts. The first text spans from “The soul of every living being,” until “to You alone we offer thanks,” (which, according to Rabbi Yochanan, is the Blessing of the Song mentioned earlier). The second text consists of the words from “Even if our mouths” until “all who stand tall shall prostrate themselves before You” (or, until “the poor and the destitute from one who would rob him”) and was part of a prayer of thanksgiving for rain. The third and final section was added by the *Geonim*, the spiritual leaders of the Jewish world in the early medieval era, who compiled the different sections and made them into a single song of praise.⁸

The Hidden Dimension

The words of this *piyyut* may be understood rather literally, in which case they praise and thank God for his loving-kindness, while at the same time acknowledging our inability to properly thank Him, “for even one of the

2. *Berachot* 59b.

3. *Siddur Kolbo*.


4. Rabbi Shimon ben Shetach was one of the most prominent sages during the time of the second Temple. His sister, Queen Shelomtzion (Salome Alexandra), was King Alexander Jannaeus's wife.

5. *Peirush Eitz HaChaim LaHaggadah*.

6. *Abudarham, Seder Shacharit Shel Shabbat*.

7. *Teshuvot HaGeonim*, p. 41.

8. In *Tikun Tefilah* (of *Otzar Hetfilot*), it is written that *Yishtabach* is part of the *Blessing of the Song*.



The soul of every
living being
shall bless your Name,
Havayah our God.

And the spirit of all flesh
shall continuously
glorify and exalt
Your mention, our King.

נְשִׁמַת כָּל חַי
תְּבָרַךְ אֶת שְׁמֶךָ
ה' אֱלֹהֵינוּ.
וְרוּחַ כָּל בֶּשָׂר
תְּפַאֵר וְתְרוֹמֵם
זְכָרְךָ מִלְּבֵנו תְּמִיד.

The soul of every living being, the soul of man, or the additional soul that enters a person on Shabbat, shall bless and praise Your Name, *Havayah* our God. And the spirit of all flesh* the spirit that dwells in the human body (referred to as flesh) and is considered spiritually lower than the soul- it too shall continuously glorify and exalt Your mention, our King** shall praise and relate your magnificence our King.

* Based on the verse, "In whose hand is the soul of every living thing, and the spirit of all flesh of man" (Job 12:10).

** Adapted from, "I will extol You, my God and king, and bless Your name forever and ever" (Psalms 145:1).

The soul of every living being

On the surface, the words, “the soul of every living being,” (נְשִׁמַת כָּל הַחַי) refer to all living beings on the planet. All living creatures – animals, birds, fish, reptiles, and insects – possess a soul with which they praise the Creator. Based on the verse, “All that had breath, the spirit of life in its nostrils,”¹ the Talmud² explains that the Hebrew word for soul (*neshamah*) also connotes breath (*neshimah*). Thus, all creatures that breathe praise the Creator.

However, the sages suggest a more profound interpretation: the soul of every living being refers to the soul of man, as man’s praise to the creator is far loftier than that of all other living beings.

Going even deeper, these words refer to the additional soul (*neshamah yeteirah*) that enters a person on Shabbat.³ On weekdays, this higher level of the soul does not indwell in the body but rather hovers above it, providing us with a transcendent, spiritual level that encompasses the consciousness. However, on Shabbat, this additional soul enclothes itself within us, praising and glorifying the Creator as an outpouring of its yearning for Him. This is why *Nishmat* is recited on Shabbat prayers.⁴

Every living being

The *Zohar*⁵ interprets the phrase, “the soul of every living being” with an additional inner meaning. According to the *Zohar*, this phrase is not referring merely to the soul or the breath of life within all living beings. Rather the words “every living being” (כָּל הַחַי) are

understood to mean “the totality of life,” alluding to the supreme source of all life from which vitality and life-force flow down to all the worlds. In the *Zohar*’s idiom, it is “that soul that has taken flight from He who is the life of all worlds.”

In the *Zohar*, this level of “the totality of life” or “the life of all worlds” (חַי הָעוֹלָמוֹת) is the *sefirah* of foundation (*yesod*) in the supernal world of emanation (*atzilut*). The supernal effluence from all the *sefirot* above it funnels into the foundation together with the even loftier Divine aspects, all the way to the very infinite nature of the Almighty. For this reason, foundation is referred to as a “totality” that collects and stores the vitality of the worlds. The *Zohar*⁶ also calls it, “the gathering of all lights.”

However, even after having been gathered in the foundation, in the totality of all life, the lights have yet to be revealed. To do so, and to be expressed, they must pass through the *sefirah* of kingdom (*malchut*), the power of revelation. Kingdom is many times described as our faculty of speech, which reveals to others that which is hidden and concealed in our mind and heart.

Nevertheless, in essence, everything already exists in foundation. Chassidic philosophy⁷ illustrates this concept using two parables. The first likens foundation to a seed from a fruit. The seed already contains all the features of the tree that will grow from it. Even the future fruits are already there, so to speak, but everything is still concealed. The second parable likens foundation to the way in which a teacher passes

his knowledge over to his student in short form. The sages instruct us that, “one should always teach his student in a concise manner.”⁸ Short, concise teachings should encapsulate within them the greatest depths, some of which will only be discovered by the student later on. It may take up to forty years for this to happen.⁹

These parables illustrate how these two concepts co-exist: on one hand the details are already fully present, on the other hand, they are not yet revealed. Making the concealed revealed is the purpose of the *sefirah* of foundation, which is also referred to by the word, “all,” as in the verse, “for **all** in the heavens and the earth,”¹⁰ indicating that all the higher levels of spirituality are already present and flow through foundation. That is why the foundation is called “the totality of life” or “the life of all worlds.”

On Shabbat, a glimmer of this higher spiritual level shines upon every Jewish soul, regardless of their stature. This is the inner meaning of the ‘additional soul’ enclothing itself within every Jew on Shabbat allowing each and every one, “to bless Your Name, our King.”¹¹

Shall bless Your Name

At first glance, the word “bless” suggests praise, and thus, this phrase implies that the soul of every living being shall praise the Almighty, with words of blessing and esteem.

However, interpreting “blessing” in this way presents a question: giving a blessing and standing in prayer are different in essence. When praying,

one stands below and focuses his words above, pleading that the prayer be accepted on high. In contrast, when blessing, the individual granting the blessing stands above the one being blessed and bestows effluence upon him.¹² Blessing implies that the one doing the blessing already holds the effluence and can therefore impart it upon the recipient who needs it. If so, how can a human soul bestow blessing upon God’s name?

By following the Zohar’s explanation presented above, these words actually make sense. “The soul of all living beings,” represents the supernal *sefirah* of foundation, which is situated above the *sefirah* of kingdom, referred to by the words, “Your Name.” Therefore, foundation has the capacity to “bless” and bestow kingdom with Divine effluence.

The *sefirah* of kingdom is referred to as, “a Name” (שם) in the liturgical phrase, “then His Name was called ‘a King’” (אָז אָמַר שְׁמוֹ נִקְרָא מֶלֶךְ).¹³ Normally, an individual’s name is used by others to call him. The individual would not have cause to call himself using his name. Similarly, the purpose of kingdom (God’s Name, as it were) is to extend and reveal the Divine attributes to others, i.e., to created beings. That is why kingdom is referred to as “a Name,” and in our context, “Your Name, our King” (שְׁמוֹ אָמַר מֶלֶךְ). It is the *sefirah* of kingdom then that receives the effluence of the higher *sefirot*, effluence that passes through foundation; in this sense, kingdom is being blessed by foundation.

This is the innermost meaning of the

words, “The soul of every living being shall bless Your Name, our King” (נְשַׁמַּת כָּל חַי תְּבָרֵךְ אֶת שְׁמֶךָ מַלְכֵנוּ). On Shabbat, the soul of each and every Jew receives a special illumination from the level of, “the totality of all life” (כָּל חַי, the *sefirah* of foundation) and thereby has the power to bless and bestow special spiritual effluence on the *sefirah* of kingdom (שְׁמֶךָ מְלָכֻתוֹ) – the manner in which God is revealed in reality.¹⁴

And the spirit of all flesh shall continuously glorify and exalt...

So far we have explained how, on Shabbat, the *sefirah* of kingdom receives a supreme effluence from above, by means of the souls, which have been illuminated by the “totality of all life.” However, at the same time, kingdom also receives additional abundance from below, through the ascent of the souls of the various creatures that occurs on Shabbat evening.

This is implied in the words, “And the spirit of all flesh” (וְרוּחַ כָּל בְּשָׂר), referring to the spirit and vitality of all created beings, which are the souls that ascend

from below and carry with them Divine abundance to kingdom.

While “the soul of all living beings” (נְשַׁמַּת כָּל חַי) stands above, in the world of emanation (*Atzilut*) and thereby bestowing its Divine effluence from above to below, the souls that are ascending from below bring about an additional abundance. This additional effluence is what the words, “shall glorify and exalt” (תְּפַאֵר וְתִרְוַמֵם) refer to. They glorify and exalt the *sefirah* of kingdom.¹⁵

Consequently, the *sefirah* of kingdom is blessed on Shabbat from both directions, and at two different times. On Shabbat evening, it is enriched by the souls that are ascending – referred to by the words, “And the spirit of all flesh” – and on Shabbat day, it is blessed from above – alluded to by the words, “The soul of every living being shall bless.”

In the words of the *Zohar*:

This level [kingdom] referred to as ‘Name’ receives blessings from below and from above and is included from all sides. On weekdays, it receives blessings from the other souls that bless it from below. On Shabbat day, it receives blessings from the supernal souls that bless it.

1. Genesis 7:22.

2. *Yoma* 85a.

3. *Beitzab* 16a and *Ta’anit* 27b.

4. *Levush, Orach Chaim* 281. *Zohar* 2:205b.

5. 2:138a.

6. 1:18a and 33a.

7. *Siddur Im Dach* f. 191a. *Peirush Hameelot* §74-75 [a-b].

8. *Pesachim* 3b.

9. *Avodah Zarah* 5b.

10. 1 Chronicles 29:11.

11. *Peirush Hameelot* §77 [d].

12. Lubavitcher Rebbe’s *Sefer Hama’amarim Melukat*, Vol. 3, p. 271.

13. *Adon Olam*.

14. *Siddur Im Dach*, f. 191d. *Peirush Hameelot* §84 [11].

15. *Siddur Im Dach*, f. 192a. *Peirush Hameelot* §78-79 [5-6]

From the highest world
to the lowest,
You are Almighty God;

מִן הָעוֹלָם
וְעַד הָעוֹלָם
אַתָּה אֱלֹהִים.

The praise begins with:

From the highest world to the lowest, You are Almighty God*; at all times, from the beginning of creation until the end of time, You are the ruler who has the power and the ability.

* A compilation of two verses, “From eternity to eternity, You are God” (Psalms 90:2) and “Blessed is *Havayah*, God of Israel, From eternity to eternity” (Ibid 106:48).

From the highest world to the lowest

Rashi explains¹ that this phrase means from the present world, or reality, to the reality of the World to Come. According to another understanding, the phrase refers to all of time, from its inception, when there was only God alone,² to the present.³ Still others interpret this phrase to mean, from our present reality or world, in which God’s

Providence is veiled and works through concealed miracles, to the future reality, in which Divine Providence will be openly miraculous.⁴

Chassidut asserts⁵ that the highest world refers to the loftiest aspects of the infinite light, which are designated as “the concealed of all that are concealed” (*steema dechol steemeen*, סְתֵימָא דְכָל סְתֵימִין) or “concealed worlds” (*almeen desteemeen*, אֶלְמִין דְּסְתֵימִין). These aspects are so deeply rooted within the infinite

that they cannot be discussed as well-defined entities, rather they serve as primordial and formless sources from which emerge the forces that are manifest in the lower worlds. Still, they too are considered worlds, since in Hebrew, the word for “world” (*olam*, עֹלָם) stems from the notion of concealment (*be'eleim*, הֶעְלֵם), implying that they do contain some describable features, be they as subtle as they are.

The second part of the phrase, (“to the lowest [world]”), alludes to the world of emanation, which is the lowest among the so-called worlds of the infinite. It is there, in emanation, that the Divine forces form into distinct *sefirot*, each with its own characteristics and attributes. However, as the *sefirot* in the world of emanation are entirely united with the infinite, we say that “from the highest world to the lowest You are Almighty God.” Meaning, that all is absolutely unified with the infinite, and there, You are Almighty God, without any change.

You are Almighty God

In the Bible, God has a number of Names. We have already seen *Elokim*

and the essential Four-letter Name, *Havayah*. The first two letters of *Elokim* are considered a unique Name, pronounced, because of its sanctity, *Kel* (כֵּל). This Name denotes the Creator’s might,⁶ proclaiming that He alone reigns and is powerful over all of creation and at all times. For this reason, it is sometimes translated as “Almighty God.”

On a deeper level, saying that God is Almighty means that all the concealment and barriers that conceal God’s essence throughout the great chain of being (*sefer hishtalshelut*), from the uppermost level of the infinite worlds to the lowest, exist only from the perspective of creation. However, God Himself, from His perspective, is not limited; nothing in creation is concealed from Him in any way and nothing in the worlds is separate from Him. God alone is the only substance, the only reality that exists, He is the single power and force that is both the light that surrounds all worlds (*sovev kol almeen*) and the light that descends through many levels in what is known as the light that fills all worlds (*memaleh kol almeen*).⁸

1. To Psalms 106:48.

2. *Roke'ach*.

3. *Peirush HaTefillot VeHaberachot* by Rabbi Yehudah Bar Yakar.

4. *Malbim* to Psalms *ibid*.

5. *Peirush Hameelot* §86 [13].

6. *Metzudat David* to Psalms 90:2. See also *Tur Orach Chaim* 5, “*Kel* means powerful and mighty, as in Ezekiel 17:13.”

7. This Chassidic term refers to the chainlike stages of self-limitation or contraction, whereby Divine light, or revelation, descends and weakens until ultimately our corporeal reality is realized.

8. *Peirush Hameelot* *ibid*. *Sefer Hama'amarim* 5660, p. 59.

And other than You, we
have no king,
redeemer, and savior
who delivers and rescues,
and sustains and answers
and is merciful,
in every time of distress
and trouble;
we have no king but You.

וּמִבְּלִעְדֶּיךָ
אֵין לָנוּ מֶלֶךְ
גּוֹאֵל וּמוֹשִׁיעַ,
פּוֹדֶה וּמַצִּיל,
וּמַפְרִינֵם וְעוֹנֶה וּמְרַחֵם
בְּכָל עֵת צָרָה וְצוּקָה.
אֵין לָנוּ מֶלֶךְ אֱלֹהִים
אַתָּה.

And other than You, we have no king who cares for us and who stands by our side, redeemer, and savior who delivers and rescues, and sustains and answers and is merciful in every time of distress and trouble, we praise the Almighty because only he can help us in times of trouble. We use a number of different phrases, each with a different meaning: Redeemer- redemption means total liberation and a transition to complete liberty. Savior- salvation brings relief, but does not secure complete liberty, so another act of salvation may be required in the future. Who delivers- deliverance is freedom attained by paying one's captors. Rescues- from decrees and from peril. Sustains- provides livelihood. Answers- our prayers. Merciful- compassionate and forgiving towards those who cannot pray to Him. In every time of distress- bodily, and trouble- mental distress. In all these situations and circumstances, we have no king but You. Our hopes are directed to you alone.

And other than You, we have no king

This phrase conveys the idea that God is the one and only ruler capable of helping us and keeping us safe. But Chassidut¹ adds more depth. The vitality of the worlds derives from the *sefirah* of kingdom, about which it said, “Your kingdom is an eternal kingdom.” Kingdom is the source of all plenitude – spiritual and physical – flowing to all worlds and creatures. Yet, however great the effluence may appear, it is only a mere glimmer or reflection of the Almighty Himself, and cannot compare to Him. This is the inner meaning of “other than You, we have no king”; without the substance and the essence of the Blessed Infinite, “we have no king,” i.e., kingdom has no value. From this realization comes the deep yearning to unite with God Himself, “We have no king but You.”

Who delivers and rescues

It is God who saves and redeems man’s soul after it has sinned and as a result, was taken captive. If a Jew commits a sin, God forbid, parts of his Divine soul are subject to the dominion of the forces of impurity (*sitra achra*), known as *kelipot*.² They grab hold of these parts of the soul and are nurtured from

them. Thus, in practice, they hold the Jew hostage. Only God, the redeemer, and savior, can free the soul from its captivity. God does so by revealing a glimmer of His blessed light upon the innermost part of the Divine soul known as the *yechidah* (literally, the singular one), which clings to Him eternally and under all circumstances; the *kelipot* have no dominion over the *yechidah*. The *yechidah* is the source from where our thoughts of returning to God (*teshuvah*) originate. These thoughts are what help free us from our captivity and allow us to return to God.³

In every time of distress and tribulation

These words can be understood as either reinforcing the previous proclamation—that God saves and redeems man when he is in distress or tribulation. Or they can be understood as providing context for the next statement, which should then mean that, “in every time of distress and tribulation, we have no king but You.” The issue is more than semantic. According to the first interpretation, God is praised for standing beside man in his darkest hour, while according to the second, man is lauded for not putting his trust in men but turning to God and trusting Him alone to save him.⁴

1. *Likutei Torah Matot* 81a.
2. *Kelipot* (singular: *kelipah*). *Kelipah* literally means a “husk” or a “shell.” It is a metaphor frequently used in Kabbalah to denote evil forces that conceal the positive Divine energy found in all of creation, in much the same way that a husk or shell covers and conceals the edible part of a fruit. There are three *kelipot* that are considered absolutely evil. A fourth *kelipah*

- known as *kelipat nogah* (literally, “translucent shell”) can undergo a process of refinement, whereby it can be utilized for holiness.
3. *Sha’arei Teshuvah* 29c.
4. *Siddur Beit Yaakov*. Rabbi Yaacov Emden remarked that he tended toward the first interpretation in his youth, but progressively came to realize that the second interpretation was the right one.

Why Sleep Is So Vital

Sleep is now believed to be an active brain process, rather than a passive state in which there is a lack of stimuli and no cerebral and physical activity, as previously thought.

Sleep allows the body to recharge and self-repair. While we are awake, a high metabolic rate causes the formation of free radicals that may damage and even destroy cells. But, during sleep, there is an increase in the activity of repair enzymes (biological catalysts) that regulate free radicals and repair damage and deficiencies created during the day.

Sleep is crucial for brain development in infants and children. It helps create new neural connections, organizes memory, and relieves the information load that the brain accumulates during waking hours.

Lack of sleep causes a decrease in the secretion of the satiety hormone, called Leptin, and an increase in the secretion of the hunger hormone, called Ghrelin, responsible for signaling the brain an increase in appetite and hunger. Lack of sleep causes problems in regulating sugar levels in the body and may result in diabetes and obesity.

Halachah [Jewish law] stipulates that a person who vows to not sleep for three consecutive days should be punished like one who takes a false oath because it is impossible not to doze off during this period of time. Lack of sleep is more dangerous than hunger: an individual who is deprived of sleep will die within ten days but will last longer without food.

How much should we sleep? Maimonides asserts: "the day and the night consist of twenty-four hours. It is enough for one to sleep a third of this, i.e., eight hours" (Hilchot De'ot 4:4). Contemporary studies show that children and adolescents need approximately ten hours of sleep on average; people 25-55 years of age need about eight hours of sleep; those 65 and older are content with six hours.

People who have gone without sleep for long periods of time have suffered from a lack of concentration, paranoia, hallucinations, and even short-term memory loss.

Researchers in the United States have found that the fatigue experienced by hospital interns, who work 26-hour shifts, causes them to function as if they were inebriated. After working this way for a month, studies confirmed that their driving skills, along with their concentration and alertness level, were equivalent to having a blood alcohol level of 0.4% (half the legal limit in most Western countries).

Rapid Eye Movement (REM) Sleep is a unique sleep phase characterized by rapid eye movements. It is among the most prominent stages of sleep. A person whose REM sleep is disturbed is likely to vividly recall his dreams. During REM sleep, the metabolic rate of the body is as high as during wakefulness.

The brain inactivates our muscles during REM sleep. If we dream of an event in which we are on the run, muscle paralysis prevents us from screaming, convincing us that we are paralyzed. Yet this paralysis is precisely what keeps us from falling out of bed.

**“He who
arouses those
who sleep”**