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THE SIGNIFICANCE OF PUMPKIN (YAQṬĪN) IN HADITH AND THE QUR'AN: A BIOACTIVE INSIGHT INTO HEALTH AND HEALING

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Abstract

Pumpkin (yaqṭīn) is mentioned in Surah al-Ṣāffāt (37:146) in the context of Prophet Yunus's recovery. This study analyses the term yaqṭīn using classical Quranic commentaries through a scientific exegesis (tafsīr ʿilmī) approach, and evaluates the bioactive compounds of pumpkin based on modern health sciences. Findings show that beta-carotene protects the retina and prevents degenerative eye diseases; polyphenols and flavonoids act as anti-inflammatory agents supporting immune balance; while potassium regulates blood pressure and lowers hypertension risk. In addition, triterpenoids in pumpkin seeds demonstrate therapeutic potential for skin health and natural treatments. The results reveal a strong correlation between the Qur'anic reference to yaqṭīn and contemporary scientific discoveries on its health benefits. This study also underscores the need for further biochemical and clinical research on Qur'anic plants. Its novelty lies in integrating scientific exegesis with bioactive analysis, thus providing an interdisciplinary framework that bridges revelation and health sciences for holistic nutrition and wellness.

Keywords: *Yaqṭīn, Scientific Exegesis, Bioactive Analysis, Modern Health Sciences, Plant Nutrients*

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INTRODUCTION

Allah, the Almighty, established the planet and all its elements in harmonious equilibrium to guarantee the sustenance of life for His beings, including the creation of flora, which is noted to have transpired subsequent to the formation of the earth and water. Surah al-Nāziʿāt (verses 30–31) asserts that Allah extended the land, allowed streams to emerge, and produced its flora. Plants provide sustenance and function as treatments for numerous health conditions. In the Qur'an, Allah explicitly references various plants, including olives, grapes, and pomegranates. A notable plant is yaqṭīn, referenced in surah al-Ṣāffāt (37:146), which denotes the gourd plant that Allah caused to flourish to provide shade for Prophet Yūnus (peace be upon him). Classical exegetes, including al-Ṭobari[1], al-Qurtubi[2], Ibnu Kathir[3] and al-Rāzī[4] interpret *yaqṭīn* as a variety of gourd, also known in Arabic as q*arʿ* or *dubbāʾ*.

[1] Abū Jaʿfar Muhammad bin Jarīr al-Ṭabarī (2009). *Tafsīr al-Ṭabarī*. Muhammad ʿAbdul Laṭīf Khalaf & Muhammad Mursi ʿAbdul Ḥamid, Aḥmad ʿAbdurrazziq al-Bakrī, Muhammad ʿĀdil Muhammad (pnyt.). 1st ed. Jakarta: Pustaka Azzam.

[2] Abi ʿAbdillah Muhammad bin Ahmad Abi Bakr al-Qurṭubī (2013). *Al-Jāmiʿ Li Aḥkām al-Qurʾān wa al-Mubayyin Lammā Taḍammanahu Min al-Sunnah wa Āy al-Furqān*. 1st ed. Beirut, Lubnan: Muassasah al-Risālah.

[3] Ibnu Kathīr (2009). *Shahih Tafsir Ibnu Katsir*. Syaikh Shafiyyurrahman al-Mubarakfuri (pnyt.). 2nd ed. Indonesia: Pustaka Ibnu Katsir.

[4] Fakhruddīn al-Rāzī (2000). *Al-Tafsīr al-Kabīr aw Mafātīḥ al-Ghaib*. 3rd ed. Beirut, Lubnan: Dār Iḥyāʾ al-Turāth al-ʿArabī.

As states by another reseacher, from a biological standpoint, yaqṭīn pertains to the genus Cucurbita, which is part of the Cucurbitaceae family, usually referred to as the gourd or pumpkin family[5]. This family consists of more than 120 genera and 800 species, including Cucurbita, Luffa, Cucumis, Citrullus, and Momordica. These plants are extensively dispersed in tropical and subtropical climates and can flourish at diverse altitudes and soil conditions. They have significant nutritional and therapeutic significance, rendering them essential in both traditional and contemporary medicine, as well as in the food industry. Four primary types of Cucurbita species are recognized: C. pepo (common pumpkin), C. maxima (big pumpkin), C. moschata (tropical pumpkin or waluh), and C. ficifolia (fig-leaf gourd or chilacayote[6]. Each species possesses unique attributes including morphology, pigmentation, stem architecture, and climatic resilience. Certain species, including C. moschata, can develop as sprawling vines reaching lengths of 3 to 10 meters and are especially adapted to tropical climes.

Recent studies in contemporary health sciences have shown that pumpkin offers numerous health advantages, including immune system support, improved ocular health, regulation of blood glucose levels, and a decreased risk of chronic diseases such as diabetes and cardiovascular disorders[7],[8]. These findings facilitate broader discussions between revelation and science, notably about the relationship between religious guidance and the general health requirements of humanity. Consequently, examining pumpkin from both Qur'anic and scientific viewpoints not only enhances the integrative comprehension between religion and science but also establishes a robust factual basis for the advancement of more comprehensive, value-oriented health strategies. Moreover, the scientifically validated therapeutic advantages of pumpkin highlight the necessity to investigate the underlying lessons of the Qur'an regarding bodily preservation. The equilibrium between natural nutrition and health principles based on revelation confirms the alignment of Islamic teachings with modern biomedical progress. The discourse between revelation and science must be strengthened to build a more comprehensive and sustainable Islamic health policy.

However, specific studies that directly link the Qur'anic interpretation of the term *yaqṭīn* with contemporary scientific findings on the health benefits of pumpkin remain very limited. Most previous research has only addressed the general advantages of pumpkin without deeply connecting them to the Qur'anic perspective. Therefore, this study was conducted to address that gap by analysing the term *yaqṭīn* through a scientific exegesis (*tafsīr ʿilmī*) approach based on authoritative classical commentaries and subsequently correlating it with modern scientific findings regarding the composition and health benefits of pumpkin. In doing so, this research contributes to the advancement of interdisciplinary scholarship between Qur'anic studies and health sciences, while also offering valuable recommendations for public health policy grounded in a holistic framework. Furthermore, the integration of *tafsīr ʿilmī* with bioactive scientific analysis presented in this study introduces a novel methodological approach that has not been previously explored in detail.

METHODOLOGY

This study uses a qualitative research technique with a focus on document analysis to evaluate the Qur'anic verse that mentions the term yaqṭīn, supported by classical tafsir, hadith literature, and

[5] Putri, T. K. (2022). *Yaqṭīn dalam al-Qur'ān: Perspektif Tafsir dan Sains*. UIN Walisongo Semarang. https://eprints.walisongo.ac.id/id/eprint/17509/?utm_source

[6] Kostecka-Gugała, A., Kruczek, M., Ledwożyw-Smołeń, I., & Kaszycki, P. (2020). "*Antioxidants and health-beneficial nutrients in fruits of eighteen Cucurbita cultivars: analysis of diversity and dietary implications*." Molecules 25(8): 1–20. https://doi.org/10.3390/molecules25081792.

[7] Ceclu, L., Mocanu, G. D., & Nistor, O. V. (2020). "Pumpkin – health benefits." *Journal of Agroalimentary Processes and Technologies* 26(3): 241–246. https://www.researchgate.net/publication/356287046.

[8] Ros, E., & Hu, F. B. (2013). "*Consumption of plant seeds and cardiovascular health: epidemiologic and clinical trial evidence*." Circulation 128(5): 553–565. https://doi.org/10.1161/CIRCULATIONAHA.112.001119.

scientific publications about the medicinal qualities of pumpkin. Because the Qur'an's reference to *yaqṭīn* is brief and allusive, the study uses additional sources to investigate pumpkin's health benefits. The major goal is to evaluate the therapeutic efficacy of pumpkin using a *tafsīr ʿilmī* method and compare it to current scientific discoveries in an interdisciplinary and balanced manner.

Data Sources

The primary sources of this study consist of Qur'anic texts, specifically Surah al-Ṣāffāt verse 146, which mentions the term yaqṭīn, along with authoritative classical tafsir works such as those by al-Ṭobari[9], Al-Qurṭubi[10] and Ibnu Kathir[11]. The study also refers to scientific-themed tafsir texts (*tafsīr ʿilmī*) such as those by al-Rāzī[12], Ibn ᶜĀshūr[13] and Ṭanṭōwī Jauharī[14]. Although these tafsir works are not entirely scientific in nature, their analytical, rational, and scientific approaches render them relevant in supporting the tafsīr ʿilmī framework applied in this study. These tafsir texts were selected based on the scholarly authority and methodological rigour of their authors in interpreting the meanings and vocabulary of the Qur'an. In addition, this study also refers to secondary sources such as scientific articles and research reports concerning the nutritional composition and health benefits of pumpkin, obtained from databases such as Scopus, PubMed and Google Scholar.

Method of Interpretation

This study utilizes the *tafsīr ʿilmīy* methodology to thoroughly analyze the phrase *yaqṭīn* in the Qur'an, emphasizing the connection between revealed texts and modern scientific understanding. This method allows the researcher to evaluate the significance and ramifications of the term within the narrative of Prophet Yūnus (peace be upon him), especially concerning health and physical recuperation. Focus is directed at discerning the potential scientific signals inherent in the text and correlating that data with discoveries in nutritional and medical research. This strategy seeks to guarantee a balanced and integrated examination between disclosed sources and scientific data using a rigorous, interdisciplinary approach.

Scientific Analysis

This study's scientific analysis centers on assessing the bioactive constituents of pumpkin, informed by contemporary health science research findings. Key compounds are highlighted, including beta-carotene, which aids in retinal protection and the prevention of degenerative eye diseases, polyphenols

[9] Abū Jaʿfar Muhammad bin Jarīr al-Ṭabarī (2009). *Tafsīr al-Ṭabarī*. Muhammad ʿAbdul Laṭīf Khalaf & Muhammad Mursi ʿAbdul Ḥamid, Aḥmad ʿAbdurrazziq al-Bakrī, Muhammad ʿĀdil Muhammad (pnyt.). 1st ed. Jakarta: Pustaka Azzam.

[10] al-Qurṭubī (2010). *Tafsīr al-Qurṭubī*. Mukhlis B. Mukti (pnyt.). 2nd ed. Jakarta: Pustaka Azzam.

[11] Ibnu Kathīr (2009). *Shahih Tafsir Ibnu Katsir*. Syaikh Shafiyyurrahman al-Mubarakfuri (pnyt.). 2nd ed. Indonesia: Pustaka Ibnu Katsir.

[12] Fakhruddīn al-Rāzī (2000). Al-Tafsīr al-Kabīr aw Mafātīḥ al-Ghaib. 3rd ed. Beirut, Lubnan: Dār Iḥyāʾ al-Turāth al-ʿArabī.

[13] Muḥammad al-Ṭāhir Ibn ʿĀshūr (2014). Tafsīr al-Taḥrīr wa al-Tanwīr. 1st ed. Beirut, Lubnan: Muassasah al-Tārīkh.

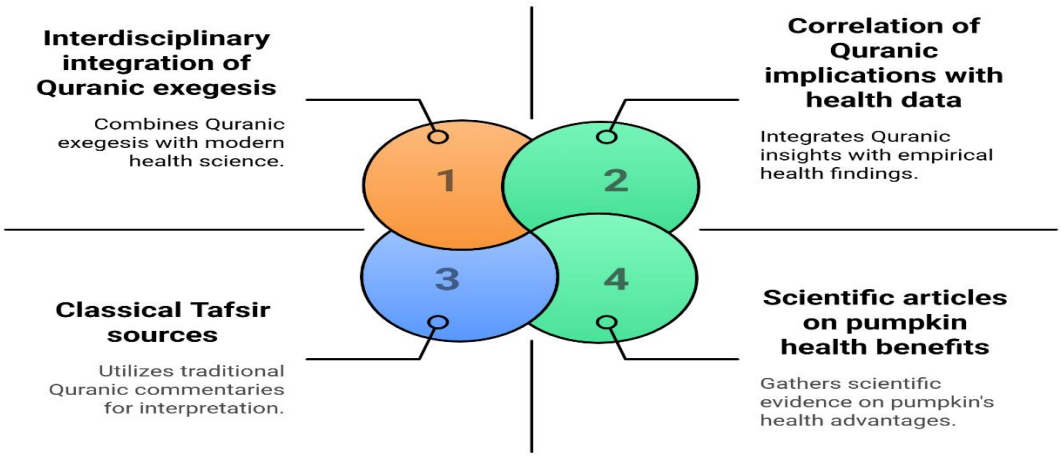
[14] al-Ḥakīm al-Sheikh Ṭanṭāwī Jawharī (2004). *Al-Jawāhir fī Tafsīr al-Qurʾān al-Karīm*. 1st ed. Beirut, Lubnan: Dār al-Kutub al-ʿIlmiyyah.

which serve as anti-inflammatory agents by mitigating immune system inflammation responses and potassium, which has been demonstrated to lower blood pressure and diminish the risk of hypertension. This scientific study aims to evaluate the correlation between the Qur'anic depiction of yaqṭīn and modern scientific findings regarding the health advantages of pumpkin.

Methodological Justification

A qualitative methodology was chosen to enable a comprehensive and interdisciplinary analysis between Islamic exegetical knowledge and modern health sciences. The *tafsīr ʿilmī* approach applied in this study ensures a focused analysis on the meaning and health-related implications of the term *yaqṭīn*, while the scientific analysis of bioactive compounds in pumpkin such as beta-carotene, polyphenols and potassium provides a strong empirical foundation. The combination of these two approaches forms the basis for integrating divine guidance with modern scientific discovery. This is consistent with the study's objective to support the development of an interdisciplinary research framework and to enhance holistic understanding of health based on value-driven and guided knowledge.

Figure 1: Integrated Methodology for *Yaqṭīn* Interpretation



RESULTS AND DISCUSSION

This section presents the main findings of the study obtained through the application of the *tafsīr ʿilmī* approach to the term *yaqṭīn* in the Qur'an, alongside scientific evaluation of the bioactive components of pumpkin based on contemporary research. The discussion is organized into four main parts: first, the interpretation of the term *yaqṭīn* by classical exegetes (*mufassirūn*), second, the role of nutrients such as beta-carotene in supporting eye health. Third, the anti-inflammatory functions of pumpkin through its bioactive compounds and fourth, the contribution of potassium in regulating blood pressure. This integrative approach not only connects divine guidance with modern scientific findings but also contributes to the development of a more holistic and value-based understanding of health.

Interpretation of *Yaqṭīn* in the Qur'an

The term *yaqṭīn* is mentioned only once in the Qur'an, in surah al-Ṣāffāt, verse 146, which recounts the story of Prophet Yūnus (peace be upon him) following his emergence from the belly of the fish. Allah the Almighty states:

وَأَنبَتنَا عَلَيهِ شَجَرَةً مِّن يَقطِينٍ ١٤٦

(al-Quran, al-Ṣāffāt 37: 146)

Meaning:

And We caused to grow over him a gourd vine.

According to Sayyid Quṭub[15] (2000) this verse illustrates Allah's compassion for the physical state of Prophet Yūnus (peace be upon him) following his ingestion and subsequent expulsion by the giant fish onto a desolate coast. The Prophet was in a debilitated and infirm condition. Consequently, Allah caused a *yaqṭīn* plant (a variety of gourd) to flourish as a method of protecting him from the intense sun and pest disturbances. The choice of a gourd plant, recognized for its ability to repel flies, is regarded as an expression of divine mercy and benevolence. Upon recovering his health, the Prophet was restored to his people to resume his prophetic work. This interpretation is corroborated by Ibnu Kathir[16] and Ibn ᶜĀshūr[17] who elucidated that no other flora was present in that location at the time other from the specifically cultivated *yaqṭīn* tree. They moreover observed that the expansive leaves of the gourd provided physical protection, while its unattractive characteristics to insects afforded added solace to the Prophet's recuperating body.

Ibn ᶜĀshūr[18] noted that *al-dubbā'* (الدُّبَّاءَ) is an alternative name for pumpkin or gourd. The phrase is substantiated by a ḥadīth documented in Sunan al-Tirmidhī, related by Anas ibn Mālik (may Allah be pleased with him), indicating that the Prophet Muhammad (peace be upon him) had an affinity for *al-dubbāʾ*:

حَدَّثَنَا مُحَمَّدُ بْنُ مَيْمُونٍ الْمَكِّيُّ، حَدَّثَنَا سُفْيَانُ بْنُ عُيَيْنَةَ حَدَّثَنِي مَالِكُ بْنُ أَنَسٍ، عَنْ إِسْحَقَ بْنِ عَبْدِ اللَّهِ بْنِ أَبِي طَلْحَةَ، عَنْ أَنَسِ بْنِ مَالِكٍ، قَالَ: رَأَيْتُ رَسُولَ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ يَتَتَبَّعُ فِي الصَّحْفَةِ، يَعْنِي الدُّبَّاءَ, فَلَا أَزَالُ أُحِبُّهُ. قَالَ: أَبُو عِيسَى هَذَا حَدِيثٌ حَسَنٌ صَحِيحٌ. وَقَدْ رُوِيَ هَذَا الْحَدِيثُ مِنْ غَيْرِ وَجْهٍ عَنْ أَنَسٍ وَرُوِيَ, أَنَّهُ رَأَى الدُّبَّاءَ بَيْنَ يَدَيْ رَسُولِ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ فَقَالَ: لَهُ مَا هَذَا قَالَ هَذَا الدُّبَّاءُ نُكَثِّرُ بِهِ طَعَامَنَا.

Meaning:

Muhammad ibn Maimūn al-Makkī narrated to us, Sufyān ibn ʿUyaynah narrated to us, who reported from Mālik ibn Anas, from Isḥāq ibn ʿAbdullāh ibn Abī Ṭalḥah, from Anas ibn Mālik (may Allah be pleased with him), who said: "I once saw the Messenger of Allah (peace be upon him) picking out pieces of gourd (*dubbāʾ*) from the dish (*ṣaḥfah*), and from that day onwards"[19].

Second hadith related to ***al-dubbā'*** (الدُّبَّاءَ):

[15] Sayyid Quṭub, *Tafsīr Fī Ẓilāl al-Qurʾān: Di Bawah Bayangan al-Qurʾān*, Yusoff Zaky Haji Yacob (pnyt.), 1st ed. (Kuala Lumpur: Pustaka Aman Press Sdn. Bhd., 2000).

[16] Ibnu Kathīr (2009). *Shahih Tafsir Ibnu Katsir*. Syaikh Shafiyyurrahman al-Mubarakfuri (pnyt.). 2nd ed. Indonesia: Pustaka Ibnu Katsir.

[17] Muḥammad al-Ṭāhir Ibn ʿĀshūr (2014). *Tafsīr al-Taḥrīr wa al-Tanwīr*. 1st ed. Beirut, Lubnan: Muassasah al-Tārīkh.

[18] Muḥammad al-Ṭāhir Ibn ʿĀshūr (2014). *Tafsīr al-Taḥrīr wa al-Tanwīr*. 1st ed. Beirut, Lubnan: Muassasah al-Tārīkh.

[19] Al-Tirmidhī, *Al-Jāmiᶜ Al-Kabīr*, Kitāb *Al-Aṭᶜimah*, Bāb *Mā Jāa' fī Akli Al-Dubbā'*, No. 1850.

حَدَّثَنَا عَبْدُ اللَّهِ بْنُ يُوسُفَ: أَخْبَرَنَا مَالِكٌ، عَنْ إِسْحَاقَ بْنِ عَبْدِ اللَّهِ بْنِ أَبِي طَلْحَةَ: أَنَّهُ سَمِعَ أَنَسَ بْنَ مَالِكٍ رضي الله عنه يَقُولُ :إِنَّ خَيَّاطًا دَعَا رَسُولَ اللَّهِ صلى الله عليه وسلم لِطَعَامٍ صَنَعَهُ، قَالَ أَنَسُ بْنُ مَالِكٍ: فَذَهَبْتُ مَعَ رَسُولِ اللَّهِ صلى الله عليه وسلم إِلَى ذَلِكَ الطَّعَامِ، فَقَرَّبَ إِلَى رَسُولِ اللَّهِ صلى الله عليه وسلم خُبْزًا وَمَرَقًا، فِيهِ دُبَّاءٌ وَقَدِيدٌ، فَرَأَيْتُ النَّبِيَّ صلى الله عليه وسلم يَتَتَبَّعُ الدُّبَّاءَ مِنْ حَوَالَيِ الْقَصْعَةِ، قَالَ: فَلَمْ أَزَلْ أُحِبُّ الدُّبَّاءَ مِنْ يَوْمِئِذٍ.

Meaning:

> A tailor once invited the Messenger of Allah ﷺ to a meal that he had prepared. I went along with the Messenger of Allah ﷺ. He then presented to him bread and broth containing pumpkin (al-dubbāʾ) and dried meat. I observed the Prophet ﷺ picking out the pieces of pumpkin from around the dish. From that day onwards, I too loved pumpkin[20].

This ḥadīth illustrates the close relationship between the Sunnah of the Prophet ﷺ and the selection of health-beneficial foods, as demonstrated in the incident where he accepted an invitation from a tailor who served bread along with a broth containing pumpkin (*al-dubbāʾ/yaqṭīn*) and dried meat. Anas ibn Mālik RA narrated that the Prophet PBUH deliberately picked out pieces of pumpkin from around the dish, indicating his preference for this particular food. From a health perspective, the Prophet's PBUH choice is significant, as pumpkin is scientifically known to be rich in beta-carotene, lutein, zeaxanthin, and potassium bioactive compounds proven to support ocular, immune, and cardiovascular health. Therefore, this ḥadīth not only highlights the Prophet's PBUH etiquette, humility, and social engagement during meals, but also subtly points to the nutritional value of a food that is now affirmed by modern science. In this context, *yaqṭīn* (pumpkin) emerges as a Sunnah-based dietary element with both preventive and therapeutic implications, aligning with the objectives of Islamic law (*maqāṣid al-sharīʿah*), particularly the protection of life (*ḥifẓ al-nafs*).

According to *Kamus Arab Sinonim*, the terms *yaqṭīn*, *qarʿ* (قرع) and *al-dubbāʾ* all refer to the same type of plant or gourd fruit[21]. These terminological differences reflect the variety of dialects and cultural usages found within Arab societies. Ibnu Qayyim[22] also explained that variations such as *al-ʿinab* and *al-karmah* both referring to grapes demonstrate how different names may refer to the same botanical entity, as is the case with the term *yaqṭīn*. Additionally, as noted by Sumaiyah[23] the types of *yaqṭīn* have been classified into several categories, as illustrated in Table 1. This phenomenon of terminological variation is not limited to gourds but also applies to various plant names mentioned in the Qur'an, depending on geographical and linguistic context. In the context of tafsir and botanical studies, understanding these Arabic synonyms is crucial to ensuring accurate identification of plant species referred to in the Qur'anic text. It also facilitates proper mapping between Qur'anic descriptions and modern scientific taxonomy, thus avoiding misinterpretations in comparative analysis. Therefore, this linguistic dimension requires deeper investigation by interdisciplinary scholars to achieve a more comprehensive and evidence-based understanding of Qur'anic terminology.

[20]Al- Bukhārī 2002), *Sahih al-Bukhāri*, Kitāb *Al-Buyūᶜ*, Bāb *Dhazaka al-Khiyāṫ*, No. 1986.

[21] H. M. Yusuf Sinaga (2013). *Kamus Arab Sinonim Arab-Melayu*. Lembaga Bahasa Arab Darussalam Center-Indonesia (pnyt.). 1st ed. Johor Darul Takzim: Perniagaan Jahabersa.

[22] Dīn Ibn Qayyim al-Jawziyyah (1989). *Tafsīr al-Qurʾān al-Karīm*. Maktab al-Dirāsāt wa al-Buḥūth al-ʿArabiyyah wa al-Islāmiyyah bi Ishrāf al-Shaykh Ibrāhīm Ramaḍān (pnyt.). 1st ed. Beirut, Lubnan: Dār wa Maktabah al-Hilāl.

[23] Sumaiyah Binti Mohd Tamizi (2015). *Tumbuhan Terpilih Menurut Perspektif Islam dan Sains Kesihatan*. Universiti Malaya, Kuala Lumpur.

Table 1: Differences in Species Names for *Yaqṭīn*

Types of Yaqtin	*Lagenaria siceraria*	*Cucurbita maxima Duchartre*	*Cucurbita pepo*	*Cucurbita moschata*

The cultivation of a yaqṭīn plant for Prophet Yūnus (peace be upon him) might be interpreted as a manifestation of natural healing that is congruent with the human biological system. The Islamic tradition, via the concepts of *al-ṭibb al-nabawī* (Prophetic medicine), consistently underscores the significance of plants in healing. This verse provide an opportunity to examine the correlation between the Qur'anic story and contemporary health principles, facilitating the integration of divine revelation and health sciences in meeting the body's demands in alignment with its inherent disposition (*fiṭrah*). This incident exemplifies a divine method of care that is mild, non-invasive, and rooted on natural resources compatible with the ecology and human body. The Qur'anic stance on health is not only broad counsel but is also manifested in practical examples via the narratives of the prophets. This approach corresponds with the notion of holistic recovery in contemporary medicine, which includes physical, emotional, and spiritual aspects. The term yaqṭīn should be understood not merely as a linguistic definition but as an epistemic sign that integrates revelation and science in developing a healthcare system aligned with human nature and Islamic principles. The study investigates the bioactive constituents of pumpkin, which have been empirically demonstrated to have substantial health advantages, especially with eye health.

The Role of Beta-Carotene in Eye Health Protection

Beta-carotene is a crucial bioactive chemical present in pumpkin (Cucurbita spp.) and serves as a precursor to vitamin A. Upon absorption, beta-carotene is metabolized into retinol, which is vital for the synthesis of retinal pigments like rhodopsin essential for vision in dim lighting. A deficit in vitamin A may result in nyctalopia and structural impairment of the retina. Furthermore, beta-carotene serves as a potent antioxidant that neutralizes free radicals and safeguards retinal cells from oxidative stress, a primary contributor to degenerative ocular conditions such as cataracts and age-related macular degeneration (AMD). This attribute renders beta-carotene an essential element in preventative nutritional approaches for eye health. Given the heightened exposure to digital blue light, the importance of retinal protection from natural sources such as pumpkin has grown significantly. The consumption of beta-carotene-rich foods acts as a preliminary nutritional strategy to mitigate the decline of visual function[24,25].

Beyond being derived from pumpkin, beta-carotene is also widely used in the nutraceutical and functional food industries due to its protective effects on the eyes and immune system. Research shows that beta-carotene can now be sustainably produced through microorganisms such as red yeast (Sporidiobolus pararoseus), which has a high potential for carotenoid production via biotechnological means. This method allows for the production of beta-carotene in large quantities with better quality control, while also adhering to sustainable and environmentally friendly practices[26]. Moreover, microbial production of beta-carotene reduces dependence on seasonal plant sources and provides a more stable year-round supply. This technology opens new opportunities for developing functional foods that are more targeted and tailored to the nutritional needs of specific populations. Thus, the

[24] Johra, F. T., Bepari, A. K., Bristy, A. T., & Reza, H. M., "A Mechanistic Review of β-Carotene, Lutein, and Zeaxanthin in Eye Health and Disease," *Antioxidants* 9, no. 11 (2020): 1046, https://doi.org/10.3390/antiox9111046

[25] Mandela, K., & Shakave, E. "Sweet Potato Leaves Contain Beta Carotene and Lutein for Eye Health," *International Journal Papier: Advance and Scientific Review* 2, no. 2 (2021): 82–89, https://doi.org/10.47667/ijpasr.v2i2.128

[26] Watcharawipas, A., & Runguphan, W. (2023). "Red yeasts and their carotenogenic enzymes for microbial carotenoid production." *FEMS Yeast Research* 23: 1–17. https://doi.org/10.1093/femsyr/foac063.

synergy between natural sources and biotechnological innovation offers great potential for advancing the health and food industries in the near future.

Furthermore, beta-carotene is present in orange-hued foods like sweet potatoes (Ipomoea batatas), which serve as a significant natural source for fulfilling human micronutrient requirements. A study by Sahana et al. (2019) shown that sweet potatoes possess beta-carotene concentrations between 5.40 and 20.00 mg per 100 grams, contingent upon variety and cultivation conditions. Sweet potatoes serve as a crucial daily dietary supply for the prevention of vitamin A deficiency, particularly among vulnerable populations. Consistent intake of these foods aids in averting vision issues linked to micronutrient deficiencies and provides defense against oxidative stress that may result in retinal damage and macular degeneration.

The quantification of the beta-carotene content in pumpkin was conducted by researchers who observed that the levels in the *Cucurbita moschata* variety ranged from 141.95 to 244.22 µg/g[27]. In addition to being responsible for the fruit's vibrant orange colour, beta-carotene is the main pro-vitamin A compound found in pumpkin-based foods. It plays a critical role in maintaining night vision, supporting epithelial tissue growth, and strengthening immune system performance. Thus, pumpkin is not only nutritionally rich but also serves as a natural dietary agent for protecting against degenerative eye diseases. Its inclusion in the Qur'anic narrative, particularly in the context of healing and recovery, offers further theological resonance to its therapeutic potential. This convergence of revelation and nutrition exemplifies the Qur'an's implicit guidance towards holistic health preservation.

More comprehensive eye protection is further supported by the presence of vitamin C in pumpkin, which functions as a water-soluble antioxidant and protects the lens and retina from oxidative damage. Another reported that pumpkin juice contains 39.6% vitamin C prior to processing, with approximately 33% retained in its powdered instant form[28]. Although some degradation occurs during drying, vitamin C stability can be preserved through the use of gum arabic as a microencapsulation agent. The synergistic effect of beta-carotene and vitamin C in pumpkin enables dual antioxidant protection against oxidative damage and helps prevent retinal degeneration. This positions pumpkin as a functional food that can support early prevention of degenerative eye diseases such as AMD and cataracts.

Furthermore, the data relating beta-carotene and vitamin C in pumpkin reveal a synergistic interaction in protecting the eyes from degenerative damage[29]. This is the conclusion that can be drawn from the studies. Based on the findings that were described earlier, Figure 2 provides a visual summary of the primary functions that beta-carotene plays in promoting eye health. This is done in order to facilitate a better understanding of this role. Not only does the combination of these two nutrients improve the body's defenses against oxidative stress, but it also speeds up the process of retinal cell regeneration[30]. When it comes to protecting the eyes from the structural damage that can be caused by environmental elements like ultraviolet radiation and digital pollution, this skill is absolutely essential. Consequently,

[27] Ninčević Grassino, A., Rimac Brnčić, S., Badanjak Sabolović, M., Šic Žlabur, J., Marović, R., & Brnčić, M. (2023). Carotenoid content and profiles of pumpkin products and by-products. *Molecules, 28*(5), 1–12. https://doi.org/10.3390/molecules28052155

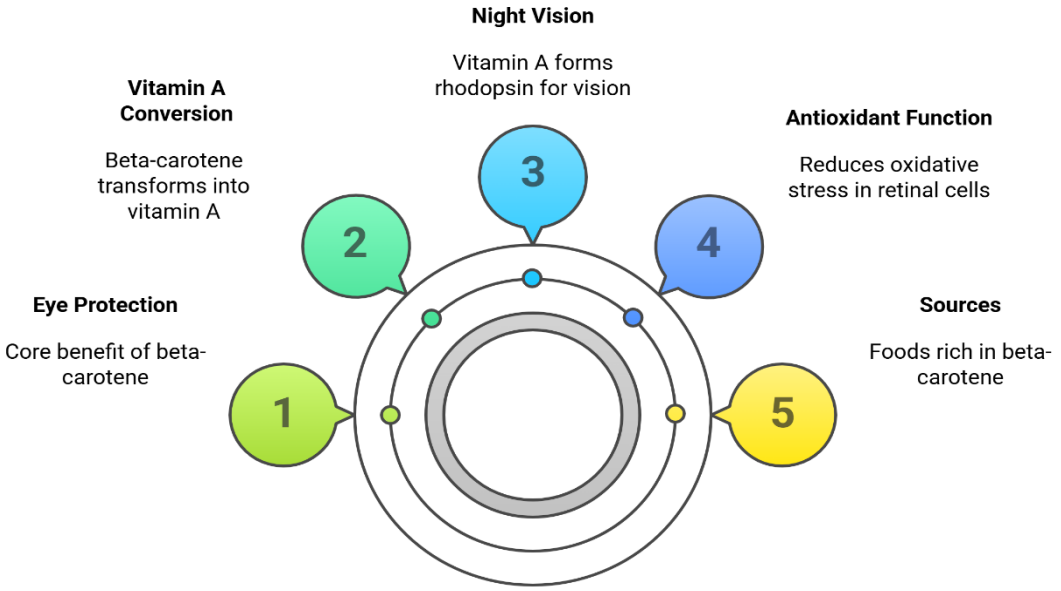
[28] Qonitah, A., & Handayani, M. N. (2019). "Penggunaan gum arab sebagai bulking agent pada pembuatan minuman serbuk instan labu kuning dengan menggunakan metode foam mat drying." *Edufortech: Jurnal Pendidikan Teknologi dan Kejuruan* 4(2): 118–127. https://ejournal.upi.edu/index.php/edufortech/article/view/19375.

[29] Zahra, N., Alim-un-Nisa, Hina, S., Masood, S., Kalim, I., Saeed, M. K., Ahmad, I., & Arshad, M., "Exploration of Locally Grown Yellow and Green Pumpkin as a Potential Source of β-Carotene and Vitamin A," *Pakistan Journal of Scientific and Industrial Research, Series B: Biological Sciences* 63B, no. 3 (2020): 238–241.

[30] Shajan, A. E., Dash, K. K., Hamid, *, Bashir, O., & Shams, R, "Comprehensive Comparative Insights on Physico-Chemical Characteristics, Bioactive Components, and Therapeutic Potential of Pumpkin Fruit," *Future Foods* 9 (2024): 100312, https://doi.org/10.1016/j.fufo.2024.100312

the consumption of pumpkin on a consistent basis can be considered a beneficial natural dietary intervention for the purpose of maintaining long-term oral and visual health.

Figure 2: Beta-Carotene's Role in Eye Health



In summary, pumpkin is a highly promising dietary source for promoting eye health, owing to its abundant bioactive components, especially beta-carotene and vitamin C. Beta-carotene acts as a precursor to vitamin A, crucial for night vision, and serves as an antioxidant that safeguards the retina from oxidative stress. The vitamin C in pumpkin synergistically enhances ocular defense mechanisms, while alternate sources of beta-carotene, such as sweet potatoes, and biotechnological applications including red yeast, further augment its potential utility. Consequently, the incorporation of natural nutrients with plant-based dietary approaches such as those sourced from pumpkin may provide a comprehensive support system for the early prevention of degenerative eye disorders. These findings closely support the study's aim to assess the alignment between the Qur'anic mention of *yaqṭīn* and contemporary scientific discoveries on the preservation of human senses as essential to general well-being.

Pumpkin Bioactive Compounds as Natural Anti-Inflammatory Agents

Research on pumpkin (Cucurbita pepo) has demonstrated that it possesses several bioactive chemicals with significant potential as natural anti-inflammatory medicines. The principal substances found include phenolics, flavonoids, and triterpenoids, which are essential in mitigating inflammatory reactions via various pathways. In in vitro investigations, methanolic extracts of pumpkin shown significant effects in stabilizing red blood cell membranes, diminishing heat-induced hemolysis, and suppressing the activity of pro-inflammatory enzymes, including proteinases. These findings underscore the potential of pumpkin as a safer, natural substitute for traditional anti-inflammatory medications, which can entail long-term adverse effects. This study endorses the utilization of C. pepo as an efficient phytotherapeutic alternative for controlling inflammation-related disorders[31].

[31] Fathima, S. N., Firdous, S. M., Pal, S., Ghazzawy, H. S., & Gouda, M. M. (2024). "Assessment of in vitro antioxidant and anti-inflammatory activities of pumpkin (Cucurbita pepo) natural plant." *Natural Product Communications* 19(5): 1–15.

The phenolic compounds in Cucurbita pepo significantly contribute to its anti-inflammatory activity through their strong antioxidant properties. Research indicates that the phenolic content in pumpkin reaches up to 273.52 mg/g, demonstrating its potency in neutralizing free radicals and protecting tissues from oxidative damage. The anti-inflammatory mechanisms associated with these compounds include the reduction of pro-inflammatory cytokine production and the preservation of cellular structures and functions. Membrane stabilization activity, especially in red blood cells, is also attributed to the presence of phenols that help prevent hemolysis caused by osmotic or heat stress. These findings confirm that the high phenolic content in C. pepo can serve as a foundation for developing safer herbal therapies and support its use in preventing chronic inflammatory conditions such as arthritis and asthma[32].

In terms of flavonoid content, , another researcher identified flavonoids as active components that may be found in the skin of yellow pumpkin (Cucurbita moschata)[33]. Flavonoids have a significant role in preventing oxidative damage to cells in the body. Flavonoids are naturally occurring chemicals derived from plants that are particularly well-known for their anti-inflammatory and antioxidant properties. In the research project, flavonoids were extracted from pumpkin skin using two different percentages of ethanol: 70% and 95%. The results of the extraction were compared. According to the findings, the flavonoid concentration of the 95% ethanol extract was 1.2045%, which was somewhat higher than the flavonoid content of the 70% ethanol extract, which was 1.1931 percent.

Furthermore, the presence of flavonoids was also confirmed through colour changes observed during laboratory testing, specifically the formation of a yellow hue, which indicated the existence of these compounds. This outcome reinforces the evidence that solvent concentration affects the amount of flavonoids that can be extracted from natural sources. The higher the ethanol concentration, the greater the flavonoid yield. Overall, the study demonstrated that pumpkin skin often regarded as waste actually possesses significant therapeutic value, and that extraction techniques play a critical role in optimizing yield.

Researchers effectively identified three types of active triterpenoid chemicals from pumpkin seeds (Cucurbita maxima). Another reported that one of these triterpenoids shown the capacity to diminish melanin production melanin being the pigment that determines skin color exhibiting effectiveness akin to arbutin, a commonly utilized skin-whitening chemical in the cosmetics sector[34]. Significantly, the chemical exhibited minimal cytotoxicity at low doses, rendering pumpkin seeds a promising natural resource for dermatological uses. This benefit establishes pumpkin-derived triterpenoids as safer natural substitutes for synthetic medicines, frequently linked to prolonged negative effects. These molecules also enhance the formulation of more sustainable, plant-derived skincare products. Consequently, pumpkin seeds provide benefits both nutritionally and as vital raw materials in therapeutic cosmetic formulations.

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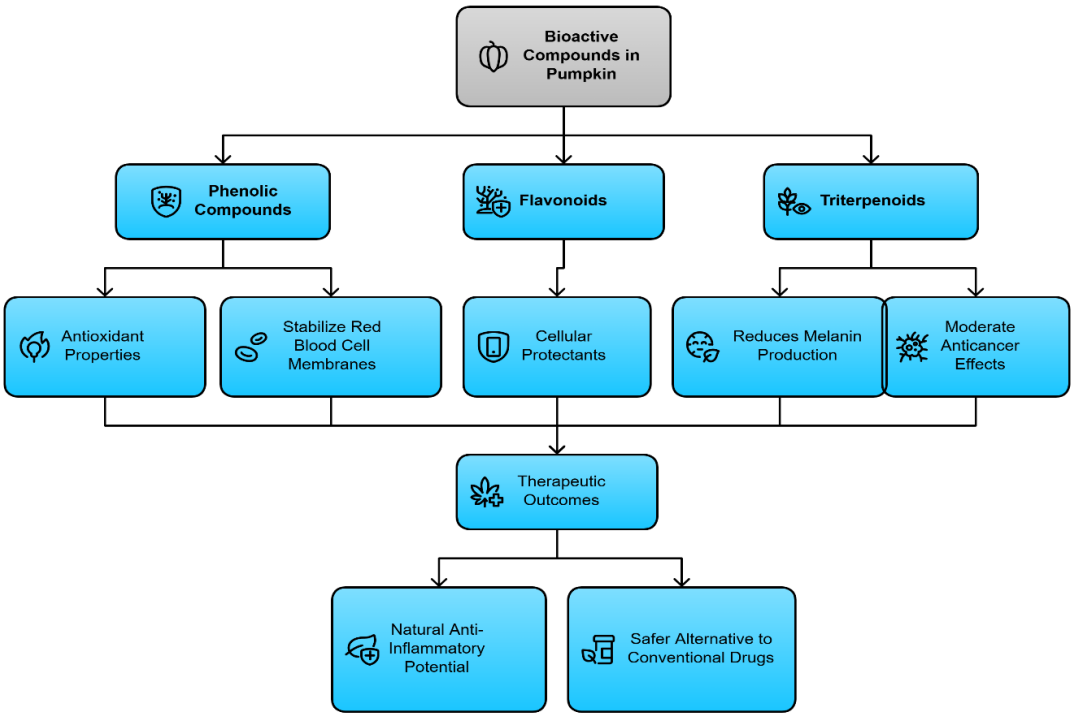
[32] Hoffmann, M. H., & Griffiths, H. R. (2018). "The dual role of reactive oxygen species in autoimmune and inflammatory diseases: evidence from preclinical models." *Free Radical Biology and Medicine* 125: 1–10.

[33] Ilham, I., Supriningrum, R., & Warnida, H. (2024). "Penetapan kadar flavonoid total ekstrak etanol kulit buah labu kuning (Cucurbita moschata) berdasarkan perbedaan konsentrasi pelarut secara spektrofotometri UV-Vis." *Jurnal Chemica* 25(1): 110–118. https://www.researchgate.net/publication/383151342_Penetapan_Kadar_Flavonoid_Total_Ekstrak_Etanol_Kulit_Buah_Labu_Kuning_Cucurbita_moschata_Berdasarkan_Perbedaan_Konsentrasi_Pelarut_Secara_Spektrofotometri_UV-Vis.

[34] Kikuchi, T., Ueda, S., Kanazawa, J., Naoe, H., Yamada, T., & Tanaka, R. (2014). "Three new triterpene esters from pumpkin (Cucurbita maxima) seeds." *Molecules* 16(4): 4802–4813. https://doi.org/10.3390/molecules19044802.

In the same study, two of the identified triterpenoids were also found to exhibit moderate inhibitory effects on the proliferation of leukemia cells, while one compound showed no significant impact. This finding suggests that minor alterations in the chemical structure of active compounds can influence their biological efficacy. Consequently, this discovery highlights the potential of pumpkin seeds not only in skincare but also in exploring plant-based cancer treatments. It reflects the broader importance of pumpkin in modern therapeutic development. Moreover, the findings support the growing field of herbal oncology, which is increasingly recognized in complementary and alternative medicine. With further research, triterpenoids from pumpkin could be refined and clinically tested as natural anticancer agents. This progress aligns with global aspirations toward safer, more effective and cost-efficient plant-based therapies.

Figure 3: Pumpkin Bioactives as Natural Anti-Inflammatory Agents



The article about *Three New Triterpene Esters from Pumpkin* (*Cucurbita maxima*) *Seeds*[35] did not directly evaluate the anti-inflammatory effects of triterpenoids from Cucurbita maxima; however, prior research on other species within the Cucurbitaceae family such as Cucurbita pepo, Momordica cochinchinensis and Trichosanthes kirilowii has shown that multiflorane-type compounds from this family exhibit inherent anti-inflammatory properties. These substances have been documented to diminish inflammation via multiple ways, including the suppression of pro-inflammatory chemical mediators. Given that Cucurbita maxima seeds contain multiflorane chemicals, it is highly likely that they possess comparable anti-inflammatory properties[36]. Additionally, one of the triterpenoids found in the Kikuchi et al. study was demonstrated to diminish melanin formation without eliciting cytotoxic effects, so indirectly suggesting its role in cellular protection a function intimately associated with physiological stability and anti-inflammatory activity. Consequently, triterpenoids in pumpkin seeds

[35] Kikuchi, T., Ueda, S., Kanazawa, J., Naoe, H., Yamada, T., & Tanaka, R. (2014). "Three new triterpene esters from pumpkin (Cucurbita maxima) seeds." *Molecules* 16(4): 4802–4813. https://doi.org/10.3390/molecules19044802.

[36] Arslanbaş, E., Kara, H., Karayiğit, M. Ö., Doğan, H. O., & Yıldız, S. N., "Anti-Inflammatory Activity of Turkey Source Pumpkin Seed Oil in Rat Edema Model," *Acta Poloniae Pharmaceutica – Drug Research* 77, no. 2 (2020): 305–312, https://doi.org/10.32383/appdr/118962.

warrant additional pharmacological investigation to facilitate the advancement of alternate treatments for inflammatory illnesses[37].

Potassium and Blood Pressure Regulation

Recent research indicate that pumpkin possesses numerous bioactive compounds capable of preventing various disorders, including hypertension. Pumpkin is acknowledged as a natural dietary source abundant in potassium, with yellow pumpkin especially providing 356.2 mg of potassium per 100 grams. Potassium is a vital mineral that significantly contributes to blood pressure regulation by maintaining electrolyte balance and facilitating nerve and muscle function. Consuming potassium-rich foods, including yellow pumpkin, has been demonstrated to mitigate the risk of hypertension and cardiovascular illnesses, along with contemporary dietary health guidelines. Moreover, yellow pumpkin comprises vital micronutrients including vitamins A, C, and folic acid, along with magnesium and calcium, which collaboratively enhance immune function, bone health, and cellular regeneration. From a nutritional science standpoint, pumpkin serves as a significant source of energy and dietary fiber, while also acting as a potential functional food that promotes physiological equilibrium in the body[38,39].

Furthermore, according to Gavril[40] potassium is one of the key minerals found in pumpkin seeds, with concentrations ranging from 2,069 to 2,838 mg per 100 grams of dry weight (D.W.), making them one of the richest plant-based dietary sources of potassium. This mineral plays a crucial role in various physiological processes, especially in blood pressure regulation, nerve impulse transmission, and electrolyte balance in the body. In the context of eye health, potassium contributes indirectly through systemic blood pressure control, ensuring smooth microcirculation in the retina and preventing vascular damage that can lead to complications such as hypertensive retinopathy. The high potassium content in pumpkin also helps stabilize muscle activity, including small ocular muscles involved in eye movement and focus. Therefore, the regular intake of pumpkin contributes to comprehensive mineral support not only for cardiovascular and neurological health but also for maintaining optimal vision through vascular and electrophysiological mechanisms.

Pumpkin is also one of the plants within the Cucurbitaceae family that contains significant levels of potassium, such as chayote (Sechium edule), which was highlighted in a study with titled *The Effect of Chayote (Cucurbitaceae) Consumption on Blood Pressure Changes in Reproductive-Aged Women with Hypertension at Citra Sehat Clinic, Bandung*[41]. Potassium acts as a key electrolyte in the body, playing an essential role in maintaining osmotic balance, muscle activity, and blood pressure stability. The positive effects of pumpkin consumption on blood pressure have been demonstrated in clinical trials involving reproductive-aged women with hypertension, where chayote intake successfully reduced average systolic blood pressure from 148.33 mmHg to 125.67 mmHg. This mechanism is associated

[37] Amin, M. Z., Islam, T., Mostofa, F., Uddin, M. J., Rahman, M. M., & Satter, M. A., "Comparative Assessment of the Physicochemical and Biochemical Properties of Native and Hybrid Varieties of Pumpkin Seed and Seed Oil (*Cucurbita maxima* Linn.)," *Heliyon* 5, no. 10 (2019): e02994, https://doi.org/10.1016/j.heliyon.2019.e02994.
[38] Purwoko, S. A. (2023). "10 makanan yang mengandung kalium untuk tubuh." *HelloSehat*. https://hellosehat.com/nutrisi/fakta-gizi/makanan-sumber-kalium/ [diakses 2 Julai 2025].
[39] Syifa (2024). "Banyak yang Belum Tahu, Inilah 20 Manfaat Daun Labu Kuning yang Bikin Penasaran." *E-Jurnal*. https://ejournal.iainbukittinggi.ac.id/banyak-yang-belum-tahu-inilah-20-manfaat-daun-labu-kuning-yang-bikin-penasaran-e-jurnal/ [diakses 2 Julai 2025].
[40] Gavril, R. N., Stoic, F., Lipsa, F. D., Constantin, O. E., Stănciuc, N., Aprodu, I., & Râpănu, G. (2024). "Pumpkin and pumpkin by-products: a comprehensive overview of phytochemicals, extraction, health benefits, and food applications." *Plants* 13(17): 1–28. https://doi.org/10.3390/foods13172694.
[41] Fitri, M. N., Choirunissa, R., & Rifiana, A. J. (2020). "Pengaruh konsumsi labu siam (Cucurbitaceae) terhadap perubahan tekanan darah pada wanita usia subur dengan hipertensi di Klinik Citra Sehat Kota Bandung." *Jurnal Ilmiah Kesehatan* 12(2): 169–178. https://doi.org/10.37012/jik.v12i2.258.

with the diuretic effect of potassium, which facilitates the removal of excess sodium and water through urination, thereby lowering pressure on the arterial walls.

Moreover, pumpkin comprises an array of nutrients, including roughly 90% water, 7.5% carbs, 1% protein, 0.6% fiber, 0.2% ash, and 0.1% fat, as well as minerals such as 20 mg of calcium, 25 mg of phosphorus, and 0.3 mg of iron. This amalgamation of components establishes pumpkin as a significant natural aliment that holistically aids in blood pressure regulation and cardiovascular wellness. Moreover, the study performed multiple assessments to evaluate the efficacy of chayote in blood pressure regulation. Table 2 illustrates the alterations in systolic and diastolic blood pressure among participants in the experimental group prior to and during therapy. The tests were conducted under controlled conditions utilizing a quantitative methodology that facilitated objective data analysis pre- and post-intervention. This evaluation is crucial to confirm that the observed reductions in blood pressure are not coincidental, but rather directly associated with chayote consumption as a therapeutic nutritional intervention. Alongside clinical efficacy, the safety and acceptability of the intervention were assessed to determine chayote's potential as a natural aid for blood pressure regulation and as a functional dietary intervention in comprehensive cardiovascular care.

Table 2: Distribution of Blood Pressure Before and After Consuming Chayote (Cucurbitaceae) in the Experimental Group

Blood Pressure	N (Number of Respondents)	Mean	Median	Standard Deviation	Min (Minimum)	Max (Maximum)
Systolic Before	15	148.33	145.00	5.876	140	160
Systolic After	15	125.67	120.00	9.796	110	140
Diastolic Before	15	98.00	100.00	7.512	90	110
Diastolic After	15	92.00	90.00	3.684	90	100

Table 2 illustrates the substantial impact of chayote intake on alterations in blood pressure among reproductive-aged women experiencing moderate hypertension. Before the intervention, the mean systolic blood pressure of participants was 148.33 mmHg, with a standard deviation of 5.876. Following seven consecutive days of chayote consumption, the value diminished to 125.67 mmHg, with a standard deviation of 9.796. This reduction is deemed clinically significant and indicates the efficacy of the dietary intervention administered. Likewise, diastolic blood pressure fell from an average of 98.00 mmHg to 92.00 mmHg following the intervention. This beneficial alteration can be ascribed to the potassium content in chayote, which acts as a natural diuretic that facilitates sodium elimination through urine, thereby alleviating strain on artery walls. Potassium is essential for balancing nerve impulses and muscle activity, especially those of cardiac muscles. Consequently, our data substantiate the idea that chayote, as a natural source of potassium, possesses promise as a nutritional agent for non-invasive and safe management of blood pressure[42].

The research additionally evaluated the efficacy of chayote intervention between the experimental and control groups, as outlined in Table 3. This comparison facilitates a more precise evaluation of the genuine impact of chayote on blood pressure lowering, in contrast to spontaneous fluctuations or external influences. The findings indicated that the reduction in blood pressure in the experimental

[42] Fitri, M. N., Choirunissa, R., & Rifiana, A. J. (2020). “Pengaruh konsumsi labu siam (Cucurbitaceae) terhadap perubahan tekanan darah pada wanita usia subur dengan hipertensi di Klinik Citra Sehat Kota Bandung.” *Jurnal Ilmiah Kesehatan* 12(2): 169–178. https://doi.org/10.37012/jik.v12i2.258.

group was more consistent and statistically significant. This substantiates the data that chayote functions as an efficacious and safe dietary component in promoting blood pressure regulation.

Table 3: Comparison of Systolic Blood Pressure Before and After Chayote (Cucurbitaceae) Consumption Among Reproductive-Aged Women with Hypertension

Group	Phase	Mean	Mean Difference	N	T	Significance (p)
Experimental	Before consumption	148.33	22.66	15	8.500	0.000
	After consumption	125.67				
Control	Before consumption	147.33	16.13	15	7.607	0.000
	After consumption	131.20				

In this experiment, two groups of female respondents were assigned separately to evaluate the effectiveness of dietary interventions on blood pressure regulation. The experimental group consisted of reproductive-aged women who consumed 100 grams of boiled chayote daily for seven consecutive days, while the control group consisted of women who did not receive any special intervention and continued with their usual daily routines. The purpose of this comparison was to assess the impact of chayote consumption on changes in systolic and diastolic blood pressure using objective data. The findings showed that the reduction in both systolic and diastolic blood pressure in the experimental group was greater than that observed in the control group. The highly significant p-values ($p = 0.000$) for both groups indicate that the observed reductions were not due to chance, but instead reflect the actual effectiveness of the dietary intervention involving chayote. Therefore, the therapeutic potential of potassium in chayote can be summarized as a key nutritional agent contributing to blood pressure stability, thus confirming its relevance for managing hypertension through natural dietary strategies.

Overall, the potassium content in pumpkin especially in yellow pumpkin and chayote plays a vital role in regulating blood pressure and supporting cardiovascular health. Findings from both dietary and clinical studies demonstrate that regular consumption of pumpkin can yield positive outcomes in blood pressure regulation via physiological mechanisms involving sodium excretion, nerve impulse stabilization, and vascular protection. Potassium, as an essential mineral in pumpkin, not only contributes to hypertension management but also supports neurological and visual health. Hence, the integration of nutrition, health sciences, and dietary interventions must continue to be explored to strengthen the scientific evidence supporting pumpkin as a natural therapeutic agent in holistic, nutrition-based health care strategies.

THE TERM *YAQṬĪN* AS A QUR'ANIC INDICATION OF REGENERATIVE THERAPY AND NUTRITION

The phrase *yaqṭīn*, referenced in Surah al-Ṣāffāt verse 146, transcends a mere literal interpretation of a plant variety, encompassing an implied indication of its significance in healing and health preservation. The narrative of Prophet Yūnus (peace be upon him) illustrates that the cultivation of yaqṭīn following his release from the fish's belly signifies the plant's direct involvement in the regeneration process,

encompassing physical protection and energy restoration. Exegetes like Al-Qurṭubī[43] and Ibnu Kathir[44] assert that the role of *yaqṭīn* embodies various heavenly wisdoms, including its swift growth, insect-repellent characteristics and its ability to supply essential nutrients for bodily rejuvenation. Contemporary scientific research on pumpkin, known as *yaqṭīn*, has revealed its abundance of antioxidants like beta-carotene and vital minerals that promote cellular regeneration and physiological equilibrium. Thus, the phrase yaqṭīn in this verse serves not just a narrative function but also signifies a Qur'anic indication of the significance of bodily healing and the therapeutic benefits of natural diet.

Modern studies, show that pumpkin contains bioactive elements such as beta-carotene that assist in tissue regeneration, particularly in supporting skin and visual health[45,46]. Beta-carotene, which acts as a vitamin A precursor, helps accelerate tissue repair and strengthen the immune system aligning with the physical and emotional recovery needs of Prophet Yūnus. Additionally, pumpkin contains anti-inflammatory compounds such as polyphenols that reduce oxidative stress and balance immune responses to inflammation. Therefore, the reference to *yaqṭīn* in this verse implicitly reflects the selection of plant types suited for therapeutic and regenerative functions, based on their natural properties and health benefits.

From the perspective of tafsir, the specific mention of *yaqṭīn* in Surah al-Ṣāffāt verse 146 suggests that the choice of this plant was not arbitrary, but was instead linked to the specific health condition of Prophet Yūnus after being expelled from the fish's belly in a state of weakness. Exegetes such al-Rāzī[47] and Ibn ᶜĀshūr[48] explained that *yaqṭīn* refers to gourd-type plants (*al-dubbāʾ*) which grow rapidly, have large leaves, and can spread across the ground to provide shade and protection from insects and sunlight. Therefore, it can be understood that pumpkin had not yet been consumed, but rather served initially to support physical recovery and skin restoration. This suggests that the Qur'anic mention of *yaqṭīn* involves divine wisdom in the form of therapeutic selection of plants appropriate for holistic healing. As such, *yaqṭīn* is not just a symbolic element in the prophetic narrative, but carries scientific relevance aligned with modern understanding of skin recovery, nutrition, and immune function.

In contemporary application, the concept of *yaqṭīn* can be utilized in the formulation of food-based therapies and Qur'an-centered healthy lifestyle practices. For example, pumpkin-derived products may be formulated for post-treatment rehabilitation, including applications after chemotherapy, skin wound management, or gastrointestinal issues. The regenerative advantages of yaqṭīn can be incorporated into the curriculum of contemporary Islamic medical education, especially within phytotherapy and Sunnah based diet. This corresponds with the maqāṣid al-sharīʿah ideas on the preservation of life (*ḥifẓ al-nafs*)

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[43] Abī ʿAbd Allah Muhammad bin Ahmad bin Abī Bakr al-Qurṭubī (2006). *Al-Jāmiʿ Li Aḥkām al-Qurʾān*. ʿAbd Allah bin ʿAbd al-Ḥasan al-Turkī (pnyt.). 1st ed. Damshiq, Syria: Muassasah al-Risālah.

[44] Ibnu Kathīr (2009). *Shahih Tafsir Ibnu Katsir*. Syaikh Shafiyyurrahman al-Mubarakfuri (pnyt.). 2nd ed. Indonesia: Pustaka Ibnu Katsir.

[45] Ninčević Grassino, A., Rimac Brnčić, S., Badanjak Sabolović, M., Šic Žlabur, J., Marović, R., & Brnčić, M. (2023). "Carotenoid content and profiles of pumpkin products and by-products." *Molecules* 28(5): 1–12. https://doi.org/10.3390/molecules28052155.

[46] Ceclu, L., Mocanu, G. D., & Nistor, O. V. (2020). "Pumpkin – health benefits." *Journal of Agroalimentary Processes and Technologies* 26(3): 241–246. https://www.researchgate.net/publication/356287046.

[47] Fakhruddīn al-Rāzī (2000). *Al-Tafsīr al-Kabīr aw Mafātīḥ al-Ghaib*. 3rd ed. Beirut, Lubnan: Dār Iḥyāʾ al-Turāth al-ʿArabī.

[48] Muḥammad al-Ṭāhir Ibn ʿĀshūr (2014). *Tafsīr al-Taḥrīr wa al-Tanwīr*. 1st ed. Beirut, Lubnan: Muassasah al-Tārīkh.

and the protection of health as a divine trust[49,50]. Consequently, the phrase *yaqṭīn* in the Qur'an should not be regarded solely as a narrative symbol within the prophetic account, but rather as a Qur'anic reference that necessitates earnest consideration of health and nutrition principles in contemporary living, informed by revelation and knowledge.

Finally, the mention of *yaqṭīn* in the Qur'an and its interpretation, bolstered by modern scientific discoveries, provide substantial opportunity to create a novel intellectual framework for the integration of knowledge. A cross-disciplinary approach is required, incorporating Qur'anic exegetes, health science specialists, and nutritionists to enhance the comprehension of divine signals pertaining to human health and well-being. In contemporary Muslim society, confronted with issues such as chronic illnesses, psychological stress and declining dietary practices, it is both opportune and essential to reinvigorate the comprehension of concepts like yaqṭīn. This initiative not only informs the society about divine natural rules (*sunnatullah*) related to nutrition and healing but also guides the creation of health and recovery goods based on Qur'anic principles. Consequently, the examination of yaqṭīn transcends mere linguistic or exegetical inquiry, serving as a cornerstone for the comprehensive reform of Islamic health philosophy, informed by divine revelation.

CONCLUSION

This study has demonstrated that the term *yaqṭīn*, mentioned in Surah al-Ṣāffāt verse 146, is not merely part of a symbolic prophetic narrative but carries deeper implications for physical healing and ecological wisdom. Classical exegetical interpretations by scholars such as al-Ṭabarī, al-Qurṭubī, and Fakhr al-Dīn al-Rāzī unanimously point to *yaqṭīn* as referring to the gourd plant (*Cucurbita* spp.), which was divinely caused to grow over Prophet Yūnus (peace be upon him) as part of his physical recuperation and protection. This plant's ability to shield from environmental stressors such as heat and insects underscores its therapeutic suitability. The Qur'anic emphasis on *yaqṭīn* suggests that its mention is intentional and purposeful, reflecting a broader divine design in selecting flora that aligns with both human needs and natural healing processes.

Complementing this is a narration in *Ṣaḥīḥ al-Bukhārī* where Anas bin Mālik RA observed the Prophet Muhammad PBUH expressing fondness for *dubbāʾ* (gourd), carefully picking it from around a dish during a meal. This Prophetic practice not only reflects personal preference but can be interpreted as tacit guidance towards dietary mindfulness and appreciation of beneficial foods. When evaluated alongside modern biomedical research, pumpkin (*yaqṭīn*) has been shown to contain bioactive constituents such as beta-carotene, flavonoids, triterpenoids, and potassium each playing a functional role in protecting eye health, modulating inflammation, and regulating blood pressure. These alignments between Prophetic behaviour and empirical findings reinforce the harmony between divine revelation and modern science in promoting human health.

The *tafsīr ʿilmī* approach employed in this study has enabled the construction of an interdisciplinary analytical framework that bridges classical Islamic scholarship with contemporary scientific inquiry. By exploring *yaqṭīn* not only as a linguistic and theological term but also as a nutritional and therapeutic agent, this research has contributed a novel perspective to the Qur'anic-health discourse. The methodology affirms that revealed texts contain latent biomedical insights that can be harnessed to formulate value-driven health strategies. In this light, *tafsīr ʿilmī* serves not only as a tool of exegetical

[49] Hasri, H., & Hasliza, M. A. (2021). "Konsep ḥifẓ al-nafs (pemeliharaan nyawa) berdasarkan maqāṣid syariah dalam menghadapi pandemik COVID-19." Dalam *International Conference on Syariah & Law 2021 (ICONSYAL 2021)*, hlm. 57–70. Selangor.

[50] Alias, N. I. F., & Syed Shamsuddin, S. S. (2022). "Peranan maqāṣid syarīʿah ḥifẓ al-nafs dan ḥifẓ al-ʿaql dalam penutupan sekolah dan universiti di Malaysia semasa pandemik COVID-19." Dalam Farah Laili Muda@Ismail & Mashitah Sulaiman Anita Ismail (pnyt.), *Seminar Antarabangsa Falsafah, Tamadun, Etika dan Turath Islami (i-STET 2022)*, hlm. 81–98. Negeri Sembilan: Universiti Sains Islam Malaysia. https://istet.usim.edu.my/publication/

enrichment but as a meaningful intellectual pathway for shaping an Islamic health paradigm that integrates science, fiṭrah, and revelation.

The key contribution of this study lies in its integration of Qur'anic exegesis, Prophetic tradition, and scientific bioactivity analysis an area often overlooked in Islamic health research. It provides foundational support for the development of pumpkin-based therapeutic and nutritional products and proposes a more systematic, revelation-based approach to lifestyle and wellness. This aligns with the objectives of *maqāṣid al-sharīʿah*, particularly in the preservation of life (*ḥifẓ al-nafs*) and intellect (*ḥifẓ al-ʿaql*). Furthermore, it contributes to public awareness of the nutritional sunnah and advocates for its reintegration into modern Muslim health consciousness. In an era of rising non-communicable diseases and lifestyle-related disorders, reviving Qur'anic and Prophetic dietary wisdom becomes not only relevant but urgently needed.

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