



Health Benefits of Ajwa Dates (*Phoenix dactylifera L*): A Qur'anic Thematic Interpretation and Scientific Perspective

Hariyana Fingki¹, Umayyatus Syarifah², Bayyinatul Muchtaromah³ Yes Setyowati⁴

¹²³ State Islamic University of Maulana Malik Ibrahim Malang

⁴ State Islamic University of Sayyid Ali Rahmatullah Tulungagung

hariyanafingki@gmail.com

umayya_syarifa@fis.uin-malang.ac.id

bayyinatul@bio.uin-malang.ac.id

enisetyowati@iain-tulungagung.ac.id

Received: 15 – 06 – 2025 Accepted : 15 – 07 – 2025 Published: 31 – 08 – 2025

Abstract

*This study focuses on the health benefits of Ajwa dates (*Phoenix dactylifera L.*) through a Qur'anic thematic interpretation combined with relevant scientific findings. Unlike previous studies that broadly discuss plant diversity, this research specifically highlights Ajwa dates, which are mentioned in hadith and valued in Islamic tradition for their protective and therapeutic properties. The thematic interpretation (tafsīr maudhū'ī) method was applied by collecting and analyzing Qur'anic verses and hadith related to dates, then synthesizing their meanings in light of classical exegesis and contemporary scientific literature. Scientific data were obtained through a qualitative literature review of medical and nutritional studies. The results indicate that Ajwa dates are rich in nutrients, antioxidants, and bioactive compounds with proven health benefits, such as enhancing immunity, reducing blood pressure, supporting women's reproductive health, and providing protective effects against toxins. Theologically, the Qur'an and hadith emphasize dates as blessings and sources of healing, which are now further supported by scientific evidence. This study concludes that Ajwa dates hold significant value as both a Qur'anic health guidance and a scientifically supported natural remedy, offering insights into integrating faith-based perspectives with modern health sciences.*

Keywords : Health Benefits, Islamic Perspective, *Phoenix dactylifera L.*

Abstrak

*Studi ini berfokus pada manfaat kesehatan dari kurma Ajwa (*Phoenix dactylifera L.*) melalui pendekatan tafsir tematik Al-Qur'an yang dikombinasikan dengan temuan ilmiah yang relevan. Berbeda dengan penelitian sebelumnya yang membahas keanekaragaman tumbuhan secara umum, penelitian ini secara khusus menyoroti kurma Ajwa yang disebutkan dalam hadis dan memiliki kedudukan istimewa dalam tradisi Islam karena sifat protektif dan terapeutiknya. Metode tafsir tematik (tafsīr maudhū'ī) diterapkan dengan mengumpulkan dan menganalisis ayat-ayat Al-Qur'an serta hadis yang berkaitan dengan kurma, kemudian mensintesis maknanya berdasarkan tafsir klasik dan literatur ilmiah kontemporer. Data ilmiah diperoleh melalui kajian literatur kualitatif terhadap penelitian*

di bidang medis dan gizi. Hasil penelitian menunjukkan bahwa kurma Ajwa kaya akan nutrisi, antioksidan, dan senyawa bioaktif yang terbukti memberikan berbagai manfaat kesehatan, seperti meningkatkan sistem kekebalan tubuh, menurunkan tekanan darah, mendukung kesehatan reproduksi perempuan, serta memberikan efek perlindungan terhadap racun. Secara teologis, Al-Qur'an dan hadis menekankan bahwa kurma merupakan anugerah sekaligus sumber penyembuhan, yang kini semakin diperkuat oleh bukti ilmiah. Penelitian ini menyimpulkan bahwa kurma Ajwa memiliki nilai penting sebagai pedoman kesehatan Qur'ani sekaligus sebagai obat alami yang didukung oleh sains modern, sehingga memberikan wawasan untuk mengintegrasikan perspektif keimanan dengan ilmu kesehatan kontemporer.

Kata kunci: Manfaat Kesehatan, Perspektif Islam, *Phoenix dactylifera L.*

Introduction

The Qur'an and Hadith provide not only theological guidance but also insights into the relationship between humans, nature, and plants. In Islam, humans are entrusted as *caliphs* (stewards) of the earth, with a responsibility to preserve and appreciate biodiversity as part of their religious duty. The study of plants within the Qur'anic framework therefore contributes to a deeper understanding of Islamic ecological ethics and inspires practical actions for environmental stewardship.

In contemporary discourse, issues of environmental sustainability have become a global concern. Examining Qur'anic verses and Hadith related to flora allows Muslims to contribute meaningfully to ecological awareness while reinforcing the integration of faith and science. Among the plants frequently mentioned in Islamic texts, dates (*Phoenix dactylifera L.*) occupy a special place. The Qur'an refers to dates around twenty times, and numerous Hadith highlight their nutritional, spiritual, and therapeutic value. One well-known narration states: "Whoever eats seven Ajwa dates in the morning, he will not be harmed that day by poison or magic" (Sahih al-Bukhari, no. 5769).¹ (Anugrah et al., 2022)

Ajwa dates, in particular, have received significant attention in Islamic tradition as a fruit endowed with protective and healing properties. Scientifically, Ajwa dates are rich in nutrients, antioxidants, and bioactive compounds that support immunity, regulate blood pressure, and provide other health benefits. However, most previous studies have focused narrowly on their phytochemical properties, with limited integration of Islamic perspectives and contemporary medical research.

¹ Anugrah, I., Hambali, K. S., Syamsu, R. F., Bamahry, A., & Murfat, Z. (2022). Comparison of Antioxidant Content of β -Carotene Compounds of the Carotenoid Group in Ajwa Dates (Medinah), Sukari Dates (Egypt), Medjool Dates (Palestine), Khalas Dates (Dubai), and Golden Valley Dates (Egypt). *Fakumi Medical Journal: Medical Student Journal*, 2(9), 612–618. <https://fmj.fk.umi.ac.id/index.php/fmj>

This study therefore seeks to bridge that gap by employing thematic interpretation (*tafsir maudhū'ī*) alongside a qualitative literature review. Qur'anic verses and Hadith concerning dates are analyzed in the light of classical exegesis and then connected with findings from modern health sciences. By focusing specifically on Ajwa dates as a distinct species, this research provides a more in-depth understanding of their theological significance and scientifically proven health benefits. Ultimately, this study aims to contribute to Islamic scholarship while offering insights into the integration of faith-based health guidance with modern scientific knowledge.

Research Methods

This study employed a qualitative research design using a literature-based scientific approach. Data were collected from a wide range of academic sources, including books, peer-reviewed journals, research articles, and other relevant scientific documents. The process involved identifying, selecting, and analyzing literature related to the Qur'anic and Hadith references on dates, particularly Ajwa dates, as well as contemporary medical and nutritional studies. Thematic interpretation (*tafsir maudhū'ī*) was applied by grouping Qur'anic verses and Hadith thematically, interpreting their meanings based on classical exegesis, and synthesizing them with contemporary scientific findings. The literature review was conducted systematically, with attention to source credibility, relevance, and validity, to ensure that the arguments and findings were logical, reliable, and academically sound. The purpose of this method is to explain the health benefits and nutritional content of Ajwa dates by integrating Islamic perspectives with modern scientific research, thereby constructing a framework that bridges theological understanding and contemporary health sciences.

Results and Discussion

In the Qur'an, fruits are mentioned in various contexts, sometimes collectively as examples of God's creation and at other times through specific references to certain fruits that carry particular symbolic and practical significance. Among these, dates (*Phoenix dactylifera L.*) are the most frequently mentioned fruit. Their repeated mention can be understood not only as an acknowledgment of their nutritional and medicinal value but also as a symbol pointing to deeper theological, spiritual, and social meanings.

Dates are mentioned in several surahs such as Al-Rahman: 68, Al-An'am: 99, An-Nahl: 11, Ar-Ra'd: 4, Al-Baqarah: 266, and Al-Mu'minun: 19, each within a different context. For instance, in Surah Al-An'am: 99, dates are mentioned together with other fruits as signs of God's greatness, serving as a reminder for

those who deny the truth. Meanwhile, Surah An-Nahl: 11, Ar-Ra'd: 4, Al-Baqarah: 266, and Al-Mu'minun: 19 use the image of dates to illustrate God's unlimited power and to emphasize moral lessons, such as the consequences faced by those who are insincere in giving charity. In addition to their symbolic meaning, dates are also acknowledged in Islamic tradition as a highly nutritious fruit with medicinal benefits for human well-being ² (Hery Sahputra, 2024)

A. Dates in the Perspective of the Qur'an and Hadith

Allah SWT says about dates in the Qur'an, surah Q.S Al-Mukminun: 19, Q.S Yaasiin: 34, Q.S Qof: 10 as follows:

Then We produced for you therein gardens of palm trees and grapevines,
in which are many fruits for you, and from them you eat.

It means: *"Then with it We cause to grow for you gardens of date palms and grapes, from which you eat the fruits."*

And We placed therein gardens of palm trees and grapevines, and caused
springs to gush forth within it.

It means: *"And We (also) made on it (the earth) gardens of dates and grapes and We caused some springs to flow on it."*

And palm trees with clusters of dates, having clusters of dates.
QS. Qof: 10

It means: *"And tall palm trees that have mayang in rows"*

While the hadith, such as Sahih Al-Bukhari and Sahih Muslim, narrates Companion Sa'ad bin Abi Waqqash, from the Prophet Muhammad: ³ (Royani et al., 2022)

Whoever eats seven Ajwa dates in the morning, will not be harmed that day by poison or magic.

It means: *"Whoever consumes seven Ajwa dates in the morning, then on that day he will not be affected by poison or magic."* (HR Al-Bukhari and Muslim)

² Hery Sahputra. (2024). Text and Context of Interpretation of Verses About Fruits in the Qur'an. *Journal of Islamic and Social Sciences (Al-Mustla)*, 6(1), 281–297. <https://doi.org/10.46870/jstain.v6i1.1102>

³ Royani, I., Hamzah, M., Latief, S., & Syahril, E. (2022). The Potential of Ajwa Dates (Phoenix Dactilifera L.) for Women's Reproductive Health in Islamic Literature and Current Scientific Research: Literature Review. *UMI Medical Journal*, 7(2), 152–165.

From Aishah Radhiyallahu 'anha, that the Messenger of Allah, peace be upon him. said:

There is a cure in the dates of the highlands, or it is an antidote, first thing in the morning.

It means: "*Indeed, Ajwa dates that come from Aliyah towards the city of Medina in the highlands near Nejed contain an antidote or it is an antidote, and it is an antidote to poison if consumed in the morning.*" (HR Al-Bukhari and Muslim)

These narrations emphasize the medicinal and protective value of Ajwa dates, while classical scholars such as Ibn Hajar al-‘Asqalani noted that their efficacy is due to the blessing of the Prophet’s supplication rather than the natural properties of the fruit itself. As an additional interpretative framework, this study refers to the approach of *tafsir al-‘ilmi* developed by Zaghoul El-Naggar. According to El-Naggar, the *cosmic verses (ayat al-kawniyyah)* in the Qur’an serve as indicators of scientific phenomena, so that Qur’anic exegesis is not limited to normative meanings but also extends to empirical dimensions (El-Naggar, 2005). Classical exegesis such as *Tafsir al-Tabari* and *Tafsir Ibn Kathir* remain fundamental references in understanding the literal and historical meanings of verses about dates. Ibn Kathir, for example, interprets the Qur’anic mention of fruits as a reflection of divine wisdom in creation and as a reminder of Allah’s blessings⁴ (Syarifah & Fahimah, 2020)

The integration between classical tafsir and the *scientific exegesis* approach enriches the analysis of this study. While classical tafsir provides theological and historical context, *tafsir al-‘ilmi* allows mapping the relevance of these verses to contemporary research, such as the flavonoid content and antibacterial properties of Ajwa dates. Thus, the thematic interpretation of dates in the Qur’an demonstrates not only their spiritual symbolism but also their consistency with modern scientific discoveries—representing a form of *i‘jaz ‘ilmi*⁵ (Ibn Kathir, 2003)

⁴ Syarifah, U., & Fahimah, S. (2020). ZAGHLÛL RÂGHIB MUH{ AMMAD AL-NAJJÂR’S METHODS AND PRINCIPLES OF SCIENTIFIC EXEGESIS: A Review of Tafsîr al-Âyât al-Kawniyyah fî al-Qur’ân al-Karîm. *Ulul Albab*, 21(2), 289–11. <https://doi.org/10.18860/ua.v21i2.10227a>

⁵ Ibn Kathir. (2003). *Tafsir Ibn Kathir: Abridged* (T. al-Hilali & M. Khan, Trans.). Riyadh: Darussalam.

Al-Hafizh Ibn Hajar Al-Asqalani rahimahullah quoted Imam Al-Khathabi regarding its specialness: "Ajwa dates have the benefit of preventing poison and magic because of the prayer of blessing of the Messenger of Allah Shallallahu 'alaihi wa sallam on the dates of Medina, not because of the nature of the fruit itself." In addition, consuming dates in odd numbers when breaking the fast is also a major practice, because the Prophet Muhammad Shallallahu 'alaihi wa sallam also did it.

On the authority of Anas ibn Malik, who said: The Prophet, may God bless him and grant him peace, used to break his fast with fresh dates before praying. If there were no fresh dates, then with dried dates. If there were no dried dates, he would take a few sips of water.

It means: *"From Anas bin Malik, he said: The Prophet, may God bless him and grant him peace, used to break his fast before prayer with rutab (wet dates), if there is no rutab, then he breaks his fast with tamr (dry dates), and if there is no tamr, he drinks a sip of water."*

Ibn Qayyim on the benefits of dates:

Uthman ibn Abi Shaybah narrated to us, Abu Usamah narrated to us, Hashim ibn Hashim narrated to us, on the authority of Amir ibn Saad ibn Abi Waqqas, on the authority of his father, on the authority of the Prophet, may God bless him and grant him peace, who said: Whoever eats seven Ajwa dates in the morning, neither poison nor magic will harm him that day.

Uthman bin Abu Shaibah, as well as Abu Usamah, who obtained a narration from Hasyim bin Hasyim, who heard from 'Amir bin Sa'd bin Abu Waqqash, who narrated from his father, that the Prophet said: *"Whoever eats seven ajwa dates in the morning, that day he will be protected from poison and witchcraft"*(HR. Abu Dawud). The study of Ajwa dates can reflect the approach of scientific interpretation, namely the method of interpreting verses that discuss plants by utilizing modern scientific knowledge. When medical findings prove the efficacy of dates that have been mentioned in the Qur'an and hadith, then this shifts to the area of I'jaz ilmi, namely scientific proof that strengthens the truth of revelation through empirical data.⁶(Khoiri & Sulthoni, 2024)

Classification of date palm plants:

Kingdom : *Plants(Plants)*

⁶Khoiri, S., & Sulthoni, A. (2024). Quo Vadis I'jaz 'Ilmi: Characteristics and Intersection with Scientific Facts. *Al Karima Journal*, 8(1), 26–43. <https://doi.org/10.58438>

Subkingdom	:	<i>Tracheobionta</i> (Vascular plants)
Super Division	:	<i>Spermatophyta</i> (Produces seeds)
Division	:	<i>Magnoliophyta</i> (flowering plants)
Class	:	<i>Liliopsida</i> (monocotyledonous)
Sub Class	:	<i>Areceidae</i>
Order	:	<i>Arecales</i>
Family	:	<i>Areceaceae / Palmae</i> (Betel nut tribe)
Genus	:	<i>Phoenix</i>
Species	:	<i>Phoenix dactylifera L</i>

It has a palm-like shape, approximately fifteen to twenty-five meters high, reaching thirty-five meters, can form poly shoots, stems, between 20 to 30, depending on the type of environment. Its fibrous roots can reach 25 meters appearing above the ground to a depth of 6 meters. The trunk is upright, thick, cylindrical, approximately 1-1.1 meters in circumference. The trunk is brown, without branches, and has a rough texture because it is covered with dry leaf sheaths. Date palm leaves are 3-6 meters long and 3-7 years old. The leaf sheath is 0.5 m wide, thorny, triangular with two transverse angles. The male flowers are white with 6 stamens and 3 petals, while the female flowers are yellowish or cream and 3-7 cm long. Dates weigh 2-60 grams, 3-7 cm long. Fruit color, dark brown, black or yellow red.⁷ (Zamilatul Azkiyah & Rahimah, 2022)

B. Contents and Benefits in Dates

Ajwa dates (*Phoenix dactylifera L.*) contain poly crucial nutrients, such as vitamins, minerals, amino acids, and chemical compounds that have been proven useful in several studies. have antioxidant, antihyperlipidemic, hepatoprotective, antimutagenic, anti-inflammatory, nephroprotective properties. Rich in potassium, minerals, crucial for body muscle contraction and good for digestion, making children more immune to disease. High iron content supports the formation of red blood cells thus preventing anemia. The health benefits of these dates are recorded in the hadith of the Prophet Muhammad

⁷ Zamilatul Azkiyah, S., & Rahimah, H. (2022). Analysis of Iron (Fe) and Vitamin C Levels in Date Palm (*Phoenix Dactylifera L.*) Fruit Extract. *Formosa Journal of Science and Technology (FJST)*, 1(4), 363–374. <https://journal.formosapublisher.org/index.php/fjst>

said, "Whoever eats seven dates every morning, he will be protected from poison and magic that day".⁸(Mutiara et al., 2024)

Ajwa dates are used in dentistry because they have antibacterial, antifungal, anti-inflammatory and antioxidant properties and contain flavonoids that control the growth of microorganisms in the oral cavity. Date seed extract inhibits the growth of *Streptococcus mutans* by 3.25% and date pulp extract inhibits *Candida albicans* by 12.5%.⁹(Amiruddin & Rusyd, 2024)

Infection of the body with dengue virus, which infiltrates the system through the bite of *Aedes aegypti* and *Aedes ogeri* mosquitoes, is known as dengue hemorrhagic fever (DF), an acute infectious disease. The health of patients will improve significantly if given 3 doses of 200 ml of red ginger juice and 2 tablespoons of date juice each for 4 to 5 days, depending on the stage of dengue fever. This shows that this intervention is effective in treating thrombocytopenia and preventing complications, and can help reduce the number of platelets in DHF patients.¹⁰(Febrianti, 2024)

Plant sterols and flavonoids (polyphenols) are among the acids found in dates that can lower lipid levels, which have an impact on LDL cholesterol. This effect was seen when Ajwa dates were given to patients. The sterol content in dates helps lower cholesterol levels by reducing its absorption and increasing its excretion through feces.¹¹ (Hamsah et al., 2024)

Before consuming ajwa dates, fasting blood sugar levels were 96.750 ± 8.4 , after consuming them 147.850 ± 9.85 . Meanwhile, before consuming Sukari dates, fasting blood sugar levels were 92.85 ± 7.5 , after consuming them increased to 152.2 ± 7.12 . It can be concluded that Sukari dates are more effective in increasing glucose after fasting, when compared to Ajwa dates, the

⁸ Mutiara, Andi Mappaware, N., Isnaini Arfah, A., Wahid, S., & Sari Dewi, A. (2024). Literature Review: The Effect of Ajwa Dates (*Phoenix Dactylifera L.*) on Androgen Hormones. *Journal Of Social Science Research*, 4(1), 5872–5882. <https://j-innovative.org/index.php/Innovative>

⁹ Amiruddin, M., & Rusyd, I. (2024). Effectiveness of Ajwa Date (*Phoenix dactylifera L.*) Flesh and Seed Extract on the Growth of Microorganisms in the Oral Cavity. *E-GiGi*, 13(1), 132–137. <https://doi.org/10.35790/eg.v13i1.55963>

¹⁰Febriyanti, S. (2024). Implementation of Nursing Care Intervention Using Date Palm Juice with Additional Red Yeast Juice Related to Increase/Decrease in Platelets in Dengue Hemorrhagic Fever (DHF) Patients in the Treatment Room of Hospital X. *Journal of Scientech Research and Development*, 6(1), 1763–1773. <https://idm.or.id/JSCR/inde>

¹¹ Hamsah, M., Andi Mappaware, N., Royani, I., & Bulango, N. (2024). Case Report: Effect of Ajwa Dates Consumption on LDL Levels in Perimenopausal Women. *Journal of Tropical Biology*, 24(4), 556–560. <https://doi.org/10.29303/jbt.v24i4.6737>

following is an explanation based on the table of average blood glucose levels (mg/dl)¹² (Ahmad Said Fadillah et al., 2024)

Table 1.1 Average Blood Glucose Levels (mg/dl)

Rerata Kadar Glukose Darah (mg/dl)			
Nama Kurma	Perlakuan sebelum (mg/dl)	Setelah	Presentase Peningkatan
Ajwa	96,750 ± 8,41	147,850, ±9,89	54,11 ± 18,60
Sukari	92,85±7,53	152,2±7,12	64,11 ± 14,2

The nutritional content of Ajwa dates, both macronutrients and micronutrients, has a positive effect on the human body, bringing health benefits, for women's reproduction, for example preventing late labor, reducing the risk of...*preeclampsia*, slows the decline of AMH, as an indicator of menopause.¹³(Royani et al., 2022)

The indirect cause of death of pregnant women is anemia. Anemia, the amount of hemoglobin in the blood is reduced, can reduce the body's ability to carry oxygen to vital organs. Iron contains various vitamins such as riboflavin, biotin, thiamine, folic acid, and ascorbic acid increase hemoglobin levels in pregnant women..¹⁴(Fadhila et al., 2023)

While in the study(Husaidah & Nurlinda, 2019)¹⁵showed that consuming Ajwa dates consistently for 30 days had a significant effect in lowering systolic and diastolic blood pressure in pregnant women with hypertension. This positive effect confirms the potential of Ajwa dates as an alternative safe and

¹² Ahmad Said Fadillah, Rachmat Faisal Syamsu, & Asrini Safitri. (2024). Effectiveness of Giving Ajwa and Sukari Dates in Increasing Blood Sugar Levels After Fasting.*Journal of Nursing and Midwifery (NersMid)*, 63–69. <http://nersmid.unmerbaya.ac.id>

¹³Royani, I., Hamzah, M., Latief, S., & Syahril, E. (2022). The Potential of Ajwa Dates (Phoenix Dactylifera L.) for Women's Reproductive Health in Islamic Literature and Current Scientific Research: Literature Review.*UMI Medical Journal*, 7(2), 152–165.

¹⁴ Fadhila, U. T., Royani, I., Murfat, Z., Mappaware, N. A., & Khalid, N. (2023). The Effect of Consumption of Ajwa Dates (Phoenix Dactylifera) on Hemoglobin Levels in Anemic Pregnant Women.*MAHESA: Malahayati Health Student Journal*, 3(10), 3203–3217. <https://doi.org/10.33024/mahesa.v3i10.11168>

¹⁵Husaidah, K. S., & Nurlinda, A. (2019). The Effect of Giving Ajwa Dates (Phoenix dactylifera) on Changes in Blood Pressure in Pregnant Women with Hypertension.*Jurnal Window of Health*, 2(1), 34–43. <http://jurnal.fkmumi.ac.id/index.php/woh/article/view/woh2105>

natural-based nutritional intervention. The content of bioactive compounds such as potassium, magnesium, calcium, flavonoids, and phenolic compounds are believed to contribute as vasodilator and antioxidant agents that support blood pressure stability. In contrast to the control group that only received nutrition education, there was no significant change in their blood pressure, so a direct consumption-based approach is more recommended in treating hypertension during pregnancy. These findings provide a strong foundation for the use of Ajwa dates since the second trimester as a preventive measure against gestational hypertension, while also opening up opportunities for further research related to biomarkers and the risk of preeclampsia.

Ajwa dates are a potential choice of sports drink because they contain glucose and electrolytes, which are essential for athlete endurance. The recommended sports drink for athletes contains 2.5% ajwa dates. At this concentration, it meets BPOM standards and is most acceptable. Ajwa date concentration of 7.5% has the highest osmolality value of 395 mOsmol/L H₂O, and a drink with a concentration of 2.5% has the lowest osmolality value of 323 mOsmol/L H₂O. Based on BPOM standards, the osmolality of sports drinks should be less than 340 mOsmol/L H₂O. Osmolality analysis of concentrations of 2.5%, 5%, and 7.5% showed that 2.5% met BPOM requirements and was isotonic. Dates with appropriate energy, sodium, potassium, pH, osmolality and tolerability content can be used as sports drink ingredients. The following is a table of clinical trial results of sports drink formulations based on ajwa concentration/gram.¹⁶(Windy Rahmawati & Budiono, 2021)

Table 1.2 Clinical Test Results of Sports Drink Formulation Based on Ajwa Concentration/Gram

Tabel 1 Hasil Uji Laboratorium

Kelompok perlakuan	Mean Rank ± SD				
	Energi	Natrium	Kalium	pH	Osmolalitas
F1	258,18±8,76	21,75±0,72	52,81±2,82	5,91±0,53	335,5±9,1
F2	294,39±10,23	22,77±0,76	55,04±2,96	5,99±0,06	360±9,08
F3	329,51±6,97	24,95±0,52	59,71±2,47	6,07±0,05	386±8,24

Keterangan :

F1 : Formulasi Minuman Olahraga dengan Konsentrasi Kurma Ajwa 5 g

F2 : Formulasi Minuman Olahraga dengan Konsentrasi Kurma Ajwa 10 g

F3 : Formulasi Minuman Olahraga dengan Konsentrasi Kurma Ajwa 15 g

¹⁶ Windy Rahmawati, Y., & Budiono, I. (2021). The Effect of Ajwa Dates (Phoenix Dactylifera) Concentration in Making Sports Drinks Reviewed from Nutritional Content and Acceptability Article Info. *Indonesian Journal of Public Health and Nutrition (IJPHN)*, 1(3), 768–775. <https://doi.org/10.15294/ijphn.v1i3.49219>

Anemia in adolescent girls due to monthly menstruation, growth period, requires more iron supplementation. Some plants, such as red spinach and dates, can help increase hemoglobin levels, which have been shown to have a positive impact on increasing hemoglobin levels for 14 days.¹⁷ (Masfufah et al., 2023)

Dates have benefits, antioxidant content especially beta-carotene, a compound from the carotenoid group that helps fight free radicals. Comparison of various types of dates. The concentration of ethanol extract of Ajwa dates is 0.11, the concentration of ethyl acetate extract is 0.161 mg/L, N-hexane extract is 0.591 mg/L. The highest concentration is 0.177 mg/L in the ethanol extract of Golden Valley dates, 0.192 mg/L of the ethyl acetate extract of Golden Valley dates, and 0.846 mg/L of the N-hexane extract of Callas dates. The lowest concentration is 0.033 mg/L of the ethanol extract of Scalidate, 0.049 mg/L of the ethyl acetate extract of Scalidate, and 0.224 mg/L for the N-hexane extract of Medjool dates. The table below shows the results of measuring the total concentration β -carotene from date extract using the test *spectrophotometry* Quantitative UV-Vis.¹⁸ (Anugrah et al., 2022)

Table 1.3 Total Concentration Measurement β -Carotene from Date Extract Using Test *Spectrophotometry* UV-Vis

Uji kuantitatif dengan *spektrofotometri* UV-Vis

Tabel 2. Hasil Pengukuran Konsentrasi β -Karoten Total dari Ekstrak Kurma dengan Persamaan

$$\text{Linear } y = 0,0627x + 0,0109$$

Jenis Ekstrak	Kadar β -karoten total (mg/L)				
	Kurma Golden Valley	Kurma Ajwa	Kurma Khalas	Kurma Medjool	Kurma Sukari
Etanol	0,177	0,11	0,08	0,129	0,033
Etil Asetat	0,192	0,161	0,065	0,065	0,049
N-Heksan	0,320	0,591	0,846	0,224	0,543

In the study of differences in the total levels of flavonoid compounds in Ajawa dates, two methods were extracted, namely infusion and soaking. The infusion method is carried out by heating the dates at a temperature of 90 ° C for 15 minutes,

¹⁷ Masfufah, M., Safitri, S., & Kariani, N. K. (2023). Potential for Increasing Hemoglobin Levels by Giving Red Spinach Date Juice to Adolescent Girls. *Ghidza: Journal of Nutrition and Health*, 7(2), 227–233. <https://doi.org/10.22487/ghidza.v7i2.1024>

¹⁸ Anugrah, I., Hambali, K. S., Syamsu, R. F., Bamahry, A., & Murfat, Z. (2022). Comparison of Antioxidant Content of β -Carotene Compounds of the Carotenoid Group in Ajwa Dates (Medinah), Sukari Dates (Egypt), Medjool Dates (Palestine), Khalas Dates (Dubai), and Golden Valley Dates (Egypt). *Fakumi Medical Journal: Journal of Medical Students*, 2(9), 612–618. <https://fmj.fk.umi.ac.id/index.php/fmj>

while the soaking method is carried out by soaking them for 24 hours without heating. Qualitative tests using the Wilstater method showed that both treatments showed a positive reaction to flavonoids, marked by the appearance of a magenta red color. Meanwhile, quantitative analysis using UV-Vis spectrophotometry revealed that extraction with the soaking method produced higher flavonoid levels (0.1564%) compared to the infusion method (0.0628%). These results indicate that the heating process can cause degradation of flavonoid compounds that are sensitive to high temperatures, so the soaking technique is more recommended to maintain the bioactive content of Ajwa dates. These findings contribute to the development of herbal and plant-based pharmaceutical preparations that emphasize the effectiveness of the extraction method in maintaining the quality of active compounds¹⁹ (Miftahul Hasanah et al., 2023)

Research by (Fikayuniar et al., 2022)²⁰ showed that date seed extract has antibacterial potential against *Staphylococcus aureus*. with the level of activity influenced by the type of extraction solvent. Of the three solvents used—n-hexane, ethyl acetate, and ethanol—ethanol-based extract showed the highest activity. At a concentration of 0.19%, the ethanol extract produced an inhibition zone of 17.77 mm, which is categorized as a strong antibacterial. This effectiveness is correlated with the presence of secondary metabolites such as flavonoids, tannins, and saponins, which are known to disrupt cell membrane structure and important biochemical processes in microorganisms. The results of this study emphasize the potential of Ajwa date seeds as plant waste that can be utilized as a source of natural antibacterials, as well as contributing to the development of pharmaceutical applications and plant-based herbal medicine.

Conclusion

This study concludes that Ajwa dates (*Phoenix dactylifera L.*) hold significant nutritional and therapeutic potential, both from Islamic teachings and contemporary scientific evidence. The Qur'an and Hadith highlight dates as a blessed fruit with protective value, while scientific studies confirm their richness in flavonoids, polyphenols, and other bioactive compounds that support cardiovascular health, reproductive well-being, and antimicrobial activity. These

¹⁹Miftahul Hasanah, A., Kurniawan, K., & Fadholah, A. (2023). Comparison of Total Flavonoid Content of Infusion and Soaking Methods of Ajwa Dates (*Phoenix Dactylifera L.*) Using UV-Vis Spectrophotometry. *Global Scientific Journal of Pharmacy*, 9.

²⁰Fikayuniar, L., Putri Waldani, D., Lidia, I., & Sri Wahyuningsih, E. (2022). Antibacterial Activity Test of Ajwa Date Seed Extract (*Phoenix dactylifera L.*) Against *Staphylococcus aureus* Bacteria. *Journal of Pharmacopolium*, 5(2), 148–154. http://ejournal.universitas-bth.ac.id/index.php/P3M_JoP

converging perspectives demonstrate the harmony between religious texts and scientific findings, reinforcing the i'jaz (scientific miracle) dimension of the Qur'an. Furthermore, the health benefits of Ajwa dates invite Muslims not only to consume them wisely but also to appreciate and preserve natural resources as a form of gratitude to God.

Bibliography

- Ahmad Said Fadillah, Rachmat Faisal Syamsu, & Asrini Safitri. (2024). Effectiveness of Giving Ajwa and Sukari Dates in Increasing Blood Sugar Levels After Fasting. *Journal of Nursing and Midwifery (NersMid)*, 63–69. <http://nersmid.unmerbaya.ac.id>
- Amiruddin, M., & Rusyd, I. (2024). Effectiveness of Ajwa Date (Phoenix dactylifera L.) Flesh and Seed Extract on the Growth of Microorganisms in the Oral Cavity. *E-GiGi*, 13(1), 132–137. <https://doi.org/10.35790/eg.v13i1.55963>
- Anugrah, I., Hambali, K. S., Syamsu, R. F., Bamahry, A., & Murfat, Z. (2022). Comparison of Antioxidant Content of β -Carotene Compounds of the Carotenoid Group in Ajwa Dates (Medinah), Sukari Dates (Egypt), Medjool Dates (Palestine), Khalas Dates (Dubai), and Golden Valley Dates (Egypt). *Fakumi Medical Journal: Medical Student Journal*, 2(9), 612–618. <https://fmj.fk.umi.ac.id/index.php/fmj>
- Fadhila, U. T., Royani, I., Murfat, Z., Mappaware, N. A., & Khalid, N. (2023). The Effect of Consumption of Ajwa Dates (Phoenix Dactylifera) on Hemoglobin Levels in Anemic Pregnant Women. *MAHESA: Malahayati Health Student Journal*, 3(10), 3203–3217. <https://doi.org/10.33024/mahesa.v3i10.11168>
- Febriyanti, S. (2024). Implementation of Nursing Care Intervention Using Date Palm Juice with Additional Red Yeast Juice Related to Increase/Decrease in Platelets in Dengue Hemorrhagic Fever (DHF) Patients in the Treatment Room of Hospital X. *Journal of Scientech Research and Development*, 6(1), 1763–1773. <https://idm.or.id/JSCR/inde>
- Fikayuniar, L., Putri Waldani, D., Lidia, I., & Sri Wahyuningsih, E. (2022). Antibacterial Activity Test of Ajwa Date Seed Extract (Phoenix dactylifera L.) Against Staphylococcus aureus Bacteria. *Journal of Pharmacopolium*, 5(2), 148–154. http://ejurnal.universitas-bth.ac.id/index.php/P3M_JoP
- Hamsah, M., Andi Mappaware, N., Royani, I., & Bulango, N. (2024). Case Report: Effect of Ajwa Dates Consumption on LDL Levels in Perimenopausal Women.

Journal of Tropical Biology, 24(4), 556–560.
<https://doi.org/10.29303/jbt.v24i4.6737>

Hery Sahputra. (2024). Text and Context of Interpretation of Verses About Fruits in the Qur'an. *Journal of Islamic and Social Sciences (Al-Mustla)*, 6(1), 281–297. <https://doi.org/10.46870/jstain.v6i1.1102>

Husaidah, K. S., & Nurlinda, A. (2019). The Effect of Giving Ajwa Dates (*Phoenix dactylifera*) on Changes in Blood Pressure in Pregnant Women with Hypertension. *Jurnal Window of Health*, 2(1), 34–43. <http://jurnal.fkmumi.ac.id/index.php/woh/article/view/woh2105>

Ibn Kathir. (2003). *Tafsir Ibn Kathir: Abridged* (T. al-Hilali & M. Khan, Trans.). Riyadh: Darussalam.

Khoiri, S., & Sulthoni, A. (2024). Quo Vadis I'jaz 'Ilmi: Characteristics and Intersection with Scientific Facts. *Al Karima Journal*, 8(1), 26–43. <https://doi.org/10.58438>

Masfufah, M., Safitri, S., & Kariani, N. K. (2023). Potential for Increasing Hemoglobin Levels by Giving Red Spinach Date Juice to Adolescent Girls. *Ghidza: Journal of Nutrition and Health*, 7(2), 227–233. <https://doi.org/10.22487/ghidza.v7i2.1024>

Miftahul Hasanah, A., Kurniawan, K., & Fadholah, A. (2023). Comparison of Total Flavonoid Content of Infusion and Soaking Methods of Ajwa Dates (*Phoenix Dactylifera L.*) Using UV-Vis Spectrophotometry. *Global Scientific Journal of Pharmacy*, 9.

Mutiara, Andi Mappaware, N., Isnaini Arfah, A., Wahid, S., & Sari Dewi, A. (2024). Literature Review: The Effect of Ajwa Dates (*Phoenix Dactylifera L.*) on. *Journal Of Social Science Research*, 4(1), 5872–5882. <https://j-innovative.org/index.php/Innovative>

Royani, I., Hamzah, M., Latief, S., & Syahril, E. (2022). The Potential of Ajwa Dates (*Phoenix Dactylifera L.*) for Women's Reproductive Health in Islamic Literature and Current Scientific Research: Literature Review. *UMI Medical Journal*, 7(2), 152–165.

Syarifah, U., & Fahimah, S. (2020). ZAGHLÛL RÂGHIB MUH{ AMMAD AL-NAJJÂR'S METHODS AND PRINCIPLES OF SCIENTIFIC EXEGESIS: A Review of Tafsîr al-Âyât al-Kawniyyah fî al-Qur'ân al-Karîm. *Ulul Albab*, 21(2), 289–311. <https://doi.org/10.18860/ua.v21i2.10227a>

- Windy Rahmawati, Y., & Budiono, I. (2021). The Effect of Ajwa Dates (Phoenix Dactylifera) Concentration in Making Sports Drinks Reviewed from Nutritional Content and Acceptability Article Info. *Indonesian Journal of Public Health and Nutrition (IJPHN)*, 1(3), 768–775. <https://doi.org/10.15294/ijphn.v1i3.49219>
- Zamilatul Azkiyah, S., & Rahimah, H. (2022). Analysis of Iron (Fe) and Vitamin C Levels in Date Palm (Phoenix Dactylifera L.) Fruit Extract. *Formosa Journal of Science and Technology (FJST)*, 1(4), 363–374. <https://journal.formosapublisher.org/index.php/fjst>