

Takhrij and Syarah Hadith of Chemistry: The Virtue of Vinegar in Hadith and Science Perspective

Marsela Yurika¹, Irma Riyani²

¹Department of Chemistry, Faculty of Science and Technology, UIN Sunan Gunung Djati Bandung

²Faculty of Usuluddin, UIN Sunan Gunung Djati Bandung

Abstract: This research aims to discuss the hadith of Prophet Saw about vinegar. The research method used in the processing of takhrij and syarah hadith is a qualitative method with chemical analyses. The result and discussion of this research are vinegar as a side dish mentioned by the Prophet Saw., and the chemical compounds in vinegar have many benefits for the body. The conclusion of this research is takhrij and syarah hadith of the Prophet Saw. about vinegar by chemical analysis has an excellent opportunity to reveal the benefits and virtues of vinegar.

Key words: Chemistry, Hadith, Syarah, Takhrij, Vinegar

Introduction

Vinegar or acetic acid is an organic compound with a carboxylic acid group that can give food a sour aroma and taste (Lestari, 2018). Vinegar is one of the foods liked by Rasulullah SAW, he even said that vinegar is the best side dish. Based on scientific research, vinegar is an antibiotic and contains vegetable fats that are good for the body. This thing is astonishing information because no one knows the benefits of vinegar at the time of Rasulullah (Irmayana, 2017).

There is hadith from the Prophet Saw. with regard to vinegar in Musnad Ibnu Majah Number 3307:

حَدَّثَنَا أَحْمَدُ بْنُ أَبِي الْخَوَارِيزْمِيِّ حَدَّثَنَا مَرْوَانُ بْنُ مُحَمَّدٍ حَدَّثَنَا سُلَيْمَانُ بْنُ بِلَالٍ عَنْ هِشَامِ بْنِ عُرْوَةَ عَنْ أَبِيهِ عَنْ عَائِشَةَ قَالَتْ قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ نِعْمَ الْإِدَامُ الْخَلُّ

Has told us Ahmad bin Abu Al-Hawari had told us Marwan bin Muhammad had told us Sulaiman bin Bilal from Hisham bin 'Urwah from his father from Aisyah he said, "Rasulullah ﷺ said," The best side dish is vinegar. "

Based on the explanation above, a research formula was prepared, namely the formulation of the problem, research question, and research objectives (Darmalaksana, 2020a). The formulation of this problem is that there is a hadith from the Prophet Saw. about vinegar. The research question is how the hadith from the Prophet Saw. about benefit of vinegar. The purpose of this research is to discuss the hadith of the Prophet Saw. about benefit of vinegar.

Research Methods

This research method is qualitative through literature and field studies (Darmalaksana, 2020b). Meanwhile, the approach applied is takhrij and syarah hadith (Soetari, 2015). The interpretation in this study used chemistry analysis (Irawati, 2019).

In general, there are two stages of research on hadith, namely takhrij and sharah. Takhrij is the process of extracting a hadith from a hadith book to examine its validity, while sharah is an explanation of the hadith text with a certain analysis (Soetari, 2015). The field of chemistry itself as a means of interpretation in this research is a field of study that examines the material and the changes that accompany it (Irawati, 2019).

Result and Discussion

At first, a search was made through the application of the hadith on the keyword "vinegar" until the hadith was found in Musnad Ibnu Majah Number 3307, as previously disclosed.

Table 1. List of Rawi Sanad

No.	Rawi Sanad	Birth/Death		Country	Kunyah	Ulama's Comments		Circle
		B	D			-	+	
1	Aisyah binti Abi Bakar Ash Shiddiq		57 H	Medina	Ummu'Abdullah			Sahabiyah
2	Urwah bin Az Zubair bin Al'Awwam bin Khuwailid bin Asad bin 'Abdul 'Izzi bin Qu		93 H	Medina	Abu'Abdullah		-Tsiqah	Tabi'in among the middle circle
3	Hisyam bin 'Urwah bin Az Zubair bin Al 'Awwam		145 H	Medina	Abu Al Mundzir		-Tsiqah -Tsiqah tsabat -Tsiqah, imam fil hadith -Tsiqah tsabat -Tsiqah, faqih	Tabi'ul Atba' among the elderly
4	Sulaiman bin Bilal		172 H	Medina	Abu Muhammad		-Tsiqah -La ba'sa bih -Tsiqah Imam	Tabi'ut Tabi'in among the middle circle
5	Marwan bin Muhammad bin Hassan		210 H	Syam	Abu Bakar		-Tsiqah -La ba'sa bih -Tsiqah Imam	Tabi'in (did not see sahabiyah)
6	Ahmad bin 'Abdullah bin maymun bin Al 'Abbas		246 H	Syam	Abu Al Hasan		-Tsiqah Zaahid	Tabi'ul Atba' among the elderly
7	Ibnu Majah	207 H	273 H	Qazwin	Abu Abdullah			Mudawin

Table 1 is a list of the rawi and sanad hadith under research. Rawi is the narrator of hadith while sanad is the chain of narrators from shahabat to mudawin, namely ulama's who record hadiths in the hadith book (Soetari, 1994). sanad the hadith narrated by Ibn Majah no 3307 is *Marfu'* because it was directly rested on the Prophet Muhammad. Sanad mutassil (continued) from mukharj (Ibnu Majah) to rawi a'la (Aisyah binti Abu Bakar as-siddiq at-taimih). Aisyah is one of the friends who met directly or heard directly from the Prophet Muhammad SAW. and *Tahammul wa al-ada'* which is used is ۷ and see from the died in 57 H shows that he truly met or lived in contemporaries (*mu'asyarah*) with the Prophet Muhammad. Reviewed from the source of the hadith, it can be described that this hadith is *marfu'* (Irmayana, 2017).

According to the science of hadith, the requirement for shahih hadith is that rawi must be positive according to the comments of the ulama's. If there is a comment from a ulama's who gives a negative assessment to one of the narrators in the sanad lane, then the hadith is a dhaif hadith (Darmalaksana, 2020d). Shahih hadith are strong hadith while dhaif hadith are weak hadith (Soetari, 1994). Also, requirements for shahih hadith must be continued. If the hadith sanad is broken, then the hadith is a dhaif hadith. The proof of continuity is meeting between teacher and student. If there is no objective evidence, the encounter between teacher and student can be seen from birth and death. If there is no data on births and deaths, it is predicted that the average age of ulama's is around 70-90 years. The meeting of teachers and students can also be seen from the narrator's life journey. If the teacher and student are in the same place, it is predicted that the teacher and student met (Darmalaksana, 2020d).

The quality of this hadith is shahih. Because, from the side of the narrator, there were no comments from ulama's who gave negative assessments. Also from the sanad side, it is connected from shahabat to mudawin. Basically the science of hadith has another parameter in providing reinforcement to hadith. Among other things, hadith are called mutawatir in a very popular sense if the hadith being researched are scattered in several hadith books (Soetari, 2015). The distribution of this hadith acts as syahid and mutabi. Syahid is another hadith of a kind where as mutabi is another sanad (Darmalaksana, 2020d). The rest, hadith so far is the virtue of Islamic practice, so it can be argued even though its status is dhaif (Darmalaksana et al., 2017).

The ulama's have given syarah, namely an explanation of the content and meaning of the hadith (Darmalaksana, 2020c). According to the ulama's view, the meaning of the hadith is praise or sufficienct in limiting food and preventing appetites from delicious other foods. Because vinegar is one of the foods that is easily available (Irmayana, 2017).

The view of the ulama on this hadith is strengthened by another hadith similar on the hadith Muslims number 3824.

حَدَّثَنَا يَحْيَى بْنُ يَحْيَى أَخْبَرَنَا أَبُو عَوَانَةَ عَنْ أَبِي بَشِيرٍ عَنْ أَبِي سُوَيْبَانَ عَنْ جَابِرِ بْنِ عَبْدِ اللَّهِ أَنَّ النَّبِيَّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ سَأَلَ أَهْلَهُ الْأَدْمَ فَقَالُوا مَا عِنْدَنَا إِلَّا خَلٌّ فَدَعَا بِهِ فَجَعَلَ يَأْكُلُ بِهِ وَيَقُولُ نِعْمَ الْأَدْمُ الْخَلُّ نِعْمَ الْأَدْمُ الْخَلُّ

Has told us [Yahya bin Yahya] has informed us [Abu 'Awanah] from [Abu Bisyr] from [Abu Sufyan] from [Jabir bin Abdullah] that the Prophet sallallaahu' alaihi wasallam asked his wives about side dishes, then they answer; "We have nothing but vinegar." He ordered taken then he ate with that vinegar saying: "The best side dish is vinegar, the best side dish is vinegar."

Rasulullah SAW. said so to keep his wife's feelings. His wives said: "we have nothing apart from vinegar". So Rasulullah tried to protect they feelings by praising the available food even though what was available was only vinegar.

This hadith can also be explained according to the chemical field. Vinegar is a solution that contains a mixture of acetic acid (CH_3COOH) and water (there is 3-9% acetic acid component in vinegar other than water). Basically, concentrated acetic acid or also known as glacial acetic acid is corrosive to the skin and cause burns permanent, eye damage and irritation. Acetic acid is one of the simplest carboxylic acids which is weakly acidic and can partially dissociate into H^+ and CH_3COO^- ions.

Vinegar can be made from almost any fermentable carbohydrate source including grapes, molasses, dates, sorghum, apples, pears, grapes, berries, melons, coconut, honey, beer, maple syrup, potatoes, beets, malt, seeds and whey. . The United States Food and Drug Administration (FDA) states that diluted acetic acid is not vinegar and should not be added to food products that typically contain vinegar. Vinegar contains mineral salts, vitamins, amino acids, polyphenolic compounds (eg gallic acid, catechins, caffeic acid, ferulic acid) and nonvolatile organic acids (eg tartaric, citric, malic and lactic) (Johnston & Gaas, 2006).

Vinegar is used as an antibiotic, food preservative, traditional medicine, household cleaner and even vinegar is known to have antimicrobial properties and can kill bad microorganisms. (Orey, 2007).

Vinegar has various types and is produced using different raw materials so that each type of vinegar has a distinctive and unique taste. The types of vinegar include black vinegar, rice vinegar, balsamic vinegar, apple cider vinegar and white wine vinegar. The main volatile compound in vinegar is acetic acid which gives vinegar a strong sour aroma and flavor. Other volatile compounds present in vinegar are alcohol, acids, esters, aldehydes and ketones (Ho et al., 2017).

Vinegar has physiological functions, such as antibacterial, anti-infective, antioxidant, blood glucose regulator, regulation of lipid metabolism, weight loss and anticancer activity. The ability antibacterial and anti-infective properties of vinegar are mainly due to the presence of organic acids, polyphenols and melanoidins. Polyphenols and melanoidins also provide the antioxidant properties of vinegar, which are produced from the raw material and the fermentation process, respectively. The control of blood glucose, regulation of lipid metabolism and weight loss from vinegar are mainly due to acetic acid. Apart from caffeolysophorose (inhibits disaccharidase) and ligustrazine (improves blood circulation), the other functional ingredients present in vinegar also provide certain health benefits (Chen et al., 2016).

Recent studies tested on animals and humans have shown that vinegar can be used for the treatment of diabetes. In mice, the effect of vinegar on blood sugar has been investigated and it has been reported that blood glucose is decreased when compared to a normal diet after consumption of starch co-administered with a 2% acetic acid solution. In humans, the area under the insulin response curve decreased by 20% after concurrent consumption of sucrose with vinegar. Several systems were then studied to explain the effect of vinegar on blood glucose concentrations. The acetic acid in vinegar can prevent the complete digestion of complex rapidly carbohydrates by speeding up gastric emptying

or by increasing the uptake of glucose by tissues which results in a decrease in blood glucose levels. (Budak et al., 2014).

It should be noted that the concentration of acetic acid in commercial vinegar is 4-7%. However, preparations containing free acetic acid or those that are not chemically neutralized at concentrations $\geq 20\%$ are considered dangerous and if ingested can cause severe injury to the esophagus. Available evidence suggests that moderate consumption of commercial vinegar, which is 2 tablespoons every meal as a sauce, is safe for the body. (Petsiou et al., 2014).

Conclusion

Vinegar is a solution that contains a mixture of 3-9% acetic acid components in addition to water and is made from all fermentable carbohydrate sources. Vinegar has many properties and impacts that are good for the body if consumed in reasonable limits. The use of vinegar as a side dish has been around since the Rasulullah SAW. Takhrij and syarah hadith about vinegar with a chemical approach need to be done further research to reveal the virtues and benefits of vinegar for the body. Apart from having a positive impact, it turns out that vinegar has a negative impact if it is consumed inappropriately. This needs to be proven in a more modern way through chemical and medical approaches. This research is expected to have beneficial implications. This research has limitations in the implementation of takhrij and syarah hadith with chemical analysis so that further research is needed through laboratory testing.

References

- [1]. Lestari, R. (2018). Jurnal Teknologi Kimia Unimal Pembuatan Asam Asetat dari Air Cucian Kopi Robusta dan Arabika dengan Proses Fermentasi. *Jurnal Teknologi Kimia Unima*, 7(1), 61–72.
- [2]. Irmayana, T. (2017). *Keutamaan Cuka dalam Hadist Nabi (I'jaz Ilmi dalam Ilmu Kesehatan)*. Universitas Islam Negeri Sultan Syarif Kasim Riau.
- [3]. Darmalaksana, W. (2020). Formula Penelitian Pengalaman Kelas Menulis. *Jurnal Kelas Menulis UIN Sunan Gunung Djati Bandung*.
- [4]. Darmalaksana, W. (2020a). Penelitian Metode Syarah Hadis Pendekatan Kontemporer: Sebuah Panduan Skripsi, Tesis, dan Disertasi. *Diroyah: Jurnal Studi Ilmu Hadis*, 5.
- [5]. Darmalaksana, W., Pahala, L., & Soetari, E. (2017). Kontroversi Hadis sebagai Sumber Hukum Islam. *Wawasan: Jurnal Ilmiah Agama Dan Sosial Budaya*, 2(2), 245–258.
- [6]. Darmalaksana, W. (2020b). Metode Penelitian Kualitatif Studi Pustaka dan Studi Lapangan. *Pre-Print Digital Library UIN Sunan Gunung Djati Bandung*.
- [7]. Soetari, E. (1994). *Ilmu Hadits*. Amal Bakti Press.
- [8]. Soetari, E. (2015). *Syarah dan Kritik Hadis dengan Metode Tahrij: Teori dan Aplikasi* (2nd ed.). Yayasan Amal Bakti Gombong Layang.
- [9]. Irawati, R. K. (2019). Pengaruh Pemahaman Konsep Asam Basa terhadap Konsep Hidrolisis. *Journal of Natural Science Teaching*, 02(01), 1–6.
- [10]. Orey, C. (2008). *Khasiat Cuka*. PT Mizan Publika.
- [11]. Johnston, C. S., & Gaas, C. A. (2006). Vinegar: medicinal uses and antiglycemic effect. *MedGenMed: Medscape General Medicine*, 8(2), 61. <https://pubmed.ncbi.nlm.nih.gov/16926800>
- [12]. Ho, C. W., Lazim, A. M., Fazry, S., Zaki, U. K. H. H., & Lim, S. J. (2017). Varieties, production, composition and health benefits of vinegars: A review. *Food Chemistry*, 221, 1621–1630. <https://doi.org/https://doi.org/10.1016/j.foodchem.2016.10.128>
- [13]. Chen, H., Chen, T., Giudici, P., & Chen, F. (2016). Vinegar Functions on Health: Constituents, Sources, and Formation Mechanisms. *Comprehensive Reviews in Food Science and Food Safety*, 15(6), 1124–1138. <https://doi.org/https://doi.org/10.1111/1541-4337.12228>
- [14]. Budak, N. H., Aykin, E., Seydim, A. C., Greene, A. K., & Guzel-Seydim, Z. B. (2014). Functional Properties of Vinegar. *Journal of Food Science*, 79(5), R757–R764. <https://doi.org/https://doi.org/10.1111/1750-3841.12434>
- [15]. Petsiou, E. I., Mitrou, P. I., Raptis, S. A., & Dimitriadis, G. D. (2014). Effect and mechanisms of action of vinegar on glucose metabolism, lipid profile, and body weight. *Nutrition Reviews*, 72(10), 651–661. <https://doi.org/10.1111/nure.12125>