



**Takhrij and Syarah Hadith about Chemistry:  
Content of Miswak for Dental Health**

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**Abstract**

The purpose of this research is to discuss the hadith of the Prophet SAW. about the content of miswak for dental health. This research method is qualitative through the takhrij and sharah hadith approaches with chemical analysis. The results and discussion of this research is that siwak has many ingredients that are good for dental health. The conclusion of this research is takhrij and syarah hadith of the Prophet SAW. about the content of miswak which is good for dental health that has been recommended by the Prophet SAW.

Keywords : *Chemistry, Hadith, Miswak, Syarah, Takhrij*

**Introduction**

Miswak (*Salvadora persica*) in general is a kind of shrub with the main trunk is upright and has many shady branches, young leaves are green (Sabrina, 2015). Miswak itself is used to clean teeth, gums and mouth. Dental health is very important, even since ancient times, attention to dental health has taken place in Egypt 1500 years BC. To maintain dental health, oral hygiene must be maintained, because in the mouth area there are various kinds of bacteria (Zaenab et al., 2004).

There is a hadith of the Prophet Muhammad SAW. with regard to brushing teeth using miswak at Musnad Imam Ahmad Number 8827:

حَدَّثَنَا أَبُو الْعَلَاءِ الْحَسَنُ بْنُ سَوَّارٍ قَالَ حَدَّثَنَا نَيْبٌ عَنْ خَالِدِ بْنِ يَزِيدَ عَنْ سَعِيدِ بْنِ أَبِي هِلَالٍ عَنْ عَبْدِ الرَّحْمَنِ الْأَعْرَجِ عَنْ أَبِي هُرَيْرَةَ أَنَّ رَسُولَ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ إِنْ كَانَ قَالَهُ لَوْلَا أَنْ أُشِيقَ عَلَى أُمَّتِي لِأَمْرُهُمْ بِالسِّوَاكِ مَعَ الْوُضُوءِ وَقَالَ أَبُو هُرَيْرَةَ لَقَدْ كُنْتُ أَسْتَنُّ قَبْلَ أَنْ أَنَامَ وَبَعْدَ مَا أَسْتَنْبِطُ وَقَبْلَ مَا أَكُلُ وَبَعْدَ مَا أَكُلُ جِئْتُ سَمِعْتُ رَسُولَ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ يَقُولُ مَا قَالَ

Having told us Abu Al-'Ala` Al-Hasan bin Sawwar said; has told us Laits from Khalid bin Yazid from Sa'id bin Abi Hilal from Abdurrahman Al-A'raj from Abu Hurairah said, That Rasulullah ﷺ said, " if it didn't burden my people, I would really order my people to use miswak every time they perform ablution." And Abu Hurairah said; After I heard Rasulullah ﷺ say as he said, I always brushed my teeth before and after sleeping, also before and after eating."

Based on the explanation above, a research formula was prepared, namely the formulation of the problem, research questions, and research objectives (Darmalaksana, 2020a). The formulation of this problem is found in the hadith of the Prophet SAW. about brushing teeth using miswak because there are ingredients that are good for teeth. The research question is how the hadith of the Prophet SAW. about the content of the Miswak. The purpose of this research is to discuss the hadith of the Prophet SAW. about the content of the miswak.

### 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 an approach with chemical analysis (Persica et al., 2017).

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, 2015a). Chemistry itself, as a means of interpretation in this research, that is, a branch of natural science that studies the composition, structure, properties, and changes of matter and energy that accompany it (Istijabatun, 2011).

### Results and Discussion

At first, a search was carried out through the Hadith application regarding the keyword "brushing your teeth". until the hadith was found in the Musnad Imam Ahmad book Number 8827, as disclosed earlier.

Table 1. List of Rawi Sanad

No.	Rawi Sanad	Birth/ Death		Country	Kunyah	Ulama's Comments		Circles
		B	D			-	+	
1	Abdur Rahman bin Shakhr		57 H	Madinah	Abu Hurairah		Friend	Friend
2	Abdur Rahman bin Hurmuz		117 H	Madinah	Abu Daud		-Tsiqah -Tsiqah -Tsiqah -Tsiqah -Tsiqah - It is mentioned in 'ast tsiqaat -Tsiqah tsabat	Tabi'in middle class
3	Sa'id bin Abi Hilal		135 H	Maru	Abu Al- 'Alaa		- It is mentioned in 'ast tsiqaat - La ba'sa bih -Laisa bi qowi -Tsiqah  -Tsiqah -Tsiqah -'Adl -Shaduuq -Shaduuq	Tabi'in (no see friends)
4	Khalid bin Yazid		139 H.	Maru	Abu 'Abdrdur Rahman		-Tsiqah -Tsiqah -La ba'sa bih -Disebutkan dalam 'ats stiqaat -Tsiqah -Mishry Tsiqah -Tsiqah Fakih -Fakih Tsiqah	Tabi'in (no see friends)

No.	Rawi Sanad	Birth/Death		Country	Kunyah	Ulama's Comments		Circles
		B	D			-	+	
5	Laits bin Sa'ad bin 'Abdur Rahman		175 H.	Maru	Abu Al-Harits		-Tsiqah -Tsiqah -Tsiqah -Tsiqah Tsabat	Tabi'ut Tabi'in Old people
6	Al-Hasan bin Sawwaar		216 H.	Baghdad	Abu Al-'Alaa		-Laisa bihi ba's -Laisa bihi ba's -Shaduq -Shaduq	Tabi'ut Tabi'in Ordinary People
7	Ahmad bin Hanbal	164 H.	241 H.	Baghdad	Hadith Expert		Imam of hadith	Mudawin

Table 1 is a list of the hadith narrators and sanad under study. Rawi is the narrator of hadith while sanad is the chain of narrators from companionship to mudawin, namely scholars who record hadiths in the hadith book (Soetari, 1994). According to the science of hadith, the requirement for authentic hadith is that rawi must be positive according to the comments of the scholars. If there is a comment from a scholar who gives a negative assessment to one of the narrators in the sanad lane, then the hadith is a hadith dhaif (Darmalaksana, 2020d). Sahih hadith are strong traditions while dhaif traditions are weak traditions (Soetari, 1994). Requirements for authentic hadith must also 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 birth and death, it is predicted that the average age of scholars 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 will meet (Darmalaksana, 2020d).

The quality of this hadith is authentic. Because, from the side of the narrator, there were no comments from scholars who gave negative assessments. Also from the sanad side, it is connected from friend to mudawin. Basically the science of hadith has another parameter in providing reinforcement to hadith. Among other things, hadiths are called mutawatir in a very popular sense if the hadiths being researched are scattered in several

hadith books (Soetari, 2015). The distribution of this hadith acts as a syahid and a mutabi. Syahid is another hadith of a kind whereas mutabi is another sanad (Darmalaksana, 2020d). The rest, hadith as far as being the virtue of Islamic practice, then it can be argued even though the status is dhaif (Darmalaksana et al., 2017).

The scholars have given syarah, namely an explanation of the content and meaning of the hadith (Darmalaksana, 2020c). This can be seen in the book Fathul Mu'in by Zain ad-Din 'Abd al-'Aziz al-Malibari. One of the scholars who followed the Imam Syafi'i school in a word *لَوْلَا أَنْ أَشَقَّ عَلَى أُمَّتِي لِأَمْرَتُهُمْ بِالسِّوَاكِ مَعَ الْوُضُوءِ* There are four schools of thought, namely Imam Hanafi, Imam Maliki, Imam Syafi'i, and Imam Hanbal argues that using miswak is sunnah at the time of ablution. Understanding of the above hadith, Rasul SAW., Was afraid that telling his people to use miswak at every ablution would make it difficult for his people. If using the miswak is mandatory, then there is no feeling of fear from the Prophet SAW., To order to use the miswak for every ablution. Rasul SAW's expression, that he was afraid of making things difficult for his people, shows that using miswak before ablution is sunnah. Scholars who argue that using miswak sunnah when performing ablution have different opinions about the location of the sunnah at the time of ablution. According to the Hanafi school of thought to use the sunnah miswak during every ablution when rinsing his mouth. The Maliki school argues with the remaining ablution water before rinsing. If you forget to use the miswak when you rinse your mouth, then it is sunnah to do it when you want to pray. According to the Syafi'i and Hanbali schools of thought, the law of miswak is Sunnah after washing two palms and before rinsing their mouths. Makruh uses miswak for someone who is fasting after the sun has slipped to sunset according to the Syafi'i and Hanbali schools of thought. In the book As-Shiam chapter Jaami'us-Shiam explains the makruh using miswak, in this case Rasul SAW., said *لِخُلُوفِ الْمَسْكِ* "The breath of a fasting person is better than the smell of muskish oil" (HR. Bukhari). The scent of the mouth of a person who is fasting in the above hadith shows that there is a demand to let it be and it is makruh to eliminate it. The law of makruh stops with the setting sun, because at sunset a person breaks his fast. As for the specialization of makruh using miswak after slipping the sun because the bad breath of a fasting person usually occurs at that time (Ansari, 2013).

This hadith can also be explained in terms of chemistry. In terms of maintaining oral hygiene and dental health, can be attributed to the mechanical method of brushing and its pharmacological components. Chemical analysis shows that miswak contains many natural constituents known for their oral

health benefits. The chemicals contained in *Salvadora persica* include sodium chloride, calcium oxalate, silica, fluoride, vitamin C, tannins, sitosterol which functions to remineralize the tooth structure, as an abrasive to remove tooth stains, produce saliva and also strengthen blood vessels in the gingivae and prevent inflammation of the gingiva. Saponins, flavonoids, alkaloids (salvadorine), trimethylamine which functions to reduce plaque accumulation, steroids (betasitosterol) and benzyl-isothiocyanate, sulfate compounds that act as antimicrobials and to treat inflammation of the gingival (Utara, 2014). Based on the results of the study, the mean score of dental plaque before brushing with toothpaste containing miswak extract ranged from 1.2 to 3.6 with an average plaque index of 2.18 and after brushing teeth ranged from 0.2 to 0.8 with an average plaque index of 0.48. There is an effect of brushing teeth using toothpaste containing miswak extract in reducing plaque scores (Persica et al., 2017). An essential oil that has a distinctive aroma to remove unpleasant odors and also plays a role in stimulating saliva.

The role of the miswak in inhibiting the growth of *Candida albicans* can be seen from the content of the miswak. The content of tannins has been shown to form irreversible compound complexes with proline (a complete protein), where this bond has an inhibitory effect on protein synthesis for cell wall formation. As a result, *Candida albicans* damages the cell walls and causes antifungal compounds to enter the body of *Candida albicans* and damage the components contained in it. Besides that, the flavonoids and alkaloids contained in miswak wood also show good antifungal activity. The mechanism of action of flavonoids is to destroy the fungal cell wall membrane, form complexes with receptors in the extracellular and form complexes with dissolved proteins. Meanwhile, alkaloids have the ability to intercalate with fungal DNA. Intercalation is the process of reversible insertion of one or more molecules into two or more other molecules. This compound easily enters the nuclear cell membrane and interferes with the synthesis of the nucleic acid *Candida albicans* by interrupting DNA synthesis. Disruption in the formation of protein particles can prevent the process of protein synthesis in the cell nucleus, causing death in *Candida albicans* cells.

Several studies such as research by Al-Bayati and Sulaiman (2008) in Iraq, argued that the miswak wood extract can inhibit the growth of microorganisms in the oral cavity, including *Candida albicans*. Research by Runyoro et al. (2006) in Tanzania also stated that miswak wood extract has inhibitory power against the growth of *Candida albicans* (Utara, 2014).

## Conclusion

Miswak is a mouth cleaner which is the Sunnah of the Prophet Muhammad. Miswak wood (*Salvadora persica*) has been known for centuries, especially by the ancient Arabs, which is still used as a tool for oral hygiene. The many benefits of miswak include sodium chloride, calcium oxalate, silica, fluoride, vitamin C, tannins, sitosterols, saponins, flavonoids, alkaloids (salvadorine), trimethylamine, steroids (betasitosterol), benzyl-isothiocyanate, and essential oils. Even after brushing your teeth using miswak extract, it could reduce plaque ranging from 0.2 to 0.8 with an average plaque index of 0.48. Miswak also has a role as an inhibitor for the growth of *Candida albicans*. Even some research such as research by Al-Bayati and Sulaiman in Iraq, argued that the miswak wood extract can inhibit the growth of microorganisms in the oral cavity, including *Candida albicans*. Research by Runyoro et al. In Tanzania also suggested that miswak wood extract had an inhibitory power against the growth of *Candida albicans*. And it turns out that the benefits of this miswak have been informed by the hadith of the Prophet SAW. This research is expected to have beneficial implications for the public as an enrichment of Islamic knowledge. Admittedly this research has limitations in the implementation of takhrij and syarah hadith so that further research in depth is needed. This research recommends a more modern development through chemical analysis.

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