



## **THE USE OF ZAMZAM WATER AND PUMPKIN FRUIT IN SCIENCE AND ISLAMIC PERSPECTIVE**

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### **ABSTRACT**

Zam-zam water is a holy spring for religious and medicinal purposes for Muslims. Zam Zam water is located 21 meters to the east of the Kaaba. Zam Zam water is rich in beneficial elements and chemical composition up to about 2,000 mg/l. So that Zam Zam water has benefits as an anticancer, maintaining healthy teeth and mouth, stimulation of the reproductive system and antioxidants. Pumpkin has low calories that are suitable for diets. Pumpkin contains a source of nutrients such as carotene and fiber and is high in protein. It is hoped that the writing of this article will bring benefits to enrich the treasures of Zam Zam water and pumpkin both from an Islamic and health perspective.

**Key words:** Zam Zam Water, Pumpkin Fruit, Health, Science, Sunnah, Qur'an

### **INTRODUCTION**

This is a section to elaborate the background and aims of the study. Please write in maximal 3 (three) paragraph using Times New Roman 11 pt, justify. Citations and references must be written in Harvard As Muslims, we will Definitely celebrate several days and several agendas that have important meanings. The big days are Ramadhan, Eid al-Fitr, Eid al-Adha, Isra Mi'raj and many more. We will certainly celebrate these days with great joy. In every big day there are always things that characterize each day. For example, Eid al-Adha is always associated with sacrificial animals such as cows, goats and oxen. Eid al-Adha is held on the 9th of Dzulhijah every year. Eid al-Adha is also commonly referred to as Eid al-Adha, because the celebration coincides with the implementation of the pilgrimage in the holy land by Muslims from all over the world.

In Islamic law, pilgrimage is worship which was prescribed at the time when Rasulullah SAW had migrated from his hometown Mecca Al-Mukaramah headed to the residence the new one, Al-Madinah Al-Munawwarah. Discussing the pilgrimage, of course, cannot be separated from the obligatory drink in the Grand Mosque, namely Zamzam water. This Zamzam water is also included in the list of obligatory Hajj souvenirs to be brought home by the pilgrims. The Prophet also encouraged his followers to drink Zamzam water. This holy water is believed to give blessings to those who drink it, such as being cured of any disease and all prayers are answered with Allah's permission, as stated in the following hadith:

إِنَّهَا مُبَارَكَةٌ إِنَّهَا طَعَامٌ طُعِمَ

Meaning: "The best water on earth is Zamzam water. The water can be a filling food and can be used as a medicine for diseases." (HR Muslim).

Another food that the Prophet Muhammad recommended was pumpkin. This pumpkin fruit is a special food during the month of Ramadan, where this fruit can usually be processed into compote, and in some areas it can be made into vegetables, soups and puddings. Rasulullah really likes pumpkin because of its many benefits, such as strengthening the heart.

## **MATERIALS AND METHODS**

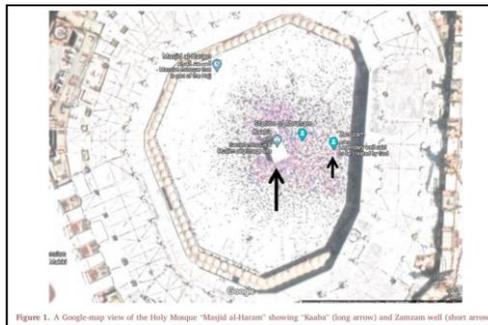
This research was conducted using the library study method, which is a research method that collects data from various sources or literature to produce objective research results by identifying, evaluating, and synthesizing research works and ideas produced by researchers and practitioners. Research using comparative study method is done by comparing the equations and difference as a phenomenon to find what factors/situations how that can cause a particular event to occur. Studies it begins by holding a collection of facts about the factors which causes a particular symptom, then compared. after knowing the similarities and differences in causes, next determined that a factor that causes the appearance of a symptom on the object under study, that's what actually causes it appearance of these symptoms. The other way is by compare which factors or variables are most influential to changes that occur in the results of research that is being carried out.

## RESULT AND DISCUSSION

### 1. Definition

#### 1.1. Zam Zam Water

Zamzam water is holy water used by Muslims for religious and medicinal purposes (Ahmed F Donia *et al.*, 2021). Pilgrims from all over the world travel to Makkah to perform the Hajj. Drinking Zamzam water is an important aspect of the holy pilgrimage. As mentioned, water has several health benefits; hence, pilgrims store them in containers and carry them back to their homes. Millions of pilgrims drink it and take it as gifts to their relatives and friends when they return home. Zamzam water, supplied from the Zamzam well is available through taps and containers distributed at the Grand Mosque in Mecca.



Picture 1. location of the zam-zam water well



Figure 2. An authorized 5-liter package of bottled Zamzam water.

*Picture 2. zam-zam water packaging*

Zamzam water is also available in bottled form to facilitate air transportation for pilgrims who want to take it with them, as the Saudi government has banned the commercial export of Zamzam water. Zam-zam water is a spring located 21 meters to the east of the Kaaba. Zam Zam water is highly carbonated water. Zam Zam water is also rich in beneficial elements and chemical composition up to about 2,000 mg/l. Compared to water sources in general, it only reaches 260 mg/l (Mahmud & Arafah, 2020).

The chemical elements contained in Zamzam water can be divided into positive ions (the smallest part that contains an electric charge), consisting of sodium ions (about 250 mg/l), calcium ions (about and white chemical elements, about 120 mg/l) , and magnesium (a silver-colored metal that glows at about 50 mg/l when burned). In addition, there are negative ions, consisting of sulfate ions (sulfuric acid salt) about 372 mg/l, bicarbonate (about 366 mg/l), nitrate (about 273 mg/l nitric acid salt), phosphate (about 25, 0 mg/l) and ammonia (about 6 mg/l) (Mahmud & Arafah, 2020).

## 1.2. Pumpkins



*Picture 3. pumpkins*

*Cucurbita moschata* (Pumpkin) belongs to the genus *Cucurbita*, order Cucurbitales, family Cucurbitaceae, subfamily Cucurbitaceae and tribe Cucurbitaceae (Jeffrey, 1990). The genus *Cucurbita* comprises 20–27 species Esquinas-Alcazar and Gulick (1983) of which five are cultivated (OECD, 2016). Among them are: *Cucurbita argyrosperma*, *Cucurbita moschata*, *Cucurbita maxima*, *Cucurbita pepo* and *Cucurbita ficifolia*. *Cucurbita moschata*, *Cucurbita maxima*, and *Cucurbita pepo* are more globally developed (OECD, 2016). Based on Jeffrey (1990), the genus *Cucurbita* is

native to America. Pumpkin is most likely cultivated in all tropical African countries (Vincent Ezin *et al.*, 2022). Pumpkin is an annual herbaceous plant, branched by creeping or climbing branches (OECD, 2016). This pumpkin is classified as an annual plant because after it has finished bearing fruit, it will die. Therefore pumpkin plants in rural areas are often used as intercrops.

Pumpkins have angular stems and leaf blades with broad oval outlines. The leaves are simple, alternate, without stipules and the length of the petiole varies between 9 and 24 cm. Flowering is asynchronous with male flowers which are solitary, having 3 stamens with free threads, and the anthers are usually supported by a long hooked organ with a very long stalk. According to the same sources, female flowers are always solitary and have 3 stigmas supported by a thick style, an inferior ovary and a short stalk. The shape of the pumpkin varies from globular to ovoid. The fruit stalk is firm, angular with five ribs distinctly broadening at the apex. It has an oval and flat seed shape (Vincent Ezin *et al.*, 2022).



*Picture 4. pumpkin plant*

Pumpkins are generally grown for their leaves, flowers, fruit, and sometimes for their oil. Pumpkin is low in calories which is suitable for any diet. In Latin America, the flowers are eaten as a vegetable. The vines and fruits are used as fodder for domestic animals. The pumpkin is an important source of vitamin A. Thus, pumpkin plays an important role in fighting vitamin A deficiency, which affects more than 250 million children under the age of five worldwide.

## 2. Views of Zamzam Water and Pumpkin According to Islam

### A. Zam Zam Water

Zamzam water has been widely mentioned in several authentic hadiths such as in the History of Ibn Madja in Sunan Ibn Majah No index 3053:

عَنْ جَابِرٍ قَالَ : سَمِعْتُ رَسُولَ اللَّهِ يُقُولُ : مَاءٌ زَمَزَمَ لِمَا شُرِبَ لَهُ

Meaning: From Jabir said, "I heard the Messenger of Allah say, 'Zamzam water depends on the intention of the person who drinks it.'" (Oktaviani & Fakhrudin, 2021).

In a book entitled *Fadhl Ma' Zamzam* by Said Bakdasy explains in Mahmud & Arafah, 2020, the benefits and virtues of zamzam water include:

1. Zamzam water is one of the springs of various springs in heaven
2. Zamzam water is the lifeblood of Mecca.
3. Zamzam water is the best water on earth.
4. Zamzam water is the greatest favor and has real benefits in Bait al-Haram.
5. Zamzam water is water that appears as an intermediary for Gabriel.
6. Zamzam water is water used to purify the shadr of the Prophet Muhammad SAW.
7. Zamzam water will fill those who are hungry.
8. Zamzam water is an antidote to all diseases.
9. In zamzam water there is a fever reliever.
10. Zamzam water can nourish the body and strengthen the body.

## B. Pumpkins

The Prophet Muhammad really liked pumpkin because of its many benefits. The Prophet's fondness for eating pumpkin was mentioned by Anas bin Malik who often accompanied the Apostle on various occasions. In fact, this fruit is mentioned in the Al-Quran in the letter As-Shaffat verse 146:

وَأَنْبَتْنَا عَلَيْهِ شَجَرَةً مِّنْ يَقْطِينٍ

Meaning: "And We grow for him a tree of a type of gourd." (QS. As-Shaffat: 146).

### 3. Utilization of Zamzam Water and Pumpkin in Medicine

#### A. Zam Zam Water

Zamzam water has not been scientifically proven to have special benefits in the world of medicine or science. Recent studies show that the mineral content in Zamzam water is almost the same as ordinary mineral water. However, this water is still praised by some people for its spiritual value and the traditions associated with it. Zam-zam water is water that contains many ions, both positive ions and negative ions. Besides containing many ions, zam-zam water also contains 34 elements of multielement and hydrochemical composition. The 34 elements include Calcium, Sodium, Chloride, Magnesium, Antimony, Beryllium, Bismuth, Bromine, Cobalt, Iodine, Chromium, Manganese, Titanium, and Molybdenum. Zam-zam water when viewed from a medical point of view is useful as an anticancer therapy (breast, cortical, ovarian, lung), maintains healthy teeth and mouth, stimulates the reproductive system (Oktaviani & Fakhrudin, 2021).

In general, Zamzam water has several medical benefits, such as:

1. Overcoming dehydration because it has a high concentration of salt and minerals
2. Maintaining the health of the digestive tract and helping prevent digestive problems
3. Maintain electrolyte balance in the body
4. Helps boost the immune system and helps prevent infection
5. Has a positive effect on the health of the heart and blood vessels
6. Overcoming skin problems such as acne and eczema.

But the medical benefits of Zamzam water are still in the research stage and are not scientifically proven. Consult a doctor before using Zamzam water as an alternative treatment.

Another benefit of zamzam water:

1. Zam-Zam Water As Anticancer

According to research (Oktaviani & Fakhrudin, 2021) explains that zam-zam water is water that is naturally alkaline or alkaline. These properties indicate that zam-zam water has benefits as an anticancer, because alkaline water has the ability to have strong antioxidant activity and anticancer effects. Antioxidants will protect DNA from oxidative damage in the body which is the main cause of cancer. So in this case zam-zam water has anticancer capabilities because it has antioxidant and anticancer activity. The content of high concentrations of calcium and magnesium ions in zam-zam water has the potential to reduce the risk of colon and breast cancer, as well as prevent metastasis of cancer cells.

2. Zam-Zam Water and Dental Caries

The high fluoride content in zam-zam water provides benefits for maintaining healthy teeth and mouth. The level of fluoride content that can be accepted by the human body is 1.5 ppm or less. Meanwhile, zam-zam water has a fluoride level of 0.68 to 0.75 ppm. Humans who lack fluoride can be at risk of experiencing disorders of the teeth and mouth, such as porous teeth or dental caries. So in this case zam-zam water with high fluoride content can prevent the risk of tooth loss (Oktaviani & Fakhrudin, 2021).

3. Zam-Zam Water and Stimulation of the Reproductive System

Zam-zam water which contains high calcium and magnesium can stimulate stem cell differentiation in the endometrium. In addition, zam-zam water also acts as an antioxidant because it stimulates nitric oxide and endometrial brain-derived neurotrophic factors (Oktaviani & Fakhrudin, 2021).

## **B. Pumpkin**

Pumpkin fruit has potential as an antidiabetic and hypoglycemic. Pumpkin extract has the ability to improve pancreatic islet cells and insulin production. Based on other research and what was obtained in this study, pumpkin can lower blood glucose both in the form of extracts and in the

form of food. The highest decrease in glucose in the extract was 228.28 mg/dL (Arsul *et al.*, 2019). while in noodles it was 60 mg/dL. Meanwhile, pumpkin seed oil contains the mineral chromium which has a role in metabolizing carbohydrates (Junita *et al.*, 2017). Pumpkin contains a source of nutrients such as carotene and fiber (Nurjanah *et al.*, 2020). According to a research journal (Suwanto & Rahmawati, 2019) explained that pumpkin contains various chemical compounds such as protein, fat, minerals, peptides, polysaccharides, sterols, vitamin A, vitamin C, fiber, water, oleic, linoleic, palmitic acid, and phytosterols. Pumpkin seeds can be used for a hypoglycemic diet because they are low in fat and low in calories. In this case the food in question is food with high fiber content or protein food. A protein diet can improve blood glucose levels and prevent complications.

Pumpkin contains vitamin C which acts as a potential antioxidant. Antioxidants are able to counteract free radicals that enter the body and prevent hyperpigmentation. It is known that free radicals are one of the factors that cause cancer. So pumpkin has the potential as an anticancer because it contains vitamin C as an antioxidant. In addition, vitamin C can also launch metabolic processes and protect the body from disease disorders. Another ingredient in pumpkin is protein, which plays a role in the formation of enzymes and hormones that regulate metabolic processes in the body. The role of other proteins in pumpkin is as antibodies which are the body's defense against all kinds of diseases and infections (Hatta & Sandalayuk, 2020).

## CONCLUSION

According to an Islamic perspective, zam-zam water has the benefits and virtues of zam-zam water like one of the springs from various springs in heaven which can nourish the body and strengthen the body. In addition, before drinking it, we must intend it first. Pumpkin fruit is the Apostle's favorite because of its many benefits.

Zam Zam water is water that contains many ions, both positive ions and negative ions. Zam Zam water contains not only many ions, but also 34 elements of several elemental and hydrochemical compositions. The 34 elements include calcium, sodium, chloride, magnesium, antimony, beryllium, bismuth, bromine, cobalt, iodine, chromium, manganese, titanium and molybdenum. From a medical point of view, Zam Zam water is useful as a cancer therapy (breast, corrective, ovarian, lung), maintains healthy teeth and mouth, stimulates the reproductive system.

Pumpkin contains various chemical compounds such as protein, fat, minerals, peptides, polysaccharides, sterols, vitamin A, vitamin C, dietary fiber, water, oleic acid, linoleic acid, palmitic acid, and phytosterols. Pumpkin seeds can be used for a hypoglycemic diet because they are low in fat and calories. In this case are foods that are high in fiber or foods that contain protein.

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