SIGNIFICANCE OF JALA MAHABHUTA (WATER) IN DAY TO DAY LIFE

Dr. Pitta Srinivas*, Dr. Rohini A. Aramani, Dr. Allam Ramakrishna, Dr. Kasthuri, Dr. K. Prameela Devi, Dr. G. K. Swamy, Dr. Achanta Lakshmipathi

Dr. Achanta Lakshmipathi, Research Centre for Ayurveda (ALRCA), (Under CCRAS New Delhi), Chennai, Tamilnadu, India.

ABSTRACT

Water is called “the elixir of life”. This is, indeed, the name which the Indian Nobel Laureate, C.V.Raman, has given it in his renowned essay of the same name. The earth comprises two thirds of water and one third of land. Water is also essential for life. Water is the major constituent of almost all life forms. Most animals and plants contain more than 60% water by volume. Without water life would probably never have developed on our planet. Early civilizations started around the water sources. Water is not only important for drinking but also for transport, trade and agriculture. Water makes up more than two thirds of human body weight, and without water, we would die in a few days. The human brain is made up of 95% water; blood is 82% and lungs 90%. A mere 2% drop in our body's water supply can trigger signs of dehydration, furry short-term memory, trouble with fundamental arithmetic and difficulty focus on smaller issue.[1] The theory of Panchamahabhutas, are basics of our body and nature. Jala mahabhuta (water) is one among them. Jala is the substance with existence and is an essence of elemental source. Water is considered to be ‘Jeeva’ (life) in Ayurvedic perception.[2] This article comprises to communicate regarding properties, types, medicinal values and effect of Jala on life in both Ayurveda and modern view.

KEYWORDS: Jala, Panchamahabhutas, Agrya Dravya, water, thirst.

INTRODUCTION

*Jivana* (water) is the essence of life, the whole world is made up of it, and hence avoiding water completely is not possible at all.

International World Water Day has been observed annually on 22nd March since 1993, as a means of focusing attention on the importance of freshwater and advocating for the sustainable management of freshwater resources.[3]

The first mechanism that the body has designed to make a person aware of its needs for water is thirst. Thirst is a basic instinct and if only this mechanism works properly and we feel thirsty whenever there is a need for water in the body. Water is a universal solvent for ions, required for cell signaling, enzyme activation, mineralization of organic compounds and properties. Water also plays a key role in digestion, removal of toxins and lubrication of cavities such as joints. It is also involved in epithelial transport, hormone release, cell proliferation, migration and cell death. It sounds so simple; H₂O - two parts hydrogen and one part oxygen, and is one of the most essential elements to health. It protects cells and organism from temperature swings, due to its ability to absorb and lose heat without undergoing a large temperature change (Wertzmanet. et. al., 1980; Manz et.al., 2005).

An average adult body contains 42 litres of water and with just a small loss of 2.7 litres he or she can suffer from dehydration, displaying symptoms of irritability, fatigue, nervousness, dizziness, weakness, headaches and consequently reach a state of pathology.

**Structure of Water**

At its most basic, fluid (water) is a molecule with one oxygen atom and two hydrogen atoms, bonded together by shared electrons. It is a V-shaped polar molecule, which means that it charged positively near the hydrogen atoms and negatively near the oxygen atom. Water molecules are naturally attracted and stick to each other because of this polarity, forming a hydrogen bond.
Physical Properties

Water (H₂O) is the most abundant compound on Earth's surface, covering 70 percent of the planet. It is in dynamic equilibrium between the liquid and gas states at standard temperature and pressure. At room temperature, it is a tasteless and odorless liquid, nearly colorless with a hint of blue. Many substances dissolve in water and it is commonly referred to as the universal solvent. Because of this, water in nature and in use is rarely pure and some properties may vary from those of the pure substance. However, there are also many compounds that are essentially, if not completely, insoluble in water. Water is the only common substance found naturally in all three common states of matter (solid, liquid, and gas) and it is essential for all life on Earth. Water makes up 55% to 78% of the human body.[4]

Jala (Water)

Ayurvedic literature explains the theory of Panchamahabhutas, which are fundamentals of our body and nature. Jala mahabhuta is one among them. Jala is the substance with existence. It is a substance of primordial origin. Water is considered to be ‘Jeeva’ (life) in Ayurvedic concepts. It is Madhura (sweet), Sheetala (cold) and Ruchikaraka (tasty). Water is wholesome as it has all the six tastes (Rasas) which are Madhura (sweet), Amla (sour), Lavana (salty), Katu (pungent), Tikta (bitter) and Kashaya (astringent). It has rupa, rasa, sparsha, drava & snigdha gunas. It relieves Daha (thirst), Moha (loss of mental block), Bhrama (giddiness), Nidra (sleepy feeling), Alasya (lazyness), Visha (toxins); it acts as Jeernakari (effectively digests food), Truptikara (provides immense satisfaction to thirsty person), provides Buddhi (intelligence), Bala (strength), Veerya (potency: ability to function), Tushti (satisfaction), Pushti (energy) to Nashta anga (debilitated parts of the body). In Jala mahabhuta Satwa and Tama guna are in predominance. Ayurveda categorize different types of water based on place of origin and availability. Quality of water flown in different rivers is also told to have different properties.

Synonyms of Jala

Paniya Water intended to drink, Salila Good, Nira Clear liquid, Kilaala Heavenly drink, Aapa Water, Payasa Water nurturing like milk, Jeevana Giving life, Amruta Superior quality of liquid, Paya/payasa Water having qualities similar to milk, free flowing water, Ambhu Water from clouds, Pushkarambhu Water with lotus, Pathya Wholesome for
everyone, *Vari* Free flowing water, *Kamalaambhu* Water where lotus are grown. (Bh. Ni. – Varivarga).[5]

**Types of Jala (water)**

Various Ayurvedic scriptures have mentioned different type of *Jala* according to its *Rasa, Guna, Virya and Vipaka* in distinguish *Jalavarga*.

Antariksha Jala
Bhauma Jala
Nadijala
Dushtajala
Hamsodaka

**1. Antariksha Jala:** It also called as “Divya Jala”[6], which is rains from Akasa. It has Avyakta rasa, Laghu guna, Sita veerya & Madhura vipaka. Having Jivaniya, Tarpaka, Dharaka, Asvasanakara, Pathya properties and Indicated in Srama (exhaustion), Klama (mental fatigue), Pipasa (thirst), Mada (intoxication), Murcha (Fainting), Tandra (drowsiness), Nidra (excessive sleep), Daha (burning sensation).[7]

Acharya Susruta also explained that after the falling of rain water on the ground, it receives different Rasas i.e. *Madhuradi Shadrasa* and particular place i.e. river, well, pond etc. and due to various rasa, environment, soil, season and place, it defines various type of water.[8]

**Types of Antariksa Jala**

*Antariksa Jala* is divided into four types i.e. Dharma, Kara, Tausara, Haima. Among these types, *Dhara Jala* is best due to its *Laghu* property. *Dhara Jala* is subdivided into two types i.e. *Ganga jala & Samudra jala*.[9]

<table>
<thead>
<tr>
<th>Ganga jala</th>
<th>Samudra jala</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Which is derived from the Ganga)</td>
<td>(Which is derived from the Sea)</td>
</tr>
<tr>
<td><strong>Properties:</strong> Revitalizing, satisfy, comforting (healthy) to the heart (mind), refreshing, stimulating the intellect, thin, of impermeable tastes, slightly sweet, cold (coolant), easily digestible nectar-like in property/effect, are the properties of <em>Gangambu</em> (rain water) which was fallen from the sky, coming in contact with sunlight, moonlight and wind. Its good or bad, depends chiefly on the region and season.</td>
<td><em>Ganga</em> type of water rains in the month of Avsyuju (September – October) and it is better than <em>Samudra Jala</em>. If rains in this month, it is similar to <em>Ganga Jala</em> in its properties. All other kinds of water are called <em>Samudra</em> (sea water), they should not be used for drinking except during Avsyuju (September-October/autumn season).</td>
</tr>
</tbody>
</table>

---

*www.wjpps.com*  
1784
It is not good in all seasons. In olden days rain water used to be pure and so good for healthy, but not so now-a-days. With the increasing industrialization, the atmosphere has become contaminated with poisonous gases, fumes and dust, so the rain water coming down from the clouds gets polluted to a great extent, because of this only we hear of sour rain, salty rain, crimson rain etc. frequently. Use of such polluted rain water for drinking is not good for health.

The terms Gangambu (also called Aindrambu) and Samudrambu also denote potable (pure-drinkable) water and unpotable (contaminated, unsuited for drinking) respectively. During Asvayuja month there will be the appearance of Agastyak naksatra (the star Canopus) which is said to remove the poisonous properties of water and other things of the earth, hence permission to use other kinds of water also for drinking during this season.

Only that rain water which makes the boiled rice kept in a clean silver plate neither too moist nor change its color is to considered as good for drinking.

Rain water, collected in a good vessel and which has not become changed (in color taste, touch etc.,) should be used for drinking always. In its absence, the water of the earth, which resembles rainwater (in all its qualities), collected from places which are clean and immense, having black or white soil, and exposed to sunlight and breeze.[10]

(2) Bhauma Jala

Bhauma jala is divided into several types, according to its place[11 & 12]

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Type of Jala</th>
<th>Rasa</th>
<th>Guna</th>
<th>Karma</th>
<th>Dosaghnata</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kaupa Jala (Well water)</td>
<td>Madhura</td>
<td>Laghu</td>
<td>Deepana</td>
<td>Tridosahara. If Taste of water is Ksara (alkaline) it aggravates Pitta and decreases Vata and Kapha</td>
</tr>
<tr>
<td>2</td>
<td>Tadaga Jala (Pond water)</td>
<td>Madhura,Kasaya</td>
<td>Guru</td>
<td>It aggravates Vayu and useful in blood disorders</td>
<td>Pitta Kaphahara</td>
</tr>
<tr>
<td>3</td>
<td>Vapya Jala (Water of small pond)</td>
<td>Madhura</td>
<td>Laghu</td>
<td>If it is madhura Kaphakrit, Vatapittahara</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Nairjara Jala (Spring water)</td>
<td>Madhura</td>
<td>Laghu</td>
<td>Dipana, Ruchikara, Vatakara</td>
<td>Kaphahara</td>
</tr>
<tr>
<td>5</td>
<td>Sarasa Jala (Lake Water)</td>
<td>Madhura,Kasaya</td>
<td>Laghu, Ruksa</td>
<td>Balya, Rocana, Trsanghna, Malamutrabandhaka</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Caundya Jala (Water of big well)</td>
<td>Madhura</td>
<td>Laghu, Visada</td>
<td>Dipana, Pacana</td>
<td>Pitta Kaphahara</td>
</tr>
<tr>
<td>7</td>
<td>Kaidara Jala (Water of field)</td>
<td>Madhura</td>
<td>Guru,</td>
<td>Abhisyandi</td>
<td>Tridosakara</td>
</tr>
<tr>
<td>8</td>
<td>Palvala Jala (Water of Small Pond)</td>
<td>Madhura</td>
<td>Guru,</td>
<td>Abhisyandi</td>
<td>Tridosakara</td>
</tr>
<tr>
<td>9</td>
<td>Audbhida Jala</td>
<td>Madhura</td>
<td>Laghu</td>
<td>Prinana, Balya,</td>
<td>Pittahara</td>
</tr>
</tbody>
</table>
3. Nadijala (River water)

The water of the rivers which flow into the western ocean (Arabian sea), which are swift and which have pure water is good for health, where as the water of rivers which flow into the eastern ocean (Bay of Bengal), which are slow and whose water is contaminated, is bad for health.

The water of rivers arising from Himalaya and Malaya mountains, and which get churned up well by dashing against rocks are good for health, whereas the same water if gets stagnated and gets contaminated gives rise to worms (intestinal parasites), Filariasis, diseases of the heart, throat and head.\[13\] Water those arising from Parvata Pariyatra,(the western part of the Vindhya mountains) mitigate the doshas, bestow strength and sexual vigor, the water of the sea causes vitiation of all the three doshas.\[14\]

4. Dushtajala (Polluted water)

The water which is dirty, being mixed with slush (sludge), algae weeds and leaves, which is not exposed to sunlight and wind, which is a mixture of old and fresh, which is thick, heavy (not easily digestible), frothy, containing worms, hot (by nature), causes tingling of teeth by being very cold, that rain water which is unseasonal or though seasonal that of the first rain, (before the appearance of Agastya naksatra), that contaminated with the webs, saliva, urine, feaces of spider etc., and such other poisonous materials, should not be used for drinking.\[15\]

5. Hamsodaka

In Sharath rutu, the water which gets heated by the hot rays of the sun during day, cooled by the cool rays of the moon during night, for many days continuously which has been de-poisoned (de-toxicated) by the rise of the star Agastya, which is pure, uncontaminated and capable of mitigating the doshas is known as Hamsodaka. It is neither abhishyandi (producing more secretion or moisture inside the minute channel so as to block them) nor dry, such water is like amrita (nectar) for drinking and other purpose.\[16\]
Some important principles of water

Useful Water in Different Months

Bhavprakasa has mentions particular types of water is useful in particular months as\[17\]

<table>
<thead>
<tr>
<th>Pusya (December)</th>
<th>Magha (January)</th>
<th>Phalguna (February) &amp; Bhadrapada (August)</th>
<th>Chaitra (March) &amp; Ashwin (September)</th>
<th>Vaisakh (May)</th>
<th>Jyaistha (June)</th>
<th>Asadha (July)</th>
<th>Shravana (August)</th>
<th>Kartika (September)</th>
<th>Margasirsa (October)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarojata Jala</td>
<td>Tadagaja Jala</td>
<td>Kaupasambhuta Jala</td>
<td>Caundya Jala</td>
<td>Nairjara Jala</td>
<td>Audbhida Jala</td>
<td>Kaupa Jala</td>
<td>Divya Jala</td>
<td>Sarva Jala</td>
<td>Sarva Jala</td>
</tr>
</tbody>
</table>

**Narikelodaka**-(coconut water): is unctuous, sweet, aphrodisiac, coolant, easily digestible, relieves thirst (aggravation of *pitta*) and *anila* (*vata*), increases hunger and cleanses the urinary bladder.\[18\]

**Sitajala** (cold water): Cold water relieves alcoholic intoxication, exhaustion, fainting, vomiting, debility (fatigue), giddiness, thirst, heat (of the sun) burning sensation, aggravation of *pitta*, *rakta* and poison.\[19\]

**Ushnajala** (warm water): Hot (warm) water stimulates hunger, helps digestion, good for the throat, easily digestible, cleanses the urinary bladder, relieves hiccup, flatulence, aggravation of *vata* and subsides *kapha*; is ideal on the days of panchakarma (purificatory) therapy and for those suffering from emerging fevers, cough, ama (accumulation of undigested materials), running-nose, dyspnoea and pain in the flanks.\[20\]

Water which has been boiled and then cooled is not going to increase the moisture inside the body, easily digestable and ultimate for the doshas associated with *pitta*. Water which has been kept overnight (so become stable) causes aggravation of all the three dosas.\[21\]

**Principles of intake of water** (*jalapana niyama*)

**Space for Jalapana**: Two parts of the stomach should be filled with solid foods, one part by liquids, and one part should be kept vacant for air.\[22\]

**Jalapana phala**: (effects of drinking water with food): Persons who drink water in the middle, at the end and at the commencement of the meal, will remain normal, become stout and emaciated respectively.\[23\]

**Jala as a Good Anupana**: Cold water is ideal after meals containing prepared from *yava* & *godhuma*, *dadhi*, *Madhya*, *Visha* & *Madhu*; Warm water is ideal after foods which are
starchy masthu (whey), takra (butter milk) and amlakanjika (fermented gruel) are good. Honey water to make stout person to lean.\textsuperscript{[24]}

\textit{Jala Paripaka kaala}:(Duration for digestion): Normal or cold water consumed is going to digest in 6 hrs(2 yama), Boiled and cooled water in 3 hrs(1 yama) and boiled and warm water in 1.30 hrs(1/2 yama).\textsuperscript{[25]}

\textbf{Principles to avoid ingestion of water (Jalapana varjya)}

Water should not be consumed or consumed in very little quantity, if unavoidable due to debility, by those suffering from poor digestive function, tumors of the abdomen, anemia, and enlargement of the abdomen, diarrhea, hemorrhoids, and diseases of the duodenum, consumption or dropsy. Except in sarad (autumn) and Nidagha (summer) even healthy persons should drink less quantity of water (in all other seasons).\textsuperscript{[26]}

Ayurveda denote methods to identify impure water and suggests several techniques like use of herbs and metals like copper to enhance the quality of drinking water. Many of these techniques can be practiced even today.

\textbf{Methods to identify impure water}

Many methods, based on sensorial aspects were adopted to identify impure water. Presence of streaks, froth, bubbles, sharp aroma, death of frogs and fish while coastal birds are intoxicated, shadows not appearing in water, representing the turbidity of water shadows, if visible, appear in two’s, smaller or abnormal.

\textbf{Water Purification Methods}

There are many methods of water treatment in Ayurveda. These are generally non-specific as in the present day context wherein it is removal of harmful chemicals or pathogenic microorganisms in water. The traditional methods emphasized on physiological (curative, health promoting) benefits.

The methods of water treatment included boiling (Shrutashita jala), exposure to sun rays during day and moonlight during nights (Hamsodaka), using Traditional Herbs such as Tulsi (Ocimum sanctum), Jeera (Cuminum cyminum), Pattanga (Cesalpinia sapan), Ushira (Vetiveria zizanioides) are routinely added to drinking water to enhance their physiological property as a local health tradition, precious stones (Suryamani), metals and minerals.
Copper utensils to store and to serve water
Water stored in copper containers for overnight and consumed the next day is believed to impart ‘health benefits’. Well-boiled and then well-cooled drinkable water should be given in copper vessel. However, cooked milk is not recommended to be kept in copper vessels before serving it.

The Importance of Water and Health according to modern knowledge[27]

Daytime fatigue: Fatigue is one of the first signs of dehydration. Even a small drop in your body’s water levels can hurt you. Many people do not realize that the fatigue and lethargy they may be experiencing could be from mild dehydration. Water reduces daytime fatigue.

Memory: The human brain is our most vital organ and it consist 95% water. Mild dehydration can reduce your mental energy and capacity, causing memory to become impaired.

Nourishes skin: like any other cell in the body, the skin cell also require water, without water the organs will certainly not function properly or at their best.

Essential for digestion: The digestive system depends on sufficient amount of water to help break down food.

Nutrient absorption and chemical reactions: Water helps carry nutrients and oxygen to the cells, and overall it is important in keeping everything moving in our body.

Aids circulation: Drinking water can help the flow of water in the body and help keep blood circulation going.

Regulates body's cooling system: Water can help in regulating body’s temperature and store extra heat in the body.

Reduce colon cancer and bladder cancer: Research shows that drinking adequate amounts of water can reduce the risk of colon cancer by 45% and bladder cancer by 50%.

CONCLUSION
The importance of water for survival in life is unquestionable. When an insufficient quantity of water is available in the body, only certain important organs of the body manage to have their needs met so that the body can carry out the most important functions to keep itself
alive. Those organs that do not play life supporting roles like the muscles and joints are denied a proper supply of water. The diversion of water to a few organs results in chronic dehydration of other organs, which are unable to carry on their function in the absence of the necessary water.

Several organs in the body of modern man, who consumes very little water, instead substituting it with tea, coffee, colas, beer and fruit drinks will continue to suffer from dehydration. But as the thirst mechanism has failed in the person, he rarely feels thirsty. This unfortunate situation continues for months or years, till a stage comes when an organ loaded with toxins completely fails, leading to the manifestation of some chronic disease.

Acharyas has considered Jala as Agrya Dravya (prime substance). Charakacharya described Jala as a best Ashvasanakara.\[28]\ Rasanendriya (tongue), Sweda (sweat), Kleda (moisture), Vasa (fat), Rakta (blood), Shukra (semen), Muthra (urine) etc., are the representation of Jala mahabhuta in components of body. Various Ayurvedic literatures have mentioned different type of Jala according to its Rasa, Guna, Virya and Vipaka like Antariksha Jala, Bhauma Jala, Nadijala, Dushtajala and Hamsodaka.

Water consumption is crucial to a healthy lifestyle. Drinking water with contaminants will reverse the benefits of pure water. Classical texts also include aspects of quality control of water. These included the source of origin, the place of collection, season and various sensorial parameters like color, taste and smell. Methods of water treatment also has been described in Ayurvedic literature which included Shrutashita jala, Hamsodaka, using herbs like Jeera, Vetiver, Ginger Sarasaparilla, anantamula and amla etc., Suryamani lime metals and minerals.

Many of these methods are significant even today. For example, the use of sunrays is now practiced widely in many developing countries of Asia and Africa for water purification. Use of copper for microbial water purification also substantiates the ancient recommendation of storing drinking water in copper containers. Pure water is the best water to drink and to avoid any contaminants from entering your body. Hence in conclusion, we can recommend to follow these methods to lead healthy way of life.
REFERENCES


27. Water encyclopedia.