

**JALA AMRUTAM-IMPORTANCE OF WATER IN LIFE STYLE DISORDERS – A
CRITICAL ANALYSIS****Dr. Sonia***

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ABSTRACT

Most people take drinking water for granted, but keeping hydrated has a huge impact on overall health. Despite how crucial water is, a significant number of people fail to consume recommended levels of fluids each day. Around 70 percent of the body is comprised of water, and around 71 percent of the planet's surface is covered by water. Perhaps it is the ubiquitous nature of water that means drinking enough each day is not at the top of many people's lists of priorities. To function properly, all the cells and organs of the body need water. It is also used to lubricate the joints, protect the spinal cord and other sensitive tissues, regulate body temperature, and assist the passage of food through the intestines. This review attempts to provide some sense of our current knowledge of water including overall patterns of intake and some factors linked with intake, the complex mechanisms behind water homeostasis, the effects of variation in water intake on health and energy intake, weight, and human performance and functioning. Water represents a critical nutrient whose absence will be lethal within days. Water's importance for prevention of nutrition-related life style diseases has emerged more recently because of the shift toward large proportions of fluids coming from caloric beverages. Similar concept is already been described in Ayurveda regarding the concept of drinking water which helps in preventing the present day life style disorders.

KEYWORDS: Water, Lifestyle disorder, Ayurveda, Prevention.**INTRODUCTION**

Jala (water) is an integral & unavoidable part of all living beings. The 3 basic things we take from environment- Oxygen, Water & food and these has to be taken in proper manner to remain healthy. The average adult body is made up of 50%-75% in which Muscles are about 75% water by weight, Fat tissues are about 25%, Bones are about 20% and Brain is about 90%. According to the recent research work average amount of water to be taken by the individual is 3-5 liters per day. Prevalence of lifestyle diseases was 37.03%. Hypertension was the most common disease with 27 (25%) cases followed by diabetes mellitus (16.7%) and asthma/COPD (7.5%).

There was significant association between lifestyle factors like Tobacco and cigarette use, junk foods, overweight and obesity with lifestyle diseases. Indian Council of Medical Research (ICMR) and other Institutes conduct studies on lifestyle disease. According to ICMR India State-Level Disease Burden Study report "India: Health of the Nation's States", the estimated proportion of all deaths due to Non-Communicable Diseases (NCDs) has increased from 37.09% in 1990 to 61.8% in 2016.^[1]

Concept of water intake in ayurveda**Time & quantity of water intake**

Before the sun rises, drinking 8 prasruti (4 anjali) jala- cures diseases, doesn't let old age set in and the person leads a long life of 100 years. Prevention of diseases like Arsha, Shotha, Grahni, Jwara, Jathar, Medovikara, Mutraghata.^[2] Ayurveda has a simple principle- drink whenever you feel thirsty.

Depending on prakruti

Vata Prakruti & Pitta Prakruti requires more water whereas the Kapha Prakruti requires less water. So know when you're thirsty and drink enough to quench your thirst.^[3]

Doshik wise intake of water

In case of Vata dosha Yavaani siddha jala and when it comes to kapha dosha shunthi siddha jala has to be taken. Water which 3/4th part water remaining after boiling is pathya and vaata roga naashak whereas 1/2 part water remaining after boiling is vaata pittagnam and 1/4th part water remaining after boiling is said to be tridoshanaashak.^[4]

Seasonal wise intake of water

In season of Sharada, ardha paad hinam (1/8th part reduced) water is advised, Hemant rutu-

paadhinam(1/4th part reduced) whereas inn Shishir vasant grishma- ardhav shisha (1/2 part reduced) and remaining season Viparit rutu and pravut rutu- ashtaavasheshe (1/8th part remaining after boiling) is mentioned by acharyas.^[5]

Food & water

Drinking water during meals leads to sama avastha, after meals leads to sthulata and before meals leads to krushta.^[6]

Less quantity of water intake

There are certain diseases in which the quantity of water consumed should be less like Arochaka, Pratishaya, Mandaagna, Shotha, Kshaya, Mookhpraseka, Jaathar, netraamaya, Jwara, Vrana and Madhumeha.^[7]

Excess amount of water intake

Excess amount of jalacan lead to water intoxication by disturbing the normal paanchbhautik sangathan of the body. It increases the aap mahabhoot in the body and this apaachit aap mahabhoot gets out of the body in the form of vyadhi's like pratishyaay, atisaar etc or gets accumulated in the form of vyadhi's like shotha according to Bhavaprakasha Nighantu Vaari Varga.^[8]

DISCUSSION

Some of the recent research work helps us to understand the relation between the intake of water and lifestyle disorder. This will give us better understanding regarding the importance and the mechanism behind the role of water intake in prevention of lifestyle diseases.

Water & hypertension

Researchers at Vanderbilt University Medical Center have shown that ordinary water -- without any additives - - does more than just quench thirst. It has some other unexpected, physiological effects. It increases the activity of the sympathetic -- fight or flight -- nervous system, which raises alertness, blood pressure and energy expenditure. The newly discovered system and its molecular mediators -- such as Trpv4 -- may be targets for blood pressure regulation, particularly in situations of low blood pressure and fainting, the investigators said. The findings also suggest that investigators who use water as a control substance (a "non-drug") in studies may need to take water's presser effects into account. According to Research in Vanderbilt University Medical Centre, Less water intake secure its fluid supply by retaining sodium systematically close down some of its capillary beds increased blood pressure. Staying adequately hydrated is one of the simplest ways to lower your blood pressure naturally.^[9]

Water & diabetes

Due to dehydration the vasopressin levels rise(kidneys to hold onto water) and this hormone pushes the liver to produce blood sugar due to which over the time may strain the ability to produce or respond to insulin. Hence, the amount of water you drink can play a role in how

your body regulates blood sugar.^[10] Roussel notes that recent research indicates an association between the hormone vasopressin, which regulates water in the body, and diabetes. Despite the known influence of water intake on vasopressin secretion, no study has investigated a possible association between drinking water and risk of high blood sugar, he says.

Water & obesity

Increased water intake is associated with loss of body weight produced *via* two mechanisms, decreased feeding and increased lipolysis. The common denominator likely is angiotensin II (AngII), the principal hormone of body fluid regulation. AngII acts on two, seven transmembrane domain peptide receptors, AT1 and AT2. Working through the AT1 receptor AngII stimulates thirst (the act of seeking out and drinking fluids, mainly water), an appetite for sodium, the release of anti-diuretic hormone (ADH or vasopressin) to conserve water *via* the kidneys, and vasoconstriction (conserving perfusion pressure to all organs and cells). The principal physiological signal for an increase in plasma AngII is extracellular dehydration (hypovolemia). The responses listed above enable the rapid return of plasma volume to normal levels, thus reducing the signal for AngII generation. Drinking water prior to each meal may help in appetite suppression as a result the person will have less quantity of food intake in turn leading to weight reduction.^[11]

Water & cardiovascular disease

There is an increasing body of evidence that drinking water hardness and elevated concentrations of certain minerals in hard water may reduce the risk of cardiac death and, in particular, the risk of sudden cardiac death. The health effects of hard water are mainly considered to be because of the effects of its dissolved salts, primarily Ca and Mg. Hard water may be a good source for the intake of these elements. Water hardness, as well as calcium and magnesium content of drinking water may have a protective role against CVDs.^[12]

CONCLUSION

Understand the Art of consumption of water for preventing the lifestyle disorders. One has to drink water when thirsty as proper digestion and nutrient absorption depend on a healthy intake of water. As the majority of people are suffering from lifestyle disorders. Water can be really helpful for prevention of lifestyle disorders. But water is just one, very small piece of the puzzle which can help in preventing the lifestyle disorder if consumed in properly.

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