Rice-A Review of Nutritional and Medicinal Aspect Mentioned in Ayurveda

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Abstract: Rice not only an essential food but also a source of protein. Ancient Ayurvedic Acharyas described Raktashali red rice as a nutritive food and medicine. Rice is the second most used cereals in the world next to wheat. Ayurveda have attributed some medicinal properties too in addition to main stay as food. According to Ayurveda rice has the ability to alleviate or subdue Tridoshas (humors) – Vata, Pitta and Kapha -whose imbalance causes various types of diseases within the body. Different groups of rice have different effect on human body as they have different inherent properties. From being used as a diet for sick it has been used as a wholesome and rice is considered as best food in some diseases mentioned in different Ayurveda text.

Keywords: Rice, Sali, Sastika, Charak Samhita, Sushruta Samhita, Astanga Hridaya, Health advantages.

INTRODUCTION

Rice, or Oryza sativa, is an annual grain that is classified in the family-Poaceae. Rice is one of the most commonly consumed grains in the world with wheat remaining in first place. As a food, rice is frequently boiled, but it can also be ground into flour, and it is present in soups, side dishes, and main dishes. Not only is rice a staple food, but it is an active ingredient in medicine and cosmetics.

Ancient Ayurvedic Acharyas delineated Raktashali red rice as an alimentary food and medication. Alternative sorts of rice like Sastika, Salit(rice) and their healthful and nutritionary worth are delineated within the charka Veda (c.700BC) and therefore the Susruta Veda (c.400BC), inside the treatment of various aliments like vomiting, fever, haemorrhage, chest pain, wounds and burns.

In Bhavaprakasha Nighantu rice comes beneath Dhanya Varga. In Dhanyantari Nighantu, it comes in Suvarnaadi Varga. In Kaiyadeva Nighantu, it comes beneath Dhanya Varga. In Raja Nighantu, it comes beneath Shalyadi Varga.

AIM AND OBJECTIVES

1. Understanding how rice (Sali, Sastika) can be used as a nutrient-rich diet, as well as for therapeutic purposes.
2. To understand the scattered topics of rice in the Charak Samhita (Vedic literature) and the Sushruta Samhita (Vedic literature) and the Astanga Hridaya.
3. Exploration of rice and its numerous applications in Ayurvedic texts.

MATERIALS AND METHODS

Through analysis of various classical texts such as the Charak Samhita, Sushruta Samhita, Astanga Hridaya and numerous commentators, followed by critical appraisal.
| Sr. No | Reference | Mention | Indication |
|--------|-----------|---------|------------|
| 1.     | C.Su.4/17 | Shunya Jainan Mahakshaya | Galactagogues’ action |
| 2.     | C.Su.4/40 | Sramahara Mahakshaya | Sramahara |
| 3.     | C.Su.5/12 | Niyia Sevania Dravya | As a daily routine diet for better health |
| 4.     | C.Su.6/13 | Hemani Ritu Charya | As Ahara |
| 5.     | C.Su.6/28 | Greshma Ritu Charya | As Ahara |
| 6.     | C.Su.6/38 | Varsha Ritu Charya | Protection of Agni digestion |
| 7.     | C.Su.6/43 | Sarad Ritu Charya | |
| 8.     | C.Su.7/11 | Adharantiya Vega Chikitsa | Retention of semen |
| 9.     | C.Su.13/90 | Pancaprastrika Pavya | Snehana (Oleation) |
| 10.    | C.Su.15/16 | Pathya Ahara | Vaman (Vomiting) |
| 11.    | C.Su.21/31 | As Ahara | Krushhata Nashak (which remove the over-leanness) |
| 12.    | C.Su.21/52 | As Ahara | Nidra Karak (which bring shortly the sleep) |
| 13.    | C.Su.25/38 | Hitatam Ahara Dravya | As a daily routine diet for better health |
| 14.    | C.Su.27/8 | Sukadhanaya | |
| 15.    | C.Nl.2/4 | As a Nidan | Rakta Pitta (Bleeding disorder) |
| 16.    | C.Nl.4/5 | As a Nidan | Kaphya Prameha (Diabetes) |
| 17.    | C.Sha.8/24 | Garbha Shampa Dravya | for stabilising the foetus during pregnancy |
| 18.    | C.Sha.8/28 | lino Garbha Chikitsa | Treatment of lino Garbha |
| 19.    | C.Sha.8/56 | As a Pathya Ahara | Pathya in Ksrirodhso (For purification of breast milk) |
| 20.    | C.CI.2-2/11 | Vrushya Papalikadi Yog | Vajikarana (Aphrodisiac) |
| 21.    | C.CI.2-2/16 | Aputya Kar Swaras | Vajikarana (Aphrodisiac) |
| 22.    | C.CI.2-2/20 | Vrushya Kshiram | Vajikarana (Aphrodisiac) |
| 23.    | C.CI.2-2/23 | Vrshygam Ghruta | Vajikarana (Aphrodisiac) |
| 24.    | C.CI.2-2/25 | Vrushya Dadhisara | Vajikarana (Aphrodisiac) |
| 25.    | C.CI.2-2/27 | Vrushya Swastika Odono | Vajikarana (Aphrodisiac) |
| 26.    | C.CI.2-2/28 | Vrushya Papalka | Vajikarana (Aphrodisiac) |
| 27.    | C.CI.2-3/8 | Aputya Kar Kshira | Vajikarana (Aphrodisiac) |
| 28.    | C.CI.2-3/13 | Vrushya Papalin Yog | Vajikarana (Aphrodisiac) |
| 29.    | C.CI.2-3/14 | Vrushya Payasa | Vajikarana (Aphrodisiac) |
| 30.    | C.CI.2-4/23 | Vrushya Masadi Papalikadi Yog | Vajikarana (Aphrodisiac) |
| 31.    | C.CI.3/178 | Jwara Nashak Dravya | Jwara (Fever) |
| 32.    | C.CI.3/179-182 | Jwara Nasahk Yavagu | Jwara (Fever) |
| 33.    | C.CI.4/36 | Rakta Pitta Ahara | Rakta pitta (Bleeding disorder) |
| 34.    | C.CI.5/10 | Pathya | Gulma (Abdominal lump) |
| 35.    | C.CI.5/133 | As Pathya Ahara | Gulma (Abdominal lump) |
| 36.    | C.CI.6/20-21 | As Pathya Ahara | Prameha (Diabetes) |
| 37.    | C.CI.7/63 | As Ahara | Kushtha (Leprosy) |
| 38.    | C.CI.8/69 | As Ahara | Rajyaksha (Tuberculosis) |
| 39.    | C.CI.8/132 | As Ahara | Rajyaksha (Tuberculosis) |
| 40.    | C.CI.11/26 | Raktasthivana formulation. | Kshyaktikho (Emaciation) |
| 41.    | C.CI.11/32 | Nyogrodhadi Ghrita | Kshytakho (Emaciation) |
| 42.    | C.CI.12/63 | Ahara | Swayathu (Oedema) |
| 43.    | C.CI.13/67 | Vataudaro Chikitsa | Udara Roga (Ascites) |
| 44.    | C.CI.13/97 | Ahara | Udara Roga (Ascites) |
| 45.    | C.CI.13/165 | Udar Nashak Yavagu | Udara Roga (Ascites) |
| 46.    | C.CI.14/95 | As Ahara | Arsha (Piles) |
| 47.    | C.CI.14/191 | Kutaajadi Rasakriya | Arsha (Piles) |
| 48.    | C.CI.14/193 | As Ahara | Arsha (Piles) |
| 49.    | C.CI.14/205 | As Pathya | Arsha (Piles) |
| 50.    | C.CI.14/211 | Rakta Arsha Nashak Yog | Arsha (Piles) |
| 51.    | C.CI.16/41 | Chikissa Uppakrama | Pundu (Anaemia) |
| 52.    | C.CI.17/74 | As Ahara during Vaman karma | Hikka and Swasa (Hiccups & asthma) |
| 53.    | C.CI.17/100 | Pathya Ahara | Hikka and Swasa (Hiccups & asthma) |
| 54.    | C.CI.18/76 | wholesome diet for Vataja Kasa | Kasa (Cough) |
| 55.    | C.CI.18/97 | As a diet in the treatment of Pittaja Kasa | Kasa (Cough) |
| 56.    | C.CI.19/35 | Varcha Kshya | Atisara (Diarrhoea) |
| 57.    | C.CI.19/56 | As Ahara with Pitta Atisara Nashak Yog | Atisara (Diarrhoea) |
| 58.    | C.CI.20/27 | Ahara after Samsadhono | Chardi (Vomiting) |
| 59.    | C.CI.20/33 | An ingredient of Churna | Chardi (Vomiting) |
| 60.    | C.CI.20/35 | Pathya Ahara | Chardi (Vomiting) |
| 61.    | C.CI.21/113 | Pathya Ahara | Visarpa |

THERAPEUTIC USES OF RICE MENTIONED IN VARIOUS AYURVEDA TEXTS

RICE MENTIONED IN CHARAK SAMHITA [1]
## RICE MENTIONED IN SUSRUTA SAMHITA [2]

| Sr. No | Reference | Mention | Indication |
|--------|-----------|---------|------------|
| 1.     | Su.Su.12/25 | Atidagdha Chikitsa | As Pralepa in Atidagdha (burn wound) |
| 2.     | Su.Su.15/40 | As Ahara | Krushata Nashak (which remove the over-leanness) |
| 3.     | Su.Su.19/32 | Ahara | during recovery from wound |
| 4.     | Su.Su.20/4 | Hitakari Dravya | As a daily routine diet for better health |
| 5.     | Su.Su.20/5 | Pathyam Ahara | As wholesome diet for human being |
| 6.     | Su.Su.42/18 | Madhura Varga Dravya | Sweet group of drugs |
| 7.     | Su.Su.44/31 | Vamank Virechanik Sura | Vaman (Vomiting) & Virechan (purgative) |
| 8.     | Su.Su.44/82 | Sadya Virechan Yavagu | Virechan (Purgative) |
| 9.     | Su.Su.45/7 | To examine types of water | Ganga Jal & Samudra Jal (i.e., gangetic and oceanic water) |
| 10.    | Su.Su.46/4 | Types of Sali rice | Types of rice |
| 11.    | Su.Su.46/5 | General Qualities of Sali | Properties of rice |
| 12.    | Su.Su.46/7 | Qualities of Rakta Sali | Specific properties of red rice |
| 13.    | Su.Su.46/8 | Types of Sastika rice | Types of rice |
| 14.    | Su.Su.46/9 | General Qualities of Sasthi rice | Properties of rice |
| 15.    | Su.Su.46/10-11 | Qualities of Sastika rice | Specific properties of rice |
| 16.    | Su.Su.46/16-17 | Qualities of Sali rice grown in Jangala Desha | Properties of rice according to region |
| 17.    | Su.Sha.2/16 | As Ahara | Vata Artava Dushta Chikitsa (Menstrual disorder) |
| 18.    | Su.Sha.10/4 | As Ahara | women in 3rd, 4th, 5th and 6th month of pregnancy respectively |
| 19.    | Su.Sha.10/16 | As Ahara | Sutiaka Roga Chikitsa (Post-partum) |
| 20.    | Su.Sha.10/30 | As Ahara | Shishya Vardhana (In loss of lactation) |
| 21.    | Su.Ci.3/23 | As Pralepa | if the junction of nail (with skin) is crushed and is full of vitiated blood |
| 22.    | Su.Ci.5/8 | As Pralepa | to use in the predominance of Pitta&Vata Vatarakta (Osteoarthritis) |
| 23.    | Su.Ci.5/12 | As Ahara | during intake of Pippali-Vardhamanaka |
| 24.    | Su.Ci.5/37 | As Pathyam Ahara | Urustambha |
| 25.    | Su.Ci.6/17 | As Ahara | to be taken during Bhalliataka Sevana |
| 26.    | Su.Ci.9/5 | As Pathyam Ahara | Kushtha (Leprosy) |
| 27.    | Su.Ci.10/14 | As Ahara | rice mixed with Ghee should be taken with Amalaka soup in Kushtha (Leprosy) |
| 28.    | Su.Ci.11/6 | As Pathyam Ahara | Prameha (Diabetes) |
| 29.    | Su.Ci.14/4 | As Nitya Ahara | Udara (Ascites) |
| 30.    | Su.Ci.26/17 | Vajikarkan Utkarika | Vajikaran (Aphrodisiac) |
| 31.    | Su.Ci.26/22 | Vajikar Pupalika | Vajikaran (Aphrodisiac) |
| 32.    | Su.Ci.31/40 | Sadya Sukradosha Yavagu | Sukradosha (Azoospermia) |
| 33.    | Su.Ci.38/15 | As Ahara | On the day of Niruha Vasti, there is a great risk of aggravation of Vayu and so boiled rice is advised |
| 34.    | Su.Ka.7/57 | As Ahara | if bitten by Unmata |
| 35.    | Su.U.10/4 | As Ahara | Kaphaj Siro Roja (Head disorder) |
| 36.    | Su.U.26/23 | As Ahara | for fever caused by Srama and Kshya (exertion & wasting) |
| 37.    | Su.U.39/262 | As Ahara | residual pitta, after elimination, being localised in skin produces |
| 38.    | Su.U.39/315 | As Ahara | residual pitta, after elimination, being localised in skin produces |
### RICE MENTIONED IN ASTANG HRIDAYA [3]

| Sr. No | Reference | Mention | Indication |
|--------|-----------|---------|------------|
| 39.    | Su.Ut.40/95 | Atisarhar Yog | As Ahara (Diarhoea) |
| 40.    | Su.Ut.41/33 | As Ahara | Samanya Chikitsa of Rajayaksha (Tuberculosis) |
| 41.    | Su.Ut.41/106 | as a remedy | Pittaja Shula (Pain) |
| 42.    | Su.Ut.42/89 | Sweda Payasa | Vatika Shula (Pain) |
| 43.    | Su.Ut.43/14 | As Pathya | Vatika Hrid Roga (heart disease) |
| 44.    | Su.Ut.43/20 | As Ahara | Krimija Hrid Roga (heart disease) |
| 45.    | Su.Ut.44/37 | As Ahara | Pandu (Anaemia) |
| 46.    | Su.Ut.45/16 | As Pathya | Raktapitta (Bleeding disorder) |
| 47.    | Su.Ut.46/16 | As Pathya | Murcha (Fainting) |
| 48.    | Su.Ut.51/49 | As Ahara | After Swedana (Sudation therapy) |
| 49.    | Su.Ut.53/12 | As Ahara with jaggery and ghee | Vataja Svara Bheda |
| 50.    | Su.Ut.53/13 | Payasa (rice milk) with Yasthimadhu and Ghee | Pittaja Svara Bheda |
| 51.    | Su.Ut.64/14 | Sarad Ritu Charya | As Ahara |
| 52.    | Su.Ut.64/23 | Hemant Ritu Charya | As Ahara |
| 53.    | Su.Ut.64/34 | Vasant Ritu Charya | As Ahara |
| 54.    | Su.Ut.64/50 | Pravrut Ritu Charya | As Ahara |

Abbreviation: S-Sushruta Samhita, Su-Sutra Sthana, Ci-Chikitsa Sthana, Ci-Chikitsa Sthana, Ka-Kalpa Sthana, Ut-Utarr Tantra

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| Sr. No | Reference | Mention | Indication |
|--------|-----------|---------|------------|
| 1.     | Ah.Su.3/29 | Grisma Ritu Charya | As Ahara |
| 2.     | Ah.Su.3/50 | Sarad Ritu Charya | As Ahara |
| 3.     | Ah.Su.4/20 | Adhuraniya Vega Chikitsa | Retention of semen |
| 4.     | Ah.Su.4/28 | under regimen | to be adopted after purificatory measures |
| 5.     | Ah.Su.6/4 | General properties of Sali Dhanya | As Ahara |
| 6.     | Ah.Su.6/5 | General properties of Rakta Sali Dhanya | As Ahara |
| 7.     | Ah.Su.6/8-9 | General properties of Sastika Dhanya | As Ahara |
| 8.     | Ah.Su.6/25 | discrimination of Dhanya | As Ahara |
| 9.     | Ah.Su.7/3 | feature of the poisonous boiled rice grain | As Ahara |
| 10.    | Ah.Su.10/33 | As an exception | all the substances having Madhura Rasa increases Kapha except old Sali rice |
| 11.    | Ah.Su.16/41 | Krsara, Pancha prasrta Peya | Snehana (Oleation) |
| 12.    | Ah.Su.22/20 | Darbhahamadadi Mukhalepa | Vasant Ritu Charya |
| 13.    | Ah. Sha.2/5 | As Ahara | if the pregnant women develop discharge of menstrual blood or pain |
| 14.    | Ah. Sha.6/30 | as a Subha Shakun (auspicious omen) | Jwara (Fever) |
| 15.    | Ah.Ci.1/72 | As Pathya Ahara | Jwara (Fever) |
| 16.    | Ah.Ci.1/95 | As Ahara (Sarpi Sevan Paschat Pathya) | after the medicated ghee is well digested |
| 17.    | Ah.Ci.3/19 | As Ahara | Kasa (Cough) |
| 18.    | Ah.Ci.3/33 | as ideal food | In Tanu Kapha (when Kapha is thin) |
| 19.    | Ah.Ci.3/73 | as an ideal food | Ksatakasa Chikitsa (Cough) |
| 20.    | Ah.Ci.4/25 | As a Pathya Ahara | Swasa and Hikka (Hiccups & asthma) |
| 21.    | Ah.Ci.4/36 | As Ahara | Vata and Pitta Anubandha Swasa and Hikka (Hiccups & asthma) |
| 22.    | Ah.Ci.5/5 | As Ahara | Rajayaksa Chikitsa (Tuberculosis) |
| 23.    | Ah.Ci.6/12 | Intake of rice along with Mudga and Jangala Mamsa Rasa | Pittaja Chardi (Vomiting) |
| 24.    | Ah.Ci.7/21 | As Ahara | Pittajamadatya Chikitsa (Alcohol disorder) |
| 25.    | Ah.Ci.8/120 | as Param Oushadham | Arsha caused by Rakta (Piles) |
| 26.    | Ah.Ci.12/11 | Pathya Ahara | Prameha (Diabetes) |
| 27.    | Ah.Ci.14/59 | Ahara | Vataja Gudma (Abdominal lump) |
| 28.    | Ah.Ci.14/74 | Ahara to be taken along with goat milk or cow milk | Pittaja Gudma (Abdominal lump) |
| 29.    | Ah.Ci.14/109 | As Pathya Ahara | Gulma Chikitsa (Abdominal lump) |
| 30.    | Ah.Ci.17/17 | Ahara | Swayathu Chikitsa (Oedema) |
| 31.    | Ah.Ci.19/25 | Pathya Ahara | Kushta (Leprosy) |
| 32.    | Ah.Ci.19/29 | rice (Sali) with Potolomuladi Kwath | Pitta Abruta Vata (Neurological disorder) |
| 33.    | Ah.Ci.22/54 | As Ahara | Pitta Abruta Vata (Neurological disorder) |

Abbreviation: Ah-Ashtanga Hridaya, Su-Sutra Sthana, Sha-Shareera Sthana, Ci-Chikitsa Sthana
DISCUSSION

It is well known that India has a number of rice varieties that offer medicinal properties, as well as fitting the description of a healthy food using both modern and old concepts. Clinical validation of rice in terms of medicinal value is needed for rice to be accepted internationally.

While rice has been described as a traditional medicine in various categories, the data on its functional effects and health benefits has been limited. In this study, we summarize the data about rice’s health-promoting and therapeutic properties. Rice has the ability to provide fast and instant energy.

In India, the dietary supply of rice per person per day is 207.9 g, rice provides about 24.1% of the required dietary protein [4]. The fat present in rice is a good source of linoleic acid and other essential fatty acids. The rice does not contain cholesterol [5]. The presence of fibre in the diet increases the bulk of faeces, which has a laxative effect in the gut [6]. rice have high magnesium content, Magnesium is an important mineral that plays a vital role in the regulation of blood pressure and sodium balance in the body [7] rice is rich in fibre and have the ability to keep healthy bowel function and metabolic function. Anthocyanins present in red rice have properties that can help in weight management [7].

CONCLUSION

Rice is an essential food for human being, almost in all parts of India rice have been used in various forms that may be as regular diet or as therapeutic purposes. As a regular diet in south Indian, rice have been used as Dosai, idli, kichadi and idiyappam whereas for therapeutic uses Rice like Matali and Lal Dhan are used for curing blood pressure and fever in Himachal Pradesh. Due to the limited availability of data, the beneficial properties of these rice varieties are unknown to most of the population. Therefore, in addition to providing health benefits to most of the population, the above data will assist researchers to conduct research on various therapeutic aspects of rice, so that rice can be consumed as part of a balanced diet or for specific purposes.

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