



RICE RECIPES IN AYURVEDA-A REVIEW

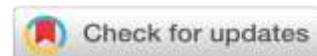
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ABSTRACT

Ayurveda is clear that diet and lifestyle are the two most important factors to maintain a healthy life. Knowledge of good dietary was deeply found in Ayurveda. Rice is the staple food of almost half of the world's population. Various rice recipes are available in Ayurveda texts which are easy to follow to improve one's health. Rice recipes are explained in detail with their properties and effect on doshas so that it is easy to choose an ideal regimen based on one's health condition.

Keywords: Nutrition, Health benefits, cooked rice, *Ayurveda* method of cooking rice

INTRODUCTION

“Let food be the medicine and medicine be the food.” (Hippocrates 400BC)

“That cha nityam prayunjeet svasthyam yen anuvartate. Ajaatanam vikaranam anuttpattikaram cha yat.” (Charaka Samhita: Sutra Sthana:5) (The diet which besides providing the basic nutrition to the body, helps to maintain the healthy state of the body and prevents the occurrence of disease should be

consumed) Food is the basic thing for human being for his mental and physical health. In *Ayurveda* food, being considered the first and foremost tripod (food, sleep, *Brahmacharya*) of life, food is the basic need for health and a healthy body function. In *Charaka Samhita Sutrasthana* 27th chapter (*Annapana Vidhi Adhyaya*) explains various types of grains and pulses; various types, qualities, and bene-

fits of fruits and vegetables, milk and dairy products, sugarcane preparations, honey; and its types, waters, and wines. etc. Food articles are classified according to the following 12 groups: *Shuka Dhanya* (grains), *Shami Dhanya* (pulses), *Mamsa Varga* (meats), *Kshira Varga* (milk and milk products), *Shaka Varga* (vegetables), *Phala Varga* (fruits), *Harita Varga* (green leafy vegetables), *Jala Varga* (waters), *Taila Varga* (oils), *Ikshu Varga* (sugarcane products), *Krutanna Varga* (prepared foods). Among these food articles, *Shuka Dhanya Varga*(grain) is the one that is described as the first group among *Ahara Vargas* as we know grains are Whole grains are rich sources of vitamins, minerals, dietary fiber, lignans, b-glucan, inulin, numerous phytochemicals, phytosterols, phytin, and sphingolipids (3,15). The bran is the multi-layered outer skin of the grain that protects the germ and the endosperm from damage, such as sunlight, pests, water, and disease. The bran contains phenolic compounds, vitamins, minerals, and fiber. The endosperm is the largest component of the whole grain; it contains carbohydrates (starch), protein, vitamins, and minerals and serves as the food supply for the germ, and provides energy for the rest of the plant. The germ refers to the embryo, the part that forms the new plant and contains vitamins, some protein, minerals, and fat.¹ Rice is a main staple food in more than 100 countries worldwide, especially for people in Asia. In some households, rice is included with more than one meal a day. A study on Bangladeshi children and their care givers showed that rice was the main source of zinc intake, providing 49% of dietary zinc to children and 69% to women (Arsenault et al.,2010).² The scientific name of rice is *Oryza sativa* is the most common species and is subdivided into long-grain indica and short-grain japonica. In *Ayurveda*, different types of rice have been described such as *Sali*, *Sastika Nivara*, and *Vrihi*. Rice is the primary source of fiber, vitamins B1 and B6, Magnesium, phosphorus, selenium, manganese, etc. Rice is cooked by boiling or steaming and absorbs water while cooking. Before cooking, rinse the rice in cool water until it runs clear to remove excess starch. it may then be soaked

to reduce cooking time and stickiness. Keeping in mind that excess washing and rinsing may remove some water-soluble B vitamins, especially for polished enriched white rice, in which vitamins have been sprayed onto the surface of the grain.

MATERIAL AND METHODS: Through analysis of various classical texts such as the *Charak Samhita*, *Sushruta Samhita*, *Astanga Hridaya*, and numerous commentators, followed by critical appraisal.

AIMS AND OBJECTIVES

- Applications of *Ayurveda* concepts in healthy food preparation.
- Information about Grain based traditional health foods for a healthy life.

THERAPEUTIC USES OF RICE RECIPES MENTIONED IN VARIOUS AYURVEDA TEXTS

TYPES OF RICE (*Sali*)

In *Ayurveda* rice comes under *sali Dhanya Varga*, *Sali-Oryza sativa* Linn., English name-paddy, rice Types of *Sali* rice mentioned in *Ayurveda*.

1. *Rakta Sali*
2. *Lohitak*
3. *Shakunahrut*
4. *Sugandhik*
5. *Mahashali*
6. *Kalama*
7. *Kalamoto*

Properties of *Sali* rice

- *Laghu, Snigdha*
- *Rasa & Vipak-Madhur*
- *Anurasa – Kashaya*
- *Hrudya, Ruchya, Sheetala,*
- *Brimhana, Vrushya*
- *Laghu paka, Atimutrala*
- *Pittaghna, Kinchit Vata Kapha Kara*³

ACC TO MODERN CLASSIFICATION OF RICE

1. **Brown rice-** is a whole grain and is a good source of fiber and many vitamins.
2. **White rice-** the name given to milled rice that has had its husk, bran, and germ removed. En-

riched with vitamins but does not have as much fiber as brown rice.

3. **Converted rice-** rice that has gone through a steam-pressure process before milling, producing extra fluffy and more separate-looking rice.

4. **Instant rice-** is white or brown rice that has been completely cooked and dehydrated after milling.
5. **Long grain rice-** when cooked the grains are separate, light, and fluffy.

Table No 01: MODERN METHOD OF COOKING RICE

1 cup uncooked rice	1. Long-grain rice
Liquid	1 ¾ to 2 cups
Cooking time	15 minutes
1 cup uncooked rice	2. Medium or short-grain rice
Liquid	1 ½ cups
Cooking time	15 minutes
1 cup uncooked rice	3. Brown rice
Liquid	2 to 2 ½ cups
Cooking time	45 to 50 minutes
1 cup uncooked rice	4. Converted rice
Liquid	2 to 2 ½ cups
Cooking time	20 to 25 minutes
1 cup uncooked rice	5. Instant rice; flavoured mixes
Liquid	Follow package directions
Cooking time	

CLASSICAL METHOD OF COOKING RICE

BHAKTA NIRMAN VIDHI (METHOD OF RICE PREPARATION) S.S.M. 2/169

INGREDIENTS

1. RICE-4 PALA

2. WATER-14

METHOD OF PREPARATION

- Wash the rice and soak for 5 to 10 minutes.
- Then boil the above amount of water in a pressure cooker, and add the washed rice.
- stir well and close the lid of the cooker, cook on medium flame till 3-4 whistles.
- When the rice is completely cooked filter or remove the starch, this is called bhakta or rice.

QUALITIES

- it is *Madhura* (Tasty) and *Laghu* (Digestible)

NOTE-So much water has been given in this so that the slackness of rice can be removed properly. By the way, such rice is also prepared where starch is not removed, but being *Guru* (Heavy), it is not useful for the patient.

1. **ANNA**

- One part of rice (washed thoroughly with water) and 10 parts of water are taken together and boiled. Super-natant thin portion is drained out. The remnant solid portion is called *Odana* or *Anna*.⁴

SYNONYMS-*Bhakta, Anna, koora, Mandha, Bhi-ossa, Deedivi, Odana, Ashana* etc.

2. **MISHRAKODANA**

- Mishra means to mix. *Shooka Dhanya* (Rice varieties) and *Shimbi Dhanya* (Pulses) are taken together and cooked well. This is called *Mishroudana*.
- *Mishroudana* is heavy for digestion, provides strength, is good for the heart, nutritive, and carminative.^{5 6}

3. **RASOUDANA**

- Rice cooked with meat soup is *Rasoudana*. It balances *Vata* and shows rejuvenative action.
- Internal Rejuvenation-rice protein, which comprises up to eight percent of the grain, has a special benefit as it has eight of the essential amino acids in a delicately balanced proportion. A complete internal rejuvenation takes place when

rice protein is metabolized into health-building amino acids.⁷

4. MAMSARASOUDANA

- Rice cooked along with meat or meat soup is called *Mamsarasoudana*.
- A great source of iron may be meat.
- Iron is essential for proper brain development of the foetus and further in the maintenance of neural connection and its activity.⁸
- Vitamin D may also play a role in muscle development because vitamin D receptor is located in muscle tissue and vitamin D deficiency leads to muscle weakness. Only a few foodstuffs naturally contain vitamin D, and these foodstuffs are mainly of animal origin.⁹
- That's why it is recommended in emaciation and neuro muscular disorders. But excess intake may cause constipation.¹⁰

5. MUDGA YUSHOUDANA (GREENGRAM SOUP WITH RICE)

- Rice cooked along with green gram, or its soup.
Kashaya and Madhura
Pitta Nashak
Best in the case of *Raktapitta*
In *Aruchi* too¹¹
- Recommended for *Kaphaja* fever due to digestive and carminative effects.
- If it is taken along with sugar, it pacifies *Pitta* fever due to its *Sheeta* properties.¹²
- **Anti-inflammatory activity:** Mung beans have been consumed in several ways to treat heat stroke connected with thirst, irritation, and high body temperature, detoxification, and these health-promoting effects of mung bean seeds and sprouts are believed to be an inflammatory response in Asian countries.¹³
- **Hepatoprotective properties:** The whole mung bean and the germinated mung bean have proved to be effective hepatoprotective agent, which is able to decrease liver enzyme activities and liver histopathology in a dose-dependent manner.¹⁴
- From the above-mentioned research, we may conclude that *Mudgayushoudana* may be effective

in *Raktapitta* due to the above scientific reasons.

6. MASHOUDANA

- Black gram (*Vigna mungo* Linn.) mixed with cooked rice is *Mashoudana*.
- Recommended as an aphrodisiac. *Mamsa vardhak, Guru,* and *Vata Nashak* (Heavy for digestion but beneficial in *Vata* disorders)¹⁵
- Research has shown that methanol and chloroform extract of seed of black gram has aphrodisiac activity.¹⁶
- Various research results indicated that the alcoholic extracts of *Vigna mungo* Linn. seed produced a significant and sustained increase in the sexual activity of normal male rats at a particular dose (500 mg/kg). the results of the present study revealed that the Aqueous extract of the seed of *Vigna mungo* improved sexual performance and sperm count. The effectiveness of the *Vigna mungo* in multiple preclinical models with the desired mechanism of action might be due to the presence of flavonoids, proteins, and tannins or its synergistic action of these phytoconstituents.¹⁷

7. KULATTHANNA

- Rice and horse gram are taken in equal quantity and cooked well. This is called *kulattha-anna*.
Rukshya, Kashaya, Madhur, Ushna
Pitta Karak, Kapha Vata Nashak
Laghu, Katu Vipak
Krimi Nashak
Swasahara, Agni Deepan
- Beneficial in abdominal worms and breathlessness.¹⁸
- **Anthelmintic Activity:** The seeds of *M. uniflorum* have an anthelmintic activity which can be beneficial in eliminating worms.
- The anthelmintic activity of the seeds of horse gram was found having a good effect by comparing it with standard piperazine citrate.¹⁹
- Horse gram possesses slowly digesting starch which is considered to have a low postprandial glucose response upon its consumption by people suffering from diabetes.²⁰

➤ In a study on overweight human volunteers, it was found that the hot extract of horse gram possesses anti-obesity activity. However, its anti-obesity effect was found to act more quickly in males than females, and its magnitude of anti-obese activity was also found more pronounced in males.²¹

8. **PHALANNA (RICE COMBINATION WITH FRUITS)**

➤ Fruits added to rice are appetizer, tasty, heavy, and nutritive.
 ➤ Recommended in children.²²

➤ In Ayurveda, *Draksha* is considered *Srestha*(best) among fruits. We can add *Draksha* as it has numerous health benefits like

- Laxative
- Beneficial for eyes (*Chakshushya*)
- Nourishing (*Brimhana*)
- Promotes urine flow.
- Aphrodisiac
- Promotes taste.
- Iron-rich²³

Selected rice varieties are being used for their medicinal properties with regard to the prevention of Disease²⁴.

State	Rice variety	Medicinal use
Madhya Pradesh	Aalcha	Pimples, small boils infant
	Baissor	Chronic headache, epilepsy
	Gathuwanor	Rheumatism
	Karhani	Paralysis
	Kalimooch	Skin diseases
	Maharaji	Post-natal tonic for women
	Bhajari	Renewal in the placenta in cows
	Dhanwar	Renewal in the placenta in cows
Orissa	Mehar	Post-natal tonic for women
	Saraiphol	Post-natal tonic for women
Karnataka	Kari Bhatta	Skin infections, increase milk in women
	Karikagga	Cooling effect
	Atikaya	Health tonic
	Mullarya	Cooling effect
Kerala	Nivara	Cure of <i>Tridoshas</i>
	Erumakkari	Cough
Himachal Pradesh and uttar Pradesh	Katheri	Post-delivery restoration of the size of reproductive organs
	Kaflaya	Leuchrrhoea
	Matali, lal dhan	High blood pressure, fever

DISCUSSION

Red rice gruel is found to be an excellent health tonic as it is found to be energetic, refreshing, easily digestible, and an excellent diuretic. Its mineral content, starch quality, Glycaemic index, and antioxidant activity have made it unique among other cereals. Studies have shown that in comparison to other

sources of starch, rice starch is completely absorbed by the human body.²⁵

In India, a person's dietary supply of rice per day is 207.9g, this provides about 24.1% of the required dietary protein. Rice has a well-balanced amino acid profile due to the presence of lysine which makes the rice protein superior among others. Thus, as a protein diet, we can take rice as a diet.²⁶ And the fat present

in rice is a good source of linoleic acid and other essential fatty acids. In fact, rice does not contain cholesterol.²⁷ The presence of fibre in the diet increases the bulk of faeces, which has a laxative effect on the gut.²⁸ Also, the dietary fibres reduce the absorption of carbohydrates by providing an enclosure to the food, hindering the action of hydrolytic enzymes in the small intestine on food, and increasing the viscosity of food in the intestine. This plays a vital role in reducing the GI of food thereby preventing the risk of diabetes type 2.²⁹

CONCLUSION

In Ayurveda, the importance of a particular diet in terms of treatment and preventive aspects was well known even in 1000BC. The above examples discussed above are of the few rice preparations picked in their original form from the classical texts of Ayurveda in which desired effects have been described in a natural way. It is not always possible to find out the phytoconstituents of a particular food preparation in terms of modern aspects which does not define it as irrational and nonexistent.

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