

## A SAFE BODY THROUGH MOOLAKA –RAPHANUS SATIVUS LINN

Sreelekshmi G<sup>1</sup>, KulkarniPratibha<sup>2</sup><sup>1</sup>PG.Scholar, <sup>2</sup>HOD, Dept of KriyaShareera, Sri DharmasthalaManjunadheswara College of Ayurveda &Hospital, Hassan, Karnataka, India

## ABSTRACT

When a *Dravya* (food) is consumed or when it comes in contact with *Jihva*, (tongue), its *Rasa* (taste) can be perceived. There are six individual *Rasa*. Among them the *Katu rasa* (pungent taste), being very pungent and due to its various *Guna* (properties) act on excess *Kapha*, do functions such as *SnehaKledaSoshana* (drying the lubrications and moisture contents), *BhinnathiShonitaSamghata* (removing obstructions in srotas), *Deepana* (stimulate digestion) *Pachana* (does digestive function), *Leghana* (scratches), *Shodhana* (purifies) etc: *Katu rasa* also play a major role in *Stoulya* (obesity) by acting on factors such as *Medas* (Lipids), one of the main reason behind many pathologies. *Medovridhi* (high lipids) and *Sthoulya* (obesity) are used as synonyms in various contexts. Any increases in these *Snehasubstances* or substances that provide oiliness and unctuousness, is a serious warning of health issues. So an *AharaDravya* (food) which is having *Katu rasa* predominantly can be selected and we can analyse its action on various parts of our body. For this purpose *Moolaka* (Radish), which comes under *Katurasaskandais* selected and it has *Rooksha* (making dry), *Ushna* (hot potency), *Laghu* (lightness) etc: *Guna*. With all these properties it is thought to be act on *Medodhatuvridhi* (increased lipids) and keep the *Shareera* (body), *Dosha and Dhātu* in a healthy normal state.

**Key words:** *KaturasaPradhanaAhara, Moolaka, Guna, Medas.*

## INTRODUCTION

*Jihva* (tongue) is one among the *Njanendriya*<sup>1</sup> (sense organs) and the *Rasa* (taste) is the *Indriyardha* (objects of sense organ) for *Jihva*. The main *karma* of *jihva* is the perception of taste. When a *Dravya* (food) is consumed or when it comes in contact with *Jihva*, its *Rasa* can be perceived. There are six individual *Rasa*. Among them the *Katu rasa*<sup>2</sup> (pungent taste), being very pungent cause *Daha* (burning sensations), *Taapa* (hot sensations) etc: in *Vaktra* (mouth) because of its *Gunas* (properties) such as *Laghu* (lightness), *Rooksha* (making dry), *Teekshna* (strong in action), *Ushna* (hot potency). The *Dosha karma* (functions on the

basis of *Dosha* predominance) of *Katu rasa* is *Kaphahara* (mitigates *Kapha*). Other *karma* (functions) are *SnehaKledaSoshana* (drying the lubrications and moisture contents), *BhinnathiShonitaSamghata* (removing obstructions in srotas), *Deepana* (stimulate digestion) *Pachana* (does digestive function), *Leghana* (scratches), *Shodhana* (purifies), *VishaKushtaKanduhara* (remove toxicity, skin disorders and itching) etc: *Katu rasa* also play a major role in reducing *Stoulya* (obesity). This will be mainly by acting on *Medas* Lipids, which is one of the main reason behind many pathologies. For analysing the action of *KaturasaAhara* (pungent foods) on *Meda-*

as well as on other *Dhatu*, a drug which is mentioned under the *Katurasaskanda* (group of drugs having the pungent taste) is selected. *Moolaka*<sup>3</sup> (Radish), a *KaturasaPradhanaAhara*, has Rooksha (making dry), Ushna (hot potency), Laghu (lightness) etc: *Guna* (properties) and easily available among all other drugs in the group. With all these properties it is thought to be act on *Medodhatuvridhi* (increased lipids) and keep the *Shareera* (body), *Dosha* and *Dhatu* in a healthy normal state.

**Aim:** The main aim of this article is to provide a review on the drug *Moolaka* (Radish), which is having predominant *Katurasa* and various *Guna* with which it acts in our body.

The drug *Moolaka* or Radish (*Raphanus sativus* Linn) belongs to Brassicaceous family. It is called by different names in different states. Such as Mullangi, Moolika, Mooli<sup>4</sup> etc: In *Nighantus* (dictionary), there are references about its synonyms such as *Hariparnam*, *Bhoomikakhaaram*, *Neelakandom*, *Mahakandam*, *Ruchishya*, *Hastidanta*, *Sankhaprabha*, *Deerkhamoola*, *Supushpya*, *Simbibeekain* Sodhal Nighantu<sup>5</sup>, and as per Bhavaprakasha Nighantu<sup>3</sup> for *Laghumoolaka* (tender Rad-



ish)-  
Moo-  
li, Shaalaamarkataka, Visra, Shaleeya, Maru

*sambhava*, *Chanakya-moolaka*, *Teekshna*, *Moolakapotika* are the synonyms, for *BruhatMoolaka* (mature Radish): *NepalaMoolaka* is the synonym. It belongs to *SaakaVarga* (vegetables), *KaraveeradiVarga*, *KatuGana*, *Moolakaadivarga* and *KatuSkanda*.

#### **Distribution and Habitat of Moolaka<sup>6</sup>**

The plant is thought to have originated in the main lands of China. But today cultivated as popular vegetable throughout the world, they are annual or biennial herbs. Its root is fleshy, swollen tap-roots, variable in size, colour and form. Smaller types and longer types Radish are available. The smaller types have few leaves about 13cm long with round roots up to 2.5cm diameter and long roots up to 7cm long. Daikon or Mooli or Winter Radishes grows up to 60cm long. The drug is eaten raw as salad as well as cooked as vegetable. Leaves are also used for cooking purposes. Among different varieties, Pink Radish is rich in Ascorbic acid and vitamins and is quite useful. They have numerous varieties. They grown as Companion plants and suffer from few pests and diseases. They germinate quickly and grow rapidly. Some Radishes are grown for their seeds, some for oil production, and some for sprouting. Roots: - Tap roots, variable in colour, shape and size. Spherical, Olive-spindle, tapering from top to bottom, 2cm to 1cm long, 60cm in diameter

Leaves: - basal leaves are long, pinnate, coarsely toothed and cauline leaves are simple and linear.

Flowers: - white or Lilac with purple veins and are in long terminal racemes or inflorescences up to 90cm tall.

Fruits: - is inflated 25-90mm long, with a long tapering beak and filled inside with white pith between the seeds, which are

globose, yellow or brown and 2-8 in number

**Parts Used:** Roots, Leaves, flowers, Pods and Seeds

**Chemical composition/ phyto chemistry<sup>4</sup>**

The plant contain the following chemical constituents: Glucosinolates, Isothiocyanates, Anthocyanins, Phenolics, Ethanol, Ascorbic acid (Vit-C), Folic acid , Trace elements such as Aluminium, Barium,Lithium, Magnesium,Silicon, Iron, Flourine, Pottasiumetc:

Seeds contain-Sufloraphene, Beta-Sitosterol, Stearic acid, Sinapine, Castasterone, Brassinolide.Leaves contains –P-coumaric, ferulic, Caffeic acids.

**Properties and Medicinal uses<sup>7</sup>**

Its main Propertiesare *Katu rasa, Laghu, Pachana,Rooksha, Ushna, Guru, Vidahi, Teekshna, Sthambhi, Ushna-VeeryaandkatuVipaka.* Mainkarmais

*Tridosahara* (keeps Doshas under control) by LaghumoolakaorBaalaMoolaka and *Tridoshakara* (aggrevates the Dosh)byBruhatmoolaka.

Other *karmas* are*Deepana, Pachana, Vatanulomana, BhedanaandRochana* Its medicinal uses are

*Kaphanishsaaraka, Yakrututtejaka, Kantya, SarvaAsmariibhedana, Agnimandya,Adhmana, Atisara, Kamala, Tvagvikara, Kasa-swasa, Khsaya, Svarakantavikara, Yakrutvikara, Udaavarta, Soola, Gulma, Jwara, Kushta, Nasaroga, Netraroga, Karnaroga, Sodha.*Inthese cases

*Moolakais* given either in the form of *Swarasa* (juice) or in the form of *Taila*(oil), *Yusha*(soup), or *Kshara*(ash).For example,in

Arsas,Bastirogasetc: , Moolaka is given in the form of *Swarasa*. In Svayadhu, in the form of *Taila*

in the form of *Taila*

**Kinds and varieties<sup>8</sup>**  
Mulaka is chiefly of two kinds on the basis of classical consideration, and they are

Baalamoolaka or Laghumoolaka (chanakya) and Mahatmoolaka or Nepalamoolaka.As per Nighantu three kinds are there, Chanaakyamoolaka, Pindamoolaka, BaalaMoolaka. BaalaMoolaka has more medicinal value.

Botanists categorised Radish in to many types on the basis of seasons they are grown in and on the basis of shapes, length, colour, size such as Summer or Radish, Winter Radish, Red, Purple, Pink, white, grey-black or Red radish with round or elongated roots that can grow longer than a parsnip.Pink-skinned Radish and White skinned are commonly found where Pink –skinned is richer in Ascorbic acid and other vitamins than white –skinned<sup>9</sup>.



**Other uses / Benifits<sup>10, 11</sup>**

Radish or *Moolaka* is used in several stomach and intestinal disorders, Digestive disorders caused by bile duct problems, loss of appetite, pain and swelling of mouth, throat, Inflammations of respiratory tract, cold cough and Fever ie..It act against bacteria and other microbes.It contains a chemical named Goitrogens that has a tendency to cause Goitre, so its consumption should be avoided by those who are having Thyroid dysfunctions. In Gallstones also it is avoided because large dosage causes irri-

tations in the mucous membrane of the whole GIT.

In *Yakrit* (Liver): Radishes are beneficial for the normal functioning of *Yakrit* and *Pittasaya* (gallbladder) functions. As it is a *Yakrittttejaka*, it is extremely useful in treating *kamala* (jaundice). Due to its Detoxificative action or *Leghana* and *SodhanaGuna*, it can keep the Bilirubin level normal and keeps the production of Bile at a stable level. It has *Sodhana* property, so that it can purifies the blood and eliminates the toxins and other waste materials. It can also regulate the production and flow of bile and bilirubin, acids, and enzymes, reduces the destruction of Red blood cells in jaundice by increasing the supply of fresh oxygen to the blood. So the regular consumption of radishes protects our *Yakrit* as well as *Pittasaya* from various infections and ulcers.

In *Arsas* (piles): The *Swarasa* (juice) as well as the *Kshara* (ash) of the drug is mentioned in the *ArsaChikitsaAdhyaya*, so it should be effective in the treatment of Piles or *Arsas*. As it is a good detoxifier, it helps to heal the symptoms of piles very quickly. It is able to soothe the excretory system, facilitate water retention and remove constipation.

In *Basti and Vrukka* (Urinary bladder and Kidney): Radishes are diuretic in nature, so they increase the production of urine. *MoolakaSwarasa* is found to be effective in curing the inflammations and burning feelings during urination. As it has *Sodhana* and *Bhedanaguna*, it cleanses the kidneys or *Vrukka* and helps to protect the whole urinary system from infections.

In *Hrudaya* (Cardiovascular Conditions): Due to the various *Guna* such as *Lekhana*, *Sodhana* etc; *Moolaka* can remove all the obstacles in the *Dhamanies* (blood vessels)

ie. *Bhinnatisonitasngatha* and protects the *Hrudaya* as well as its *Dhamanies*

Studies proved that Radish is a great source of anthocyanins, which are a type of flavonoids, that give colour to radishes and also provide numerous health benefits. Anthocyanin reduces the occurrence of cardiovascular disease and also displayed anti-cancerous and anti-inflammatory properties. Vitamin-C present in Radish boost our immune system, regulate metabolism, contributes in the creation of collagen, which is an essential protein that strengthens blood vessel walls and reduces the chances of arteriosclerosis and various other heart diseases.<sup>12</sup>

In *Sthoulya* (Obesity): Radishes are low calory root vegetable. It is low in digestible carbohydrates, high in roughage and the presence of lot of water, makes radish a good dietary option for those who are determined to lose weight. They have high fiber content and low Glycemic index, which means that they increase regular bowel movements, which helps in weight loss, and increases the efficiency of the metabolism for all bodily processes. Vit-C also contributes to reduce the weight. Due to their *Rechana*, *Deepana*, *Pachana*, *laghuGuna*, they are easily digested in the body and can acts on the abnormal Medas.

In *Arbuda* (Cancer): *Moolaka* due to its *Kapha –Medoharaguna* act as good detoxifiers and are rich in vitamin-C, folic and Anthocyanins, So they can be used for treating many types of cancer, particularly colon, kidney, intestinal, stomach and oral cancer. The Isthocyanates found in radishes have a major impact on the genetic pathways of cancerous cells. They alter the pathways so much, in fact, that they can cause apoptosis, cell death, thereby eliminating cancerous cells from reproducing.<sup>10</sup>

On *Twak* (skin disorders): The detoxifying and anti-carcinogenic actions of Radish, helps in the management of *Switra* (Leucoderma). Its seeds are commonly used for the purpose. As a home remedy, its seeds can be powdered and soaked in vinegar, ginger juice, or cow's urine and then applied on the white patches. Radishes as a whole can also be taken to aid the treatment of Leucoderma. So Moolaka is an excellent *Kushta-Kanduhara*<sup>7</sup> (skin disorders, itching) medicine because of its various Guna. Vitamin-C, phosphorus, zinc and some members of vitamin-B complex that are present in radishes are good for the skin. The water in radishes also helps in maintaining healthy moisture levels in the skin. Smashed raw radish is a good cleanser and serves as an efficient face pack. Due to its disinfectant properties, radishes also help clear up skin disorders like dry skin, rashes, and cracks.

In *Malabandha* (Constipation): Radishes are very high in fiber, so helps in bowel movements, promotes regular excretory patterns, relieve symptoms of constipation, helps to firm up loose bowels and get rid of loose stool or diarrhea, promote the production of bile which is one of the most important parts of good digestion.

In *SwasanaPadha* (Respiratory Disorders): The *Kaphanishkarana karma (expectorant)* of Moolaka, which may be due to its *sushnaguna* etc: helps in curing the *KaphajaKasa* and other *kaphadosha* associated disorders or infections such as Bronchitis, Asthma etc: Radishes have anti-congestive action, so decreases the congestion of the respiratory system due to the irritations of nose, throat, wind-pipe and lungs from colds, infections, allergies and other causes. It can eliminate excess mucus from the throat.

In *Raktachapa* (Blood Pressure): Moolaka, being a *KaturasaPradhanaAhara*, has *BhinnatiSonitasaghata*karma, so helps to normalise the Blood pressure by removing all obstacles throughout its pathway. The presence of Potassium in Radish helps it to perform such function which also contributes to a large list of health benefits. The Potassium interacts with the arterial supply of vascular beds, relaxes the blood vessels and therefore increases the blood flow and reduces the blood pressure.

In *Prameha* (Diabetes): The various Guna of Moolaka also has impact on body sugar levels. Radish has a low glycemic index, so does not impact blood sugar levels. It regulates the absorption of sugars into the bloodstream and the diabetics don't have to worry about the sudden drops of sugar level while eating, or being away from food for a certain amount of time.<sup>13</sup>

Against *Visha* (poisons): Its *Srotosodhana*, *Pachana*, *LaghuGuna*, provides an anti-Pruritic action against many insect and Bee bites to some extent. *Swarasa* is found to be effective in reducing pain and swelling and soothes the affected area.

## DISCUSSION

All varieties of Radish have medicinal value. But the concentration of Ascorbic acid, Anthocyanin, Isothiocyanates are found to be more in Pink coloured and then in White coloured Radish. The tender forms of such varieties have more medicinal value as they have more percentage of this chemical composition. The tender varieties are called by the name *Moolaka Potika*,<sup>14</sup> which can mitigate all the *Doshas*. While the bigger variety aggravates all the *Dosha*. So in studies usually tender varieties are preferred. Among the different forms of preparations or *Kalpanas*, *Swarasakalpana* will be the best as it is more potent, easily prepared and palatable than

any other forms. As *Anupana* (liquids to be taken along with the medicine) is not mentioned with most of the *Yogas*, we can prescribe as per our *Yukti* (logic). If it is prescribed for the purpose of *Medohara*, *Madhu* (honey) or *Ushnodaka* (warm water) can also be prescribed along with the *Swarasa*. *Takra* (butter milk), in case of *Arsas* with the *Swarasa* or *Yusha* of *Moolaka* The *Katurasa* and *Ushnaveerya* provide various *Guna* to *Moolaka*, which act in different way with its *Anupana* and *Kalpana*. It can act as a good appetizer due to its *RochanaGuna*, mouth and breathe freshener due to its *SodhanaGuna*, laxative due to its *BhedanaGuna*, and a metabolism regulator due to *LaghuGuna*. It can remove the *Kaphaavarana* and pacify the vitiated *Vata*.

### CONCLUSION

Thus the drug *Moolaka* can be used as a good medicine in the treatment of various disorders. It tries to keep our body safe, away from different kinds of diseases. AS one Chinese proverb says – “Eating Pungent Radish and drinking hot tea, let the starved doctor beg on their knee.”

### Recommended Dosage of Moolaka in various forms:

*Moolaka Swarasa*-10-20ml

*Moolaka Kashaya*- 50-90ml

*Moolakayusha*- 25-50ml

### Vishishta yoga mentioned in classics:

*Moolakayusha* (ch.chi.19)

*Moolakadyataila* (ch.chi.28)

*Moolaka yoga* (ibid-18-19)

*Moolakakshaaram*(*Arbudam, Arsas*)

*Sushkamoolakadyataila* (*bahyasvayadhu*)

*SushkamoolakadyaGruta*

*Moolakabeejadilepa*.

### Related On-going Research Work on Moolaka

1. “Experimental study on the action of *KatuRasaPradhanaAhara* on Lipid profile”-Dr. Sreelekshmi G , RGUHS

### REFERENCES:

1. Tarkavachaspathi S.T. Vachaspathyam (A comprehensive Dictionary). 3. Varanasi (India):Chaukhamba Sanskrit Series office Publishers); 1969. 4794
2. R.B.RAMA,AshtangaSangraha of Vagbhata. Sootrasthana; Rasabhedeyamadyayam: 18,16-17.Varanasi:Chowkambha Vishvabharrati,2006:280
3. Sri BhavaMisra, Sri Brahma Sankaramisra, and Sri RupalalajiVaisya .SrimadbhishakbhooshanaBhavamisrapranitaBhavaprakasha. Varanasi : Chowkambha Sanskrit Bhavan;2013, 686
4. Dr.J.L.N.Sastry, K.C.Chunekar. DravyaGunaVijnanam. Varanasi: Chowkambha orientalia;2004:602
5. Prof. GyanendraPandey, Prof.R.R.Dwivedi. AcharyaSodhala’sSodhalaNighanduh. Karaveeradivarga.Varanasi: ChowkambhaKrishnadas Academy;2009,72
6. Prof.K.C.Chunekar,Prof.C.L.Yadava. Medicinal plants of Susrutasamhita. France: European Institute of Vedic studies;347
7. Dr.Gnanendrapandey. DravyaGunaVijnanam.Varanasi: ChowkambhaKrishnadas Academy;2004:609
8. Sri BhavaMisra, Sri Brahma Sankaramisra, and Sri RupalalajiVaisya .SrimadbhishakbhooshanaBhavamisrapranitaBhavaprakasha.Varanasi : Chowkambha Sanskrit Bhavan;2013, 686
9. Radish-Wikipedia ,the Free Encyclopedia

10. [www.WebMD.com/vitamins-supplements/ingredients Mono-502-Radish](http://www.WebMD.com/vitamins-supplements/ingredients/Mono-502-Radish)
11. [www.Nutrition-and-you.com/radish.html](http://www.Nutrition-and-you.com/radish.html)
12. M.MonocaGiusti,RonaldE.Wrolstad.A journal of Food Science; vol61,Issue2, March 1996 ,page 322-326
13. [www.thehealth site. Com](http://www.thehealthsite.Com)
14. M.K.R.Srikantha.SusrutaSamhita of Susruta.Sootrasthana;Dravyaguna vinjanamadyayam:26,240-243.Varanasi:Chowkambha Orientalia,2012:98

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### **CORRESPONDING AUTHOR**

**Dr. Sreelekshmi G**

PG. Scholar

Dept of KriyaShareera, Sri DharmasthalaManjunadheswara College of Ayurveda &Hospital, Hassan, Karnataka, India

**Email:** lekshmi.bams@gmail.com

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*Source of support: Nil*

*Conflict of interest: None Declared*