



Therapeutic and Nutritional Value of Shigru Patra (Moringa Oleifera Lam)-A Review

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ABSTRACT: Traditional Ayurvedic siddha medicines is one of the ancient systems in the world, which still remains one of the country's health care systems. ayurvedic medicines is widely studied and one of these is moringa oleifera lam (shigru pallava) or drumstick in common medical terms which has great benefits. It has great nutritional properties and is rich in vitamins. All parts of the plant i.e. root bark, leaves, flowers; stem bark is used as a medicinal herb. This study is an attempt towards making the herb an essential item in various medicinal aids to cure diseases.

KEYWORDS: Ayurveda, Moringa Oleifera, Nutrition,



INTRODUCTION

Moringa oleifera belonging to the family of Moringaceae is an effective remedy for malnutrition. Moringa is rich in nutrition owing to the presence of a variety of essential phytochemicals present in its leaves, pods and seeds. In fact, moringa is said to provide 7 times more vitamin C than oranges, 10 times more vitamin A than carrots, 17 times more calcium than milk, 9 times more protein than yoghurt, 15 times more potassium than

Dr. Renu P. Raokhande , *International Journal of Ayurvedic & Herbal Medicine* 11(02) March.-April. 2021 (3997-3942) bananas and 25 times more iron than spinach [1]. The fact that moringa is easily cultivable makes it a sustainable remedy for malnutrition. Countries like Senegal and Benin treat children with moringa [2]. Children deprived of breast milk tend to show symptoms of malnutrition. Lactogogues are generally prescribed to lactating mothers to augment milk production. The lactogogue made of phytosterols, acts as a precursor for hormones required for reproductive growth. Moringa is rich in phytosterols like stigmasterol, sitosterol and kampesterol which are precursors for hormones. These compounds increase the estrogen production, which in turn stimulates the proliferation of the mammary gland ducts to produce milk. It is used to treat malnutrition in children younger than 3 years [3]. About 6 spoonful of leaf powder can meet a woman's daily iron and calcium requirements, during pregnancy. This study provides an overview on the cultivation, nutritional values, medicinal properties for commercial use and pharmacological properties of moringa. There are no elaborate reports on treatment of diabetes and cancer using moringa. This study aims to bridge the gap.

MORINGA OLEIFERA IN NIGHANTU CLASSICS[4-6]

NIGHANTU	USES
Raja Nighantu [4]	Mukhjadykara, deepana (Useful for stimulating digestive fire), vranadoshnuta
Bhavaprakasa Nighantu[5]	Sangrahi, shukrala (semen promoting), hrdhya (Wholesome for heart), Chakshushya (Beneficial for eyes), vidradhihara (pacifies abscess), sothahara (Anti-inflammatory), kramihara (Antihelmintic), medohara, pacifiesapaci (Chronic lymphadenitis), plihaghna, gulmanashaka (Destroying the abdominal lump),
Dhanvantari Nighantu[6]	Sophahara (Anti-inflammatory),kramihara (Antihelmintic), medohara, vidradhihara, plihaghna, gulmanashaka (Destroying the abdominal lump)

IMPORTANCE OF MORINGA[7]

Moringa is believed to have many benefits and its uses range from health and beauty to helping prevent and cure diseases. The benefits of moringa include:

1. Protecting and nourishing skin and hair

Moringa seed oil is beneficial for protecting hair against free radicals and keeps it clean and healthy. Moringa also contains protein, which means it is helpful in protecting skin cells from damage. It also contains hydrating and detoxifying elements, which also boost the skin and hair.

It can be successful in curing skin infections and sores.

2. Treating edema

Edema is a painful condition where fluid builds up in specific tissues in the body. The anti-inflammatory properties of moringa may be effective in preventing edema from developing.

3. Protecting the liver

Moringa appears to protect the liver against damage caused by anti-tubercular drugs and can quicken its repair process.

4. Preventing and treating cancer

Moringa extracts contain properties that might help prevent cancer developing. It also contains niazimicin, which is a compound that suppresses the development of cancer cells.

5. Treating stomach complaints

Moringa extracts might help treat some stomach disorders, such as constipation, gastritis, and ulcerative colitis. The antibiotic and antibacterial properties of moringa may help inhibit the growth of various pathogens, and its high vitamin B content helps with digestion.

6. Fighting against bacterial diseases

Due to its antibacterial, antifungal, and antimicrobial properties, moringa extracts might combat infections caused by *Salmonella*, *Rhizopus*, and *E. coli*.

7. Making bones healthier

Moringa also contains calcium and phosphorous, which help keep bones healthy and strong. Along with its anti-inflammatory properties moringa extract might help to treat conditions such as arthritis and may also heal damaged bones.

8. Treating mood disorders

Moringa is thought to be helpful in treating depression, anxiety, and fatigue.

9. Protecting the cardiovascular system

The powerful antioxidants found in Moringa extract might help prevent cardiac damage and has also been shown to maintain a healthy heart.

10. Helping wounds to heal

Extract of moringa has been shown to help wounds close as well as reduce the appearance of scars.

11. Treating diabetes

Moringa helps to reduce the amount of glucose in the blood, as well as sugar and protein in the urine. This improved the hemoglobin levels and overall protein content in those tested.

12. Treating asthma

Moringa may help reduce the severity of some asthma attacks and protect against bronchial constrictions. It has also been shown to assist with better lung function and breathing overall.

13. Protecting against kidney disorders

People may be less likely to develop stones in the kidneys, bladder or uterus if they ingest moringa extract. Moringa contains high levels of antioxidants that might aid toxicity levels in the kidneys.

14. Reducing high blood pressure

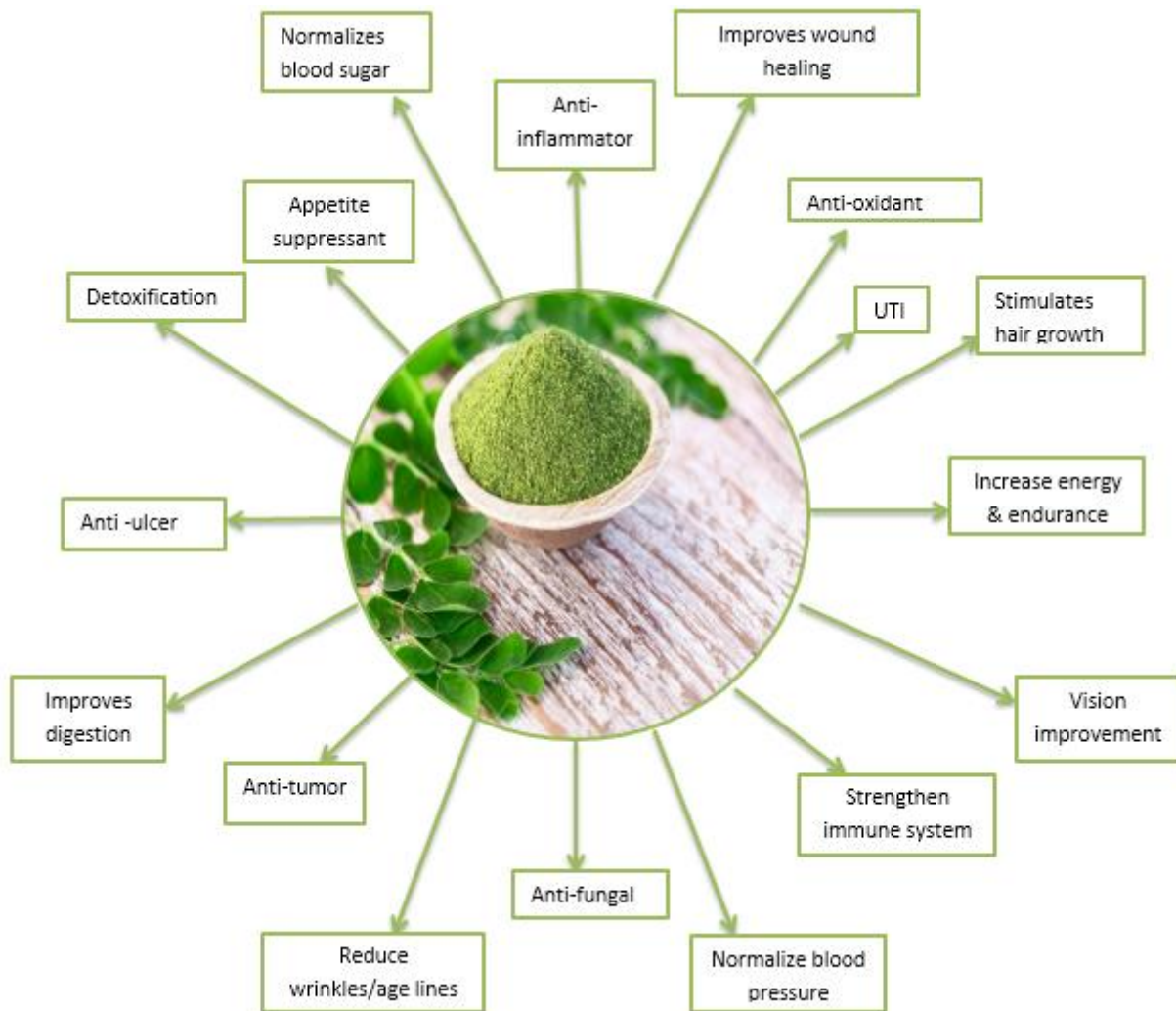
Moringa contains isothiocyanate and niazimicin, compounds that help to stop arteries from thickening, which can cause blood pressure to rise.

15. Improving eye health

Moringa contains eyesight-improving properties thanks to its high antioxidant levels. Moringa may stop the dilation of retinal vessels, prevent the thickening of capillary membranes, and inhibit retinal dysfunction.

16. Treating anemia and sickle cell disease

Moringa might help a person's body absorb more iron, therefore increasing their red blood cell count. It is thought the plant extract is very helpful in treating and preventing anemia and sickle cell disease.



ROUTE OF ADMINISTRATION[9-12]

INTERNAL

EXTERNAL

<ul style="list-style-type: none"> • Relives pain 	<ul style="list-style-type: none"> • Wound healing
<ul style="list-style-type: none"> • Anti-inflammatory 	<ul style="list-style-type: none"> • Increase sweating in the body
<ul style="list-style-type: none"> • Osteoarthritis 	<ul style="list-style-type: none"> • Burn sensation
<ul style="list-style-type: none"> • Nasya 	<ul style="list-style-type: none"> • Skin disorders
<ul style="list-style-type: none"> • Weak nervous system 	<ul style="list-style-type: none"> • Eye problems(Anjana)
<ul style="list-style-type: none"> • Increase appetite 	<ul style="list-style-type: none"> • Scrapping properties
<ul style="list-style-type: none"> • Diarrhea 	
<ul style="list-style-type: none"> • Worm infection 	
<ul style="list-style-type: none"> • Menstruation problem 	
<ul style="list-style-type: none"> • Cardiac tonic 	
<ul style="list-style-type: none"> • Improves digestive system 	

NUTRITIONAL VALUE OF MORINGA[13]

They are a good source of B Vitamins and among the best plant sources of Minerals. The Calcium content is very high for a plant. Phosphorus is low, as it should be. The content of Iron is very good (it is reportedly prescribed for anemia in the Philippines).



They are an excellent source of Protein and a very low source of fat and carbohydrates. Thus the leaves are one of the best plant foods that can be found .” Moringa Leaf Powder is truly jam-packed full of nutrients.”

If every household had access to Moringa then malnutrition would be wiped out. Wealthier Households would have no need to purchase artificial supplements.

% OF RDA PROVIDED BY 30 GRAMS OF MORINGA POWDER LEAF POWDER		
Calcium	601 mg	60%
Magnesium	110.4 mg	37%
Iron	8.46 mg	84%
Copper	0.171 mg	19%
Potassium	397.2 mg	11.35%
Phosphorus	61.2 mg	9%
Vitamin A	4.89 mg	163%
Vitamin B1	0.792 mg	52.85%
Vitamin B 2	6.15 mg	361%
Vitamin B 3	2.46 mg	13%
Vitamin C	5.19 mg	8.6%
Vitamin E	33.9 mg	226%
Protien	8.1 grams	12.8%

NUTRIENT COMPARISONS PER 100 GRAMS			
NUTRIENTS	COMMON FOODS	FRESH LEAVES	DRIED LEAVES
Vitamin A	1.8 mg carrots	6.8 mg	18.9 mg
Calcium	120 mg milk	440 mg	2003 mg
Potassium	88 mg of bananas	259 mg	1324 mg
Protien	3.1g yogurt	6.7 g	27.1 g
Vitamin C	30 mg of oranges	220 mg	17.3 mg

CONTRADICTIONS IF ANY[14]

- Moringa has laxative properties. In large quantities, it can cause stomach upsets gaseous distension, diarrhea and heartburn.
- If you don't like the taste it may activate your gag reflex. Avoid consuming too much as it can cause nausea.
- Certain chemicals found in the roots, flowers and bark could cause uterine contractions in pregnant women. They may increase the risk of a miscarriage.

- Women who are breastfeeding should avoid moringa as some of the ingredients may not be good for infants.
- People on blood-thinning medications such as Warfarin should desist from consuming moringa regularly.
- Seed extracts should be avoided as they can lead to toxicity in immune cells.

DISCUSSION & CONCLUSION

The world is slowly waking up to a new super food called 'moringa oleifera'. It's not only providing good nutrition in daily food but also cures and prevents a lot of diseases. Studies reveal that almost various parts of the plant has immense therapeutic and medicinal importance.in India, drumstick pieces are made into curries and is added into sambhar etc. it can also be consumed as a powder – fresh leaves are dried and then crushed into powder. It ticks all the boxes for a great healthy lifestyle.

REFERENCE

1. J.L. Rockwood, B.G. Anderson, D.A. Casamatta Potential uses of *Moringa oleifera* and an examination of antibiotic efficacy conferred by *M. oleifera* seed and leaf extracts using crude extraction techniques available to underserved indigenous populations
2. Int. J. Physiotherapy Res., 3 (2013), pp. 61-71 J.N. Kasolo, G.S. Bimenya, L. Ojok, J. Ochieng, J.W. Ogwal-okeng Phytochemicals and uses of *Moringa oleifera* leaves in Ugandan rural communities
3. J. Med. Plants Res., 4 (2010), pp. 753-75 T. Mutiara Titi, E.S.W. Estiasih Effect lactagogue moringa leaves (*Moringa oleifera* Lam) powder in rats J. Basic Appl. Sci. Res., 3 (2013), pp. 430-434 [Google Scholar](#)
4. Tripathi.Indra Dev., Raja Nighantu, Chaukhambha Krishna Das Academy Varanasi, 2016; 193-194, shlok 27,28,29,31,33,34.
5. Chunekar K.C. and Pandey Ganga shahay, Bhavaprakasa Nighantu, Chaukhambha orientalia Varanasi, 2015; 324-327.
6. Sharma P.V. and Sharma G.P., Dhanvantari Nighantu, Chaukhambha orientalia Varanasi, 2016; 127, shlok 36, 37, 38.
7. Moringa: Benefits, side effects, and risks
<https://www.medicalnewstoday.com/articles/319916#what-are-the-benefits>
8. 92 Nutrients & 46 Antioxidants In One Tree Moringa Oleifera - <https://www.amchara.com/detox-and-cleanse/92-nutrients-and-46-antioxidants-in-one-tree-maringa-oleifera>
9. Moringa benefits, uses, dosage + Ayurvedic uses of moringa
<https://www.theayurvedaexperience.com/blog/moringa-benefits-uses-dosage/>
10. Dravyaguna Vijnana by Acharya Priyavrat Sharma, Volume 2, page no. 112, Chaukhamba Bharati Academy, 2017
11. Aadrash Nighantu, vol. 1, page no.346, by Shri Bapalal Vaidya, Chaukhambha Bharti Academy, 2016.
12. Dravyaguna Vijnana by Acharya Priyavrat Sharma, Volume 2, page no.113, Chaukhamba Bharati Academy, 2017
13. Moringa Oleifera Leaf Powder -- Nutritional Analysis
<http://www.moringaleafpowder.co.za/analysis.html>
14. Moringa: Health Benefits and Side Effects You Need to be Aware of - HealthifyMe Blog - <https://www.healthifyme.com/blog/moringa-health-benefits-side-effects-need-aware/>