



A Critical Analysis of *Shaka varga*

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Abstract

INTRODUCTION: Ahara is considered as Mahabheshaja in Ayurveda. Shaka varga is one among the ahara varga explained by all acharyas. Ayurveda has given more importance to the intake of variety food articles like vegetables, fruits, whole grains on the basis of Rasapanchakas. Acharya have classified vegetables are into five types according to their origin, appearance and part used. Viz, Pushpa, Patra, Phala, Nala and Kanda. **MATERIALS AND METHODS:** Systematic review and critical analysis of *Ayurvedic* classical texts. Article published in national and international journal regarding *SHAKA VARGA*. E. samhita and *Nighantu* are the basic source of information for this review. **RESULT AND DISCUSSION:** Use of different types of vegetables provides us with essential vitamins, minerals and other essential nutrients required for the maintenance of health. The action of drug depends on its rasa panchaka and the phyto constitute present in it. Acharya vagabhata emphasis it is virya that does action in dravya and next is vipaka then comes rasa. Prabava is that action which is beyond the explanation. **CONCLUSION:** Ayurveda extensively explains Shakha Vargas with their importance, benefits, and their impact on health.

Keywords

Ahara, Shaka varga, Trayopshtambha, Vegetables, Swasthavritta

INTRODUCTION

Ahara considered as Mahabheshaja and one among Traya- upastambha. Ayurveda promotes Pathya in the prevention as well as management of diseases. Pathya highlighted “there is no need of any medicine, if an individual follows Pathya and there is no use of medicine if a person does not follow Pathya”. Scientific evidence showed role of vegetables in protecting different diseases. Shaka varga is one among Ahara varga which explained in classics. Vegetables are main source of vitamins and minerals which take part in the prevention and maintenance of

the health. Acharya have classified Shaka varga into five types according to their origin, appearance and part used.¹

META Analysis

MATERIALS AND METHODS

Plants described in Shakavarga, under the category of Patra shaka (Leafy vegetables), Phala shaka (Fruit vegetables), Mula shaka (Tubers) etc, indicated for various diseases were compiled from Charaka Samhita, Sushruta Samhita, Astanga Sangraha Astanga Hridaya and 9 different Nighantus ie,

Shodhala Nighantu, Madhava Dravyaguna, Madanapala Nighantu, Kaiyadeva Nighantu, Bhavaprakasha Nighantu, Raja Nighantu, Priya Nighantu, Dravyaguna Sangraha and Dravyaguna Shatasloki.

Published research data from various research journals and books were referred to gather the information regarding the role of vegetables in the prevention and management of diseases.

RESULT AND DISCUSSION

All the data obtained after literature search are compiled and criticized as follows

Number of Shaka varga dravyas

Samhita/ Nighantu	Varga	Total	Phala	Patra	Pusha	Nala	Kanda
Charaka Samhita ³	Shaka varga	118	15	71	7	2	23
Sushruta Samhita ⁴	Shaka varga	133	20	71	20	1	21
Astanga Sangraha ⁵	Shaka varga	150	25	90	9	-	26
Astanga Hridaya ⁶	Shaka varga	144	22	88	2	-	27
Shodhla Nighantu ⁷	Guduchyadi Karaveeradi	51	31	26	8	1	6
Madhava Dravyaguna ⁸	Shaka varga	92	19	54	1	1	17
Madanapala Nighantu ⁹	Shaka varga	61	24	27	1	1	8
Kaiyadeva Nighantu ¹⁰	Aushadha varga	102	26	55	1	-	20
Bhavaprakasha ¹¹	Shaka varga	68	20	27	3	1	17
Raja Nighantu ¹²	Moolakadi	105	15	59	-	2	23
Priya Nighantu ¹³	Shaka varga	55	19	17	8	-	9
Dravyaguna Sangraha ¹⁴	Shaka varga	68	13	25	8	1	16
Dravyaguna Shatashloki ¹⁵	Shaka varga	51	14	27	2	1	7

Vegetables indicated in different diseases

Shaka varga as a management and prevention of diseases.

Vyadhi	Number of Shaka	Diseases	Number of Shaka
Jwara	41	Diabetes	29
Raktapitta	53	Cardiovascular Disease	33
Svasa	38	Respiratory Diseases	44
Kustha	35	Skin Diseases	49
Kasa	34	Gastrointestinal tract disease	58
Hruda roga	33	-	-
Prameha	29		

Vegetables and GIT Diseases

Diseases like cholelithiasis, duodenal ulcers, hemorrhoids and hiatus hernias may be prevented or treated with dietary fibers present in vegetables. High fiber diets may help to prevent colon cancer and

can be used to treat constipation, diverticular disease, irritable bowel syndrome and Crohn's disease. The bulking and softening action of insoluble fiber also decreases pressure inside the intestinal tract and may help prevent diverticulosis.

Classical vegetables indicated in Gastrointestinal diseases

Ajirna	Chardi	Arsha	Grahani	Aruchi
Chanaka	Kakamachi	Changeri	Rajakoshataki	Arkapuspi
Karkotaki	Karkotaki	Sunishannaka	Grunjana	Brahmi
Lashuna Hastikarna	Sarshapa	Vastuka	Changeri	Chakramarda
	Kolakanda	Soorana	Tilaparni	Grunjana
	Soorana			Kantakari

Vegetables in Respiratory diseases

Changes in diet over the past few decades increased prevalence of chronic obstructive pulmonary diseases (COPD). Evidence from human studies and experimental investigations have shed new light on the relationship between diet, lung function and COPD development, showing role of certain foods,

nutrients, and dietary patterns on pulmonary function. A whole foods approach to nutrient supplementation-for example, increasing intake of fruit and vegetables, has the benefit in respiratory diseases in terms of reducing risk of COPD and incidence of asthma exacerbations

Classical vegetables Indicated in Respiratory diseases (44)

Kasa	Shvasa	Pratishyaya	Hikka
Alabu	Grinjana	Karavellaka	Vrintaka
Brahmi	Guduchi	Karkotaki	
Chakrmarda	Kakamachi	Koshataki	

Vegetables and Cardiovascular diseases

They provide nutrients, such as fiber, foliate potassium, and carotenoids and other photochemical that may directly reduce cardiovascular disease risk. Certain nutrients may

directly improve established, diet-related cardiovascular disease risk factors, such as blood pressure, hyper - lipidemia, and diabetes. The consumption of vegetables may lead to a reduced intake of saturated fat and cholesterol.

Classical vegetables Indicated in cardiovascular diseases (33)

Patra	Pushpa	Phala
Brahmi	Bakula	Alabu
Chakramarda	Nimba	Karavellaka
Guduchi		Karkotaki
Methika		Koshataki
Punarnava		Kushmanda
		Shigru

Vegetables in Diabetes

Vegetables in the prevention of type-2 diabetes tend to be associated with the fiber found in vegetables. Dietary fiber helps to slow the release of sugar into the bloodstream, thus helping to keep the blood

sugar levels normal. Soluble fiber delays glucose absorption from the small intestine and thus may help prevent the spike in blood glucose levels that follow a meal or snack.

Classical vegetables Indicated in Diabetes (29)

Alabu	Grinjana	Karavellaka	Kushmanda	Nimba
Brahmi	Guduchi	Karkotaki	Lashuna	Punarna
Chakrmarda	Kakamachi	Kostki	Methika	Vrintaka

Vegetables in Skin diseases

Dermatologic conditions linked with nutrition can range from nutritional deficiencies, excess nutrients or metabolic disorders. Disorders such as atopic dermatitis, acne vulgaris, psoriasis vulgaris, urticaria,

pruritus, allergic contact dermatitis, fish odor syndrome, toxic oil syndrome, vitiligo, aphthous ulcers, and telogen effluvium in which diet may have a role as a prevention and management.

Classical vegetables indicated in skin diseases (49)

Kandu	Kustha	Visarpa	Visphota	Vidradhi
Chakramarda	Brahmi	Hamsapadi	Suvarchala	Shigru
Brihati	Changeri	Shigru		Shimbi
Kantakari	Chakramarda			
Sarshapa	Guduchi			
Patha	Patola			
Kakajanga				

UNDERSTANDING THE MODE OF ACTION OF SHAKA DRAVYA

The action of drug depends on its rasa panchaka and the python - constitute present in it. Acharya vagabhata emphasizes it is virya that does action in dravya and next is vipaka then comes rasa. Prabava is that action which is beyond the explanation. The different types of vegetables mentioned are

considered to be heavy for digestion from their ascending order (Uttarottara Gurutha).

PATRA < PUSHPA < PHALA < NAALA < KANDA

Ayurveda explains principals of Ahara by giving importance to Agni which plays a major role in the process of easy digestion and absorption. They are Matra, Kala, Astavidhi visheshayatana, Dwadasha pravicharna etc.

PATRA SHAKA

Vegetable	Rasa	Guna	Virya	Vipaka	Doshakarma	Chemical Constitution
1.UPODIKA ^[4]	Madhura	Guru, Snigdha	Sheetha	Madhura	Kapha kara, Vatapitha hara	<ul style="list-style-type: none"> Very low in calories and fats. It holds incredibly good amount of vitamins (Vit C), Minerals (Potassium and Manganese) and antioxidants (β-Carotene, Lutein, Zeaxanthin) These compounds act as protective scavengers against oxygen-derived free radicals.
2.PALAKYA ^[5]	Madhura	Guru, Ruksha	Sheetha	Madhura	Vata kapha kara.	
3.Dhanyaka ^[6]	Kashaya, Tikta, Madhura	Laghu, Snigdha	Ushna	Madhura	Thridosha shamaka	<ul style="list-style-type: none"> 11 components of essential oils, six types of acids (ascorbic acid- vitC), minerals and vitamins.
4. Methika ^[7]	Katu	Laghu, Ruksha	Ushna	Katu	Vata kapha shamaka	<ul style="list-style-type: none"> It consists of mucilage, volatile oil, alkaloids, and all the primary nutrients. presence of trimethylamine neurin and betain similar to alkaloids
5.Thanduliyaka ^[8]	Tikta, Madhura	Laghu, Ruksha	Sheetha	Madhura	Pitta shyamaka	<ul style="list-style-type: none"> Power house of iron, vitamins, and minerals. Rich in iron content and dietary fibers.
6.Patta Gobhi ^[9]	Kashaya, Tikta	Laghu, Ruksha	Sheetha	Katu	Vata kara, Kaphahara	<ul style="list-style-type: none"> Rich in phytonutrient antioxidants. Fresh leaves are nutritious but very low in fat and calories. It's a storehouse of various phytochemicals. Fresh cabbage is an excellent source of natural antioxidant; vitamin C and excellent source of vitamin K.

PUSHPA SHAKA

Vegetable	Rasa	Guna	Virya	Vipaka	Doshakarma	Chemical Constitution
Kadali pushpa ^[15]	Madhura, Kashaya	Guru, rooksha	Sheeta	madhura	Vata-pittahara	<ul style="list-style-type: none"> Rich in dietary fibers, proteins, unsaturated fatty acids. It's rich in vitamin E and flavonoids.

PHALA SHAKA

Vegetable	Rasa	Guna	Virya	Vipaka	Doshakarma	Chemical Constitution
1.Kooshmanda ^[18]	Tikta	Guru	Sheetha	Madhura	Baala-Pittahara, Madyama-Kaphahara, Vriddha-Sarvadoshahara	<ul style="list-style-type: none"> Rich in vitamins (B1, B3 and C). Possesses various minerals like calcium, sodium, potassium, selenium 96% of water.

2.Kooshmandi ^[19]	MadhuRuksha, Sheetha Madhura ra Guru			Pakwa Phala- Pittakara, Kaphavatahara Apakwa Phala- Thridoshakaraka	<ul style="list-style-type: none"> Best source of beta carotene- (a powerful antioxidant), fiber, potassium and vitamin C and vitamin A.
3.Karkati ^[20] Apakwa Phala	MadhuRuksha, Sheetha Madhura ra Guru			Pittahara	<ul style="list-style-type: none"> Sources of phytonutrients like flavonoids, lignans. The peel and seeds are the most nutrient dense parts which contain fiber and beta carotene. Seeds are rich in minerals and contain calcium.
Pakwa Phala	MadhuRuksha, Ushna Madhura ra Guru			Pittakara	
4.Trapusa	MadhuRuksha, Sheetha Madhura ra, Guru Tikta			Pitta Hara	
5. Karvellaka	Tikta, Laghu Sheetha Katu Katu			Kaphapittahara, Vatakara	<ul style="list-style-type: none"> All the essential primary nutrients and phytochemicals like insulin (peptides, alkaloids) and charantin
6. Torai	MadhuLaghu, Sheetha Madhura ra Snigdha			Kapha- Vatakara, Pittahara	<ul style="list-style-type: none"> cucurbitacin B,E and oleanolic acid, triterpene saponins.
7. Patola	Tikta Laghu, Ushna Snigdha		Madhura (Ch,Ah) Katu(Su)	Pitta kaphahara (Ch.Su.Ah) Thridoshahara (Bp)	<ul style="list-style-type: none"> Low calorie with minimum sugar content Fat free and high moisture content, high in vitamins, minerals, moisture.
8.Shobhanjana ^[24]	Katu Laghu, Ushna Tikta Rooksha, MadhuTheekshn ra a, Ushna		Katu	Kapha-Vatahara, Pittakara	<ul style="list-style-type: none"> Leaves are an excellent source of proteins. Fresh pods and seeds are excellent source of oleic acid (mono unsaturated fats). Excellent source of vitamin C, rich source of vitamin B6 and thiamin. Minerals like calcium, iron, copper, manganese.
9.Vrinthaka ^[25]	MadhuLaghu, Ushna ra, Rooksha Katu Tikta		Katu	Kapha-Vatahara, Kinchid	<ul style="list-style-type: none"> Contains phytonutrients (phenolic compounds) such as Caffeic acid and chlorogenic acid, flavonoids such as nasunin.
10.Okra Bhindi Lady's Fingerr	MadhuGuru, Sheeta Madhura ra, Snigdha, Kashay Picchila a			Kapha- Vatakara, Pittahara	<ul style="list-style-type: none"> Part of balanced diet. It is free of fat, cholesterol, and sodium. It contains negligible amount of sugars making it ideal diet.
11.Tomato ²⁶	Amla, Guru, Sheeta MadhuSnigdha ra		Amla	Kaphakara, Vatashamaka	<ul style="list-style-type: none"> Very low in fat content and have zero cholesterol. Source of antioxidants, dietary fibers, minerals and vitamins (vit A and vit C). lycopene A flavonoid antioxidant is the unique phytochemical compound present in tomato.

NAALA SHAKHA

Vegetable	Rasa	Guna	Virya	Vipaka	Doshakarma	Chemical Constitution
Sarsapa nala	Katu, tikta	Ushna, snigdha	ushna	katu	kapha-vatahara	

Vegetable	Rasa	Guna	Virya	Vipaka	Doshakarma	Chemical Constitution
1.Soorana ^[38]	Kashaya, Katu	Laghu, Rooksha	Ushna	Katu	Kaphahara	<ul style="list-style-type: none"> Consists of omega 3 fatty acids, High in vitamin A, B6, C. Magnesium, Potassium and Phosphorous
2.Lashuna	Katu, Madhura	Snigdha, Guru, Tikshna	Ushna	Katu	Kapha, vata shamaka	<ul style="list-style-type: none"> It has sulphur containing amino acids, peptides & sulphoxides. Source of manganese, vitamin B 6, vit C and copper.
3.Palandu	Madhura, Katu	Snigdha, Guru, Tikshna	Kinchid ushna	Madhura	Vatahara, Na-Atipittala, Kaphavardaka	<ul style="list-style-type: none"> Rich in dietary fibers. Recent Research have shown that alliums and ally disulfide present in onion have anti mutagenic properties, rich source of chromium and an antioxidant flavonoids-quercetin
4.Aluka ^[39]	Madhura	Guru, Rooksha	Ushna	Katu	Kaphavatakaraka	<ul style="list-style-type: none"> Rich in vit B6, vit c, niacin, pentatonic acid, carotenoids, flavonoids, and caffeic acid.
5.Moolaka ^[40] Baala Moolaka	Tikta, Katu, Katu	Laghu, Rooksha	Ushna	Katu	Thridosha Hara	<ul style="list-style-type: none"> Sources of antioxidants, electrolytes, minerals, vitamins, and dietary fibers.
Mahamoolaka	Madhura	Ruksha	Ushna	Madhura	Tridosha Kara	
6.Grinjana ^[41]	Madhura, Tikta	Laghu, Rooksha, Theeksna	Ushna	Katu	Vatakaphahara, Rakthapittahara	<ul style="list-style-type: none"> Carrots are mainly composed of water and carbohydrates (starch and sugars, such as sucrose and glucose). Source of fibers, pectin is the soluble fiber present in carrot. It is also a rich source of biotin, vit A and Vit K, beta carotenes and lutein.
7. Shalgam (Turnips)	Madhura	Guru, Snigdha	Sheetha	Madhura	Vatakaphakara, Pitthahara	<ul style="list-style-type: none"> Rich in dietary nitrates and potassium.
8.Beetroot	Madhura	Guru, Snigdha	Sheetha	Madhura	Vata-Pittahara	<ul style="list-style-type: none"> Rich in Nitrates, alpha lipoic acid, Choline

KANDA SHAKA

Mushrooms are usually cholesterol free, fat free, gluten free but provide important nutrients like selenium, potassium, riboflavin, niacin, vit D, vit-B.

CONCLUSION

From the history of medicine to the recent modern research, among the preventive measures given to the persons suffering from different diseases, shaka varga dravya's have proven their role and importance in this area. Ayurveda extensively explains Shakha Vargas with their importance, benefits, and their impact on health. Nighantu in Ayurveda abdicated complete chapters on explaining about vegetables these vegetables are very essential as a part of routine diet in the current world of non-communicable diseases, one must switch to healthy diet from the on healthy food habits of current trend to lead a healthy and long life.

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