

## **KUSHMANDA (*BENINCASA HISPIDA*): AN AMAZING FOOD IN AYURVEDA**

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### **ABSTRACT**

The prime source of energy for humans is the plant kingdom. Our ancient science Ayurveda has explained a number of whole grains, vegetables, fruits, with its nutritional and therapeutic indications thousand of year back. All we know intake of proper food in proper quantity gives a healthy life. Now a day's researcher again started to draw attention to the benefits of food items in the promotion of health of healthy person, prevention of diseases and treatment also. Kushmanda is one of amazing fruit which can enhances health, prevent many diseases and treat many health problems. This article provides all essential information about kushmanda with classical references as well as modern view.

**KEYWORDS:** Ayurveda, Food, Kushmanda, Health.

### **INTRODUCTION**

That which is taken for the purpose of nourishment of the body in the form of solids or liquids is known as food. No medicine is equivalent to food and it is possible to make person disease free with a proper diet. Ayurveda, the science of life agrees that food is Brahma i.e supreme energy, all living beings originate from food and it is responsible for life of all beings.<sup>[1]</sup> Kasyapa gives it the name Mahabhesaja. It is the cause for health and diseases also. A well balanced nutritious diet plays an important role to maintain a good relationship between the health and disease. So proper knowledge regarding properties of different food

stuff is vital as it health benefits, in prevention and cure of different illness. In Ayurveda, information regarding rasapanchaka and benefits of dravya are widely described. Kushmanda is an important food which is well known for its therapeutic as well as nutritious properties. Now nutraceuticals has been considered as a part of food that provides health benefits with prevention and treatment of diseases. The Nutritional treatment is a system using dietary therapeutic and nutraceuticals as complementary therapy this treatment is based on belief that food can not only be source of nutrients and energy but could also supply medicinal benefits. The reference of kushmanda is found in Vedic literature which is used for yagyana for sacrifice. It is kept under shaka varga as Aharadravya as in Charaka samhita. Susruta acharya has described in the rasavisheshavijnaniya adhyaya in the class of madhura rasa dravya. Again kushmanda is described under shakavarga and tailavarga. Dhanwantari nighantu mentioned kushmanda is the uttama valliphala. In siddhabhaishjya manimala, kushmanda swarasa is used as hair bleaching agent.

## MATERIAL AND METHODS

This review has done to provide an overview on nutritional and therapeutic properties of kushmanda. The information was collected from different classical ayurvedic texts and research journals.

## PLANT PROFILE OF KUSHMANDA

### Taxonomical classification<sup>[2]</sup>

Kingdom: Plantae

Clade: Angiosperms

Clade: Eudicots

Clade: Rosids

Family: Cucurbitaceae

Order: Cucurbitaceae

Tribe: Benincaseae

Genus: Benincasasavi

Species: Benincasahispida

Botanical name: Benincasa hispida (Thunb.) Cogn.

Classical name: Kushmanda

Sanskrit names: Kushmanda, Valliphala, Puspaphala, Bhritaphala

**Regional names<sup>[3]</sup>**

English: White gourd melon, Ash gourd

Hindi: Petha, Raksa, Kushmand

Panjabi: Petha

Bengali: Chal kumra

Oriya: Kakharu

Assamese: Kumra

Marathi: Kohala

Gujrati: Kohulu, Bhurum

Kannada: Budugumbale

Malayalam: Kumpalam

Tamil: Pusanikki

Telegu: Gummadi

Arabic: Mahadav

Singhal: Pethi sao

Persi: Vaduv

Urdu: Petha

Synonyms: Bhihatphala, Phalaraja, Gulaphala, Sukaphala, Pitapushpa, Sthira phala, Peetaka, Mahaphala, Pushaphala, Somokamrita.<sup>[4]</sup>

**Justification of names<sup>[5]</sup>**

Valliphalottama – best among cucurbitaceous fruits

Pitapuspa- It bears yellow flowers

Bhrihatphala- Big fruits

Sthiraphala- Hard in nature

Kumbhaphala- Pitcher like

Pushpaphala – Carrying remnants of flowers

Somasrita – Watery

**Table 1: Varga –According to Nighantu.**

Varga	Classical Text
Shakavarga	Bhavaprakash nighantu
Sakavarga	Kaiyadeva nighantu, Saligram nighantu
Mulakadi varga	Raja nighantu
Guduchyadi varga	Dhanvantari nighantu, Sodhala nighantu
Pippalyadi varga	Priya nighantu

**ATTRIBUTES OF KUSHMANDA****Rasapanchaka**

Rasa – Madhura<sup>[6]</sup>, kshara (vridha)<sup>[7]</sup>

Guna<sup>[8]</sup>– Ama avastha – Guru

Pakwa avastha- Laghu

Virya<sup>[9]</sup>- Ama avastha- Sheeta

Pakwa avastha- Alpasheeta

Vipaka<sup>[10]</sup>- Ama avastha- Katu

Pakwa avastha- Madhura

Prabhava- Medhya

Doshakarma – Kaphavardhak, vatapittanasak

**Kushmanda saka<sup>[11]</sup>**

Guna- Guru

Virya - Ushna

Doshakarma – Vatanasak, Kaphapittahara

**Karma****According to avastha<sup>[12]</sup>**

Bala – Pittanasak

Madhya- Kaphakara

Pakwa- Sarvadoshahara

Agnideepana, Medhya, Balya, Brimhana, Rasayana, Nidrajanana, Mastiskasamaka, Santapahara, Dahaprasamana, Trishnanigraha, Hridya, Raktapittasamaka, Krimighna, Anulomana, Sonitasthapana, Mutrajana, Sukravardhaka, Sandhaniya, Pathya chittavikara.

**Table: 2 Nutrients in Kushmanda<sup>[13]</sup>**

Among the nutrients, it is rich in carbohydrates, vitamin C. The nutritional value of Kushmanda per 100 grams is as follows.

Nutrients	Percentages or per 100gm
Calories	13kcal
<b>Macronutrients</b>	
Carbohydrates	3gm
Protein	0.4g
Fat	0.2g
<b>Micronutrients</b>	
Vitamin C	13 mg
Vitamin B2	0.11mg
Vitamin B3	0.4mg
Vitamin B	0.133mg
Calcium	19mg
Sodium	111mg
Magnesium	10mg
Phosphorus	19mg

**Therapeutic benefits<sup>[14-15]</sup>**

- Manasaroga (Mental disorders)
- Vibandha (Constipation)
- Udarasula (Pain in abdomen)
- Trishna (Polydipsia)
- Daha (Burning sensation)
- Jwara (Fever)
- Paittikajwara (Fever due to pittadosha predominance)
- Jeernajwara (Chronic fever)
- Dourbalya (Weakness)
- Hridvikara (Heart disease)
- Kshaya (Emaciated)
- Rajaykshma (Tuberculosis)
- Kasa (Cough)
- Swasa (Breathing difficulty / Asthma)
- Raktapitta (Bleeding disorder)
- Amlapitta (Hyperacidity and peptic ulcer)
- Parinamasula (Duodenal ulcer)
- Mutraghata (Scanty urination / Anuria)

- Asmari (Urinary stone)
- Prameha (Diabetes)
- Agnidagdha (Burn injury)
- Siroroga (Disease of brain)

### AS HERBAL FOOD SUPPLEMENT

Herbal food supplements are defined as a type of dietary complement that contains herbs plant or part of a plant used for its taste, potential therapeutic properties. Parts of plant includes flowers, fruits, seeds, leaves, barks, stems, and roots, either alone or in mixtures.<sup>[16]</sup>

Kushmanda can be used in unripe, ripped forms. It is pathya (wholesome food) in chittotvikara (mental disorders).<sup>[17]</sup> Apart from supplementing nutrients, Kushmanda has antioxidant activity, anti inflammatory analgesic activity, anti microbial activity, antipyretic activity, anti convulsion activity, antiulcer activity, anti depressant activity, anorectic activity, anti histamine activity. Different parts of kushmanda are used as cooking purpose, like vegetables, salad, chips, and sweets.

**Table 3: Therapeutic preparation of Kushmanda.**

Preparation	Indication
Kushmanda avaleha <sup>[18]</sup>	Karshya, Swasa, Raktapitta, Pandu, Kamala, Visarpa, Amlapitta, Agnimanda, Aruchi, Sheetapitta, Upadamsa
Kushmanda swarasa <sup>[19]</sup>	Mutrasarkara, Mutraghata, Asmari
Khanda kushmanda <sup>[20]</sup>	Raktapitta, Amlapitta, Pipasa, Daha, Trishna, Kamala
Kushmanda vati <sup>[21]</sup>	Balakarak, Rechak, Sukrajanak, Vivandhahara, Vidahi, Pittaraktaghna
Kushmanda Kalyanakaguda <sup>[22]</sup>	Kustha, Arsha, Bhagandara, Gulma, Visuchika, Prameha

### CONCLUSION

Kushmanda is a fruit which is having nutritional as well as medicinal values. It is widely used as popular vegetables by Indians. Usage of dietary substances is not only of promotion of health also prevention of diseases. It is used in the treatment of piles, internal haemorrhage, anaemia, cough, heart disease in the form of juice, paste, powder etc. Consumption of Kushmanda will be beneficial in curative and promotive aspects. A systemic research is required for assessment of nutritional properties for the promotion of traditional knowledge of this plant. More study is required for better understanding about Kushmanda.

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