

## A Review on potential value of Bengal gram in Siddha for a healthy life style

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### Abstract

#### Keywords

Bengal gram,  
chickpea,  
Cicer arietinum,  
antimicrobial effects

Bengal gram, also known as chickpea or Chana (*Cicer arietinum*), is a widely used legume in traditional Indian medicine, including Siddha medicine. This review literature aims to provide an overview of the therapeutic properties of Bengal gram as described in Siddha texts. Bengal gram has been reported to possess various medicinal properties, including anti-inflammatory, anti-diabetic, anti-cancer, and antimicrobial effects. It is also believed to have beneficial effects on digestive health, respiratory health, and wound healing. The review highlights the importance of Bengal gram in Siddha medicine and suggests that further research is needed to validate its traditional uses and explore its potential for modern medicine.

### Introduction

In India, Pulses like: Bengul-gram, Black-gram. Cow-gram, Field- beans, Green-gram, Horse-gram, Khesri-dal. Lentil, Red-gram, etc., are largely consumed next to cereals. Pulses are indeed a good and cheap source of bulk-food, that supplies energy, proteins, minerals and vitamins.

Pulses absorb plenty of water when they are cooked and form the bulk food. It is this reason that they are not readily digested in the stomach. The digesting time of the pulses varies between 3 to 4 hours, but they become easy digestible and more nutritive if they are germinated. The energy that is supplied by pulses is due to carbohydrate in

the form of starch. It is estimated that each pound of pulses supplies about 1,500 calories. Since starch is harmful if eaten uncooked, pulses should be properly cooked before they are consumed.

Germination of the pulses converts the starch into dextrose and maltose, therefore. eating such uncooked pulses does not cause any digestive disturbances. Germinated pulses are suitable for weak persons too. Carbohydrate of the pulses can be safely consumed along with other fatty foods, because, pulses do not contain fat. The bitter principle in the starch of pulses can be removed by soaking them in water containing a small amount of soda bicarbonate.

The bengal gram have the qualities of dryness and softness .It aggravates vatha.These are boiled and consumed as snacks(sundal).It will be soaked in water for 6 hours,washed and boiled ,adding a pinch of turmeric powder and then fried with asafoetida,garlic,mustard and chillies.This is an ideal food for breakfast.

‘Kadalaivayi roothar kanatraagang seiyung  
Kudalaivalip pithumalang kottun –  
thidamarunthaich  
Chaethamurap pannuth thiyakkamodu  
vaayuvaiyum  
Potha alaikum pugazh’

Bengal gram cause indigestion ,thirst due to pitham, diarrhoea, associated intestinal disorders, giddiness, haemorrhoids and nullifies the effect of medicines.

‘Perumpayatrai menmelum peniyunnu vaarku  
Prunchada raakinipom pinnum-  
varumandham  
Bedi adikarikkum peraak kabamkathikum  
Vaathakudi lamperugum vazhthu’.

Family: Papilionaceae,

Zodiac: Cancer.

## Materials and methods:

Bengal gram dal and rajmah, when compared with dextrose, were found to be more effective in reducing postprandial plasma glucose levels than wheat and rice.[1]

The Bengal gram is a good source of protein and carbohydrate and its nutritional value (like protein content, carbohydrate, biological value etc.) is quite comparable to other legumes such as pigeon pea, black gram and green gram.[2]

## Food Value per 100 g. Approximately

<b>Carbohydrate</b>	<b>61.2 g</b>
<b>Protein</b>	<b>17.1 g</b>
<b>Fat</b>	<b>3.5g</b>
<b>Calcium</b>	<b>189 mg</b>
<b>Phosphorous</b>	<b>238 mg</b>
<b>Iron</b>	<b>9.1 mg</b>
<b>Potassium</b>	<b>322 mg</b>
<b>Sodium</b>	<b>71 mg</b>
<b>Vitamin A</b>	<b>270 I.U</b>
<b>Vitamin B1</b>	<b>98 mg</b>
<b>Vitamin B2</b>	<b>507 mg</b>
<b>Niacin</b>	<b>2.4 mg</b>
<b>Oxalic acid</b>	<b>2.4 mg</b>

## Calories 361

## Essential Amino Acids(g.per 100 g.protein)

<b>Arginine</b>	<b>6.9</b>
<b>Histidine</b>	<b>2.3</b>
<b>Isoleucine</b>	<b>6.0</b>
<b>Leucine</b>	<b>8.0</b>
<b>Lysine</b>	<b>4.4</b>
<b>Cystine</b>	<b>0.8</b>
<b>Methionine</b>	<b>1.7</b>
<b>Phenylalanine</b>	<b>5.0</b>
<b>Threonine</b>	<b>4.8</b>
<b>Tryptophan</b>	<b>6.0</b>
<b>Valine</b>	<b>5.4</b>

## Physiopharmacology and Therapeutics

Chick-pea plants are largely cultivated in the Punjab, U.P., A.P etc., during winter months. The plants are viscid and profusely branched. They grow up to 20 inches having pinnate ½ inch long toothed leaves that are ovate-oblong or obviate and sour in taste.

The flowers are solitary axillary and are pink, blue or white depending on the variety of gram. The fruit is a pod ¾ to 1 inch long in which one or two green seeds that are encased in the pod and become reddish-brown on drying. The seeds of other varieties of Bengal gram such as: Kabuli channa, black and white channa are bigger in size.

Bengal gram is the chief food for poor people and domestic animals, particularly the horses.

Flour of the puffed Bengal gram (phutaney ka-ata) is a chief constituent of Multipurpose Food of C.F.T.R.L, Mysore.

Flour of the puffed Bengal gram 2 tablespoons mixed with sugar, powdered dates and skimmed milk powder is a very nutritive food in the treatment of kwashiorkor in children, impotency, premature ejaculation, hardness of liver, under weight, etc. It can be packed in air tight tins and used as an emergency food during travelling. It is nutritious and a safe food than the contaminated food available during the journey.

Flour of the unroasted gram (Besen) is used in the preparation of various sweet meats. It is the base of Mysore Pak, a very popular sweet meat of Mysore State. Other culinary preparations like: Vadai, Besen roti, Chaklee etc., are also prepared from the flour of Bengal gram. The flour is a very effective cleansing agent and its regular use as a cosmetic, bleaches the skin and prevents its natural oil if used in place of soaps. In allergic skin diseases like eczema, contact dermatitis. scabies washing with Bengal gram flour is highly recommended. The flour mixed with full-cream milk in which few drops of fresh lime juice is added is applied over the face as a very useful cosmetic to cure pimples and dry skin. Washing

the hair with the flour keeps them clean, soft and free from hair diseases.

Sprouted Bengal gram supply plenty of vitamin B-complex and C. Cooked germinated gram is a wholesome food for children and invalids. Water in which sprouting Bengal gram is soaked in a new earthen pot is used as a very cooling medicine during small-pox, measles, diarrhoea, dysentery, cholera, typhoid, excessive thirst due to diabetes. summer heat, etc. Putting the water in the eyes during these infectious diseases prevents the eye infections and imparts a cooling sensation. This treatment is prevalent in India from ancient times.

Excessive use of Bengal gram causes indigestion, rancid flatus and may precipitate urinary calcium due to high concentration of oxalic acid and form urinary calculi.

In some parts of Tamil Nadu, India, the leaf, seeds and young stems are used to cure gingivitis, stomatitis and as a toothbrush. It is also an important folk medicine in eastern Rajasthan as fresh juice/boiled leaves are given orally to nullify the effect of intoxication and as a laxative. Leaf paste is applied in oral ulcers and inflammations. Leaves and seeds are applied as poultice over the breast to induce lactation.[3]

## Discussion:

### Nutritive factors in bengal gram

#### Proteins

The protein quality is considered to be better than other pulses. Bengal gram has significant amounts of all the essential amino acids except sulphur-containing amino acids, which can be complemented by adding cereals to the daily diet.

#### Carbohydrate

Starch is the major storage carbohydrate followed by dietary fibre, oligosaccharides and simple sugars such as glucose and sucrose. Although

lipids are present in low amounts, chickpea is rich in nutritionally important unsaturated fatty acids such as linoleic and oleic acids. -Sitosterol, campesterol and stigmasterol are important sterols present in chickpea oil. Ca, Mg, P and, especially, K are also present in chickpea seeds.

### Vitamins

Chickpea is a good source of important vitamins such as riboflavin, niacin, thiamine, folate and the vitamin A precursor -carotene. As with other pulses, chickpea seeds also contain anti-nutritional factors which can be reduced or eliminated by different cooking techniques.

### Minerals

Chickpea contains nutritionally important minerals, notably calcium and iron, and the availability of iron is reported to be good.[4]



Bengal gram (chick pea)/*Cicer arietinum*

### Conclusion

Bengal gram is a nutritious and versatile legume that can be a valuable addition to a healthy lifestyle. Including it in your diet may help to

regulate blood sugar levels, promote healthy digestion, boost immunity, and support weight loss efforts. As with any dietary change, it is important to consult with a healthcare provider or a qualified nutritionist to determine the best approach for your individual needs and goals.

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### References

1. J B Dilawari, P S Kamath, R P Batta, S Mukewar, S Raghavan, Reduction of postprandial plasma glucose by Bengal gram dal (*Cicer arietinum*) and Rajmah (*Phaseolus vulgaris*), *The American Journal of Clinical Nutrition*, Volume 34, Issue 11, November 1981, Pages 2450–2453.
2. Sibian, Mandeep S., Dharmesh C. Saxena, and Charanjit Singh Riar. "Effect of pre and post germination parameters on the chemical characteristics of Bengal gram (*Cicer arietinum*)."*LWT-Food Science and Technology* 65 (2016): 783-790.
3. Pal D, Mishra P, Sachan N, Ghosh AK. Biological activities and medicinal properties of *Cajanus cajan* (L) Millsp. *J Adv Pharm Technol Res.* 2011 Oct;2(4):207-14. doi: 10.4103/2231-4040.90874. PMID: 22247887; PMCID: PMC3255353.
4. Kishor, Kaushal, et al. "Nutritional composition of chickpea (*Cicer arietinum*) milk." *International Journal of Chemical Studies* 5.4 (2017): 1941-1944.
5. Dr Murugaesa muthaliyar,2009, *Siddha materia medica*, Indian medication and homoeopathy, Chennai-600 106
6. Dr Durairaasan. K et al,1993, *Siddha hygienic and preventive medicine*, Indian remedy and homoeopathy, Chennai-600 106.

7. Dr Thiyagarajan R,2009, Siddha materia medica, Indian medication and homoeopathy, Chennai-600 106.
8. Shanmugavelu M,2003, Noi Naadal, Indian remedy and homoeopathy, Chennai-600 106.

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