

Medicinal Values of Gur

Project Report
Submitted by

Dr. Ashwani
Dr. Ashfaq Ali
Dr. Vivek Kumar Tyagi
Assistant Professor
Shri Ram College
Muzaffarnagar

funded by

Heavy Engineering Corporation Ltd.
Muzaffarnagar



Shri Ram College, CERTIFIED
Muzaffarnagar


Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar


Shri Ram College
Muzaffarnagar

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ISGEC HEAVY ENGINEERING LTD.

ENGINEERING FOR EXCELLENCE

Nara, Meerut Road, Muzaffarnagar

09/06/2019

To,

Dr. Ashwani Kumar
Dept of Biosciences,
Shri Ram College, Muzaffarnagar

Dear Dr. Ashwani Kumar,

On behalf of the Board of directors, I am pleased that a grant of Rs 15,000 has been approved for the research project 'Medicinal Values of Gur' as proposed by you and your team. The cheque details are as follows:

Cheque date: 06/06/2019

Cheque No. 683123

In favour of : Shri Ram Charitable Trust, Muzaffarnagar

Grant funds must be used in accordance with the budget included with your proposal. No changes in the budget or the grant period 3 months may be made without prior written approval from the management board. Any funds not used for the purposes described in your proposal will revert to the company. If this grant agreement is acceptable, please countersign and return it to me, making a copy for your records. Please let me know if you have any questions. We wish you all the best.

Sincerely,

(R.K. Sharma)
Chief Operations
ISGEC Heavy Engineering Ltd

Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar

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Principal
Shri Ram College
Muzaffarnagar

Registered Office:
Radaur Road
Yamunanagar - 135001, Haryana, India
CIN No.: L23423HR1933PLC000097

Corporate Office:
A-4, Sector 24
Noida - 201 301, U.P., India

Utilization Certificate

S.N.	Detail of sanction of Fund with Project name and Duration	Amount
1.	60-Day project on Medicinal Values of Gur,	15000.00
	TOTAL	15000.00

It is Certified that out of Rs. 15000.00 (Rs. Fifteen Thousand Only) of grants sanctioned by **M/s Heavy Engineering Corporation Ltd** during the year 2019-20 in favor of **Shri Ram College, Muzaffarnagar**, a sum of Rs. 15000.00 has been utilized for the purpose of the project for which it was sanctioned and that the balance of Rs. Nil remaining unutilized at the end of the year has been surrendered. The Extra amount (If any) is met out by Shri Ram College.

2. Certified that we have satisfied our self that the conditions on which the grant was sanctioned have been duly fulfilled/are being fulfilled and that we have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercise-

- 1 Checking of cash book
- 2 Checking of payment vouchers.
- 3 Checking of expenses bills.

For Shri Ram College

[Signature]
Secretary

Place: Muzaffarnagar
Date- 12-10-2019

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[Signature]
Principal
Shri Ram College
Muzaffarnagar

[Signature]
Co-ordinator
IQAC, Shri Ram College,
Muzaffarnagar

For Goel Rakesh & Co.
Chartered Accountants



Proprietor
M. No. 071858
FRN : 003374C

Medicinal Properties of Gur

Gur or Jaggery is a solid substance obtained by boiling and drying the juice of sugarcane, palm etc. Its color can range from light yellow to dark brown. Brown color sometimes gives the impression of black. It is sweet to eat. Can be called the sweetest of natural substances. The sweetness of other things is compared to that of jaggery. Usually it is a dry, solid material, but during the rainy season when there is more moisture in the air, then it absorbs water and becomes like a semi-liquid. It is highly soluble in water and the impurities present in it, such as coal, leaves, small pieces of cane, etc., can be easily separated. The impurities sometimes also contain clay particles, the finer particles of which are difficult to separate completely, but the larger particles settle down in the solution and can be separated. On heating, it first starts to melt and eventually becomes very brownish black before burning.

Jaggery is originally used in South Asia. Jaggery is used in place of sugar in rural areas of India. Jaggery is a major source of iron and a person suffering from anemia is advised to consume it in place of sugar. Jagari, another Hindi word for jaggery, is used for this in English.

Vitamins and Minerals:

There are many types of vitamins and minerals inside jaggery. It contains many minerals like magnesium, calcium, potassium, selenium, manganese and zinc. Because there is no chemical process in making jaggery, so it is better than sugar. Sugar is purified due to which no minerals of any kind remain inside it. When you eat sugar, it gets absorbed in the body immediately. Due to which it does not immediately increase the sugar level of your body compared to sugar, but it does increase.

Calorie Count and Nutrition Value of Jaggery

Jaggery has enormous health benefits which make it the ideal sweetener. Just 20 grams of it contains 38 calories and has 9.8 gram of carbohydrates, 9.7 gram of sugar, 0.01 gram of protein, choline, betaine, Vitamin B12, B6, folate, calcium, iron, phosphorus, magnesium, selenium, and manganese. It has no traces of any kind of fat so one can readily add it to their diet without worrying about excessive fat intake. However, its sugar content is similar to that of white sugar, so patients suffering from diabetes should avoid overconsumption.

Drug-like properties:

It is high in potassium and not high in sodium. Jaggery is used in the preparation of many types of medicines in Ayurveda. It is helpful in maintaining the balance of the body. If you drink its decoction in winter, then you will get relief from cold and cold.

Jaggery is also beneficial in improving your digestion. If you eat jaggery after a meal, then it helps in digesting your food. Sugar is 100% sweet in white sugar, but if you talk about the same amount of jaggery, then only 70% of the sugar remains in it. The rest of the jaggery also contains things like fructose and glucose which are not in sugar. If we talk about 15 grams of jaggery, then calories in it are 60 grams, sucrose is 70 percent fructose and glucose is 25-30 percent.


Jaggery (or gur) is made from unrefined sugar, and is obtained by boiling raw, concentrated sugar cane juice till it solidifies. Although jaggery is also made from the sap of coconut and date palm, the one made from sugar cane is the one that's used most widely.

Not only is gur better than white sugar--which only adds empty calories to your body--it also has a number of health benefits, including its ability to cleanse the body, aid in digestion and provide good amounts of minerals. Here are some health benefits that will make you want to adopt jaggery as your go-to sweetener for everyday purposes:

It prevents constipation by aiding digestion. It activates the digestive enzymes in our body, thus helps in proper digestion of food. That's why many people prefer eating jaggery after a meal. It acts as a detox, as it helps cleanse the liver by flushing out nasty toxins from the body.

Jaggery is loaded with antioxidants and minerals like zinc and selenium, which help prevent free-radicals (responsible for early ageing). It helps boost resistance against infections, hence building stronger immunity.

Eating a piece of jaggery daily can help women combat PMS symptoms including mood swings, menstrual cramps and abdominal pain.


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Jaggery acts as a natural sweetener and provides energy over an extended period of time. Even factory-made honey has been deemed unhealthy because it gets ripped of its nutrients. That's when jaggery steps in!

It is, however, suggested to consume jaggery in moderation, as it is slightly higher in calories, containing up to 4 kcal/gram. People who are diabetic or are following a weight loss diet should monitor their consumption of jaggery, as it can lead to weight gain and fluctuations in blood-sugar levels.

Health Benefits of Jaggery

Following are some of the health benefits of this popular food sweetener below:

1. Prevention of respiratory problems

For those who have frequent respiratory tract problems, jaggery could be one of the most beneficial solutions. One can prevent asthma, bronchitis, etc. by including the same in their diet. It is better if one consumes jaggery along with sesame seeds. This combination is ideal for treating respiratory problems.

2. Helps with weight loss

Weight gain is an issue most people have to deal with. A trusted remedy to foster weight loss is a moderate intake of jaggery. It is a good source of potassium that helps balance electrolytes, boosting metabolism as well as building muscles. Moreover, potassium can also help reduce water retention in one's body, hence, playing a major role in weight loss.

3. Controls blood pressure

The presence of potassium and sodium in jaggery helps maintain acid levels in the body. This, in turn, maintains normal blood pressure levels. So if someone suffers from high or low blood pressure, including it in their diet would be of great help!

4. Great source of energy

Unlike sugar that offers short-lived energy boost, jaggery provides gradual energy that lasts for a longer time. This is because it is unrefined, which ensures that blood sugar levels aren't altered immediately and rises slowly instead. This, in turn, can help prevent fatigue as well.

5. Relieves menstrual pain

Jaggery is a natural remedy to ease pain occurring from menstrual cramps. Additionally, those who experience mood swings or frustration before their periods should also eat the same in small amounts since it helps to release endorphins that relax one's body.

6. Prevents anemia

To prevent anemia, it is required that adequate levels of RBCs are maintained in the body along with iron and folate. Jaggery is rich in both iron and folate, hence, a good way to prevent anemia. Doctors often recommend its intake to adolescents and pregnant women.

7. Purifies the body

People commonly consume jaggery after meals since it is one of the best natural cleansing agents for the body. Eating this food can help remove all kinds of unwanted particles from the intestines, stomach, food pipe, lungs, and the respiratory tract successfully.

8. Detoxification of the liver

Jaggery is a natural cleansing agent, especially for the liver. The natural sweetener helps flush out harmful toxins from one's body. This further helps to detoxify the liver. Hence, those suffering from diseases associated with the liver should start eating Jaggery.

9. Prevents constipation

Consumption of the nutrient-packed sweetener helps to stimulate bowel movements and activation of digestive enzymes in one's body. Whenever you've eaten a heavy meal, just consume some of this nutritious natural sweetener and reduce the risk of constipation.

10. Treatment of cold and cough

Jaggery also helps cure flu-like symptoms such as cold and cough. It leads to the production of heat in one's body thereby fighting the cold. To reap better benefits, do mix Jaggery in warm milk or use it as a sweetener in your tea.

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11. Reduces joint pain

For people suffering from arthritis or any kind of pain in the joints, the consumption of jaggery can provide immense pain relief. When eaten with ginger, the effectiveness only improves.

12. Purifies blood

Consumption of jaggery on a regular basis in moderate amounts can aid in blood purification. This is also the reason why it is effective in treating acne or pimples as cleaner blood also means healthier skin. Additionally, the total hemoglobin count in blood also increases with the consumption of the right amount of it.

13. Jaggery can boost immunity

Antioxidants and minerals like selenium and zinc are present in substantial quantities in jaggery. This helps in preventing free radical damage along with building resistance against various infections. This is why it is eaten frequently in winters.

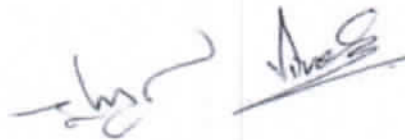
14. Cures urinary tract problems

Sugarcane is a natural diuretic, so jaggery too possesses this property. Reducing inflammation of the bladder, stimulating urination and improving the smooth flow of urine are some issues that regular intake of this nutritious food item can easily help with.

15. Maintains good intestinal health

Jaggery is rich in magnesium. Every 10 g of the food contains 16 mg of the mineral. So, if one consumes even 10 grams of it, he or she would've fulfilled 4% daily requirement of this mineral in our lives. Therefore, eating it on a daily basis can lead to good intestinal health.


This dark brown natural sweetener is easily available in all parts of India. However, do ensure that the jaggery you purchase is 100% natural. Make it a part of your daily diet, and you'll start observing its benefits on your own.



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