



An Overview: Bitter Gourd-Nutrition, Health Benefits, and Side Effects

(*Rohit Rawat¹ and Vishal Singh²)

¹Chandra Shekar Azad University of Agriculture & Technology, Kanpur

²Department of Vegetable Science, SHUATS, Prayagraj

*Corresponding Author's email: rohitrawat7718@gmail.com

Momordica charantia, commonly known as bitter gourd, likely originated in eastern India or southern China. It thrives in hot and humid climates with ample sunshine and regular water access. While prevalent in Asia, bitter gourd has also gained popularity in the Caribbean and South America. There are various varieties, with Chinese and Indian bitter gourd being the most common.

Health Benefits

- 1. Fights Inflammation:** Rich in polyphenols, bitter gourd has potent anti-inflammatory properties.
- 2. Diabetes Management:** Bioactive compounds like saponins and terpenoids aid in lowering blood sugar levels, facilitating glucose movement from the blood to cells.
- 3. Decreases Cholesterol Levels:** Consuming bitter gourd may help lower cholesterol levels, supporting overall heart health.
- 4. Nutrients per Serving:** One fresh bitter gourd provides essential nutrients:
 - Calories: 21
 - Protein: 1g
 - Fat: 0g
 - Carbohydrates: 5g
 - Fiber: 3g
 - Sugar: 0g
 - Cholesterol: 0mg
 - Sodium: 6mg
 - Rich in antioxidants, bitter gourd accounts for 93% of the recommended daily intake of vitamin C in half a cup.
 - Raw bitter gourd is a source of vitamins and minerals, including Vitamin A, Vitamin C, Calcium, Iron, Thiamine (B1), Riboflavin (B2), Niacin (B3), Folic Acid (B9), Potassium, Zinc, Phosphorus, and Magnesium.

Side Effects

Upset Stomach: Bitter gourd might cause upset stomach in some individuals when used for up to 4 months.

Anaemia Risk: Bitter melon seeds may cause severe anaemia in individuals with G6PD deficiency.

Blood Sugar Control: Bitter gourd might interfere with blood sugar control during and after surgery. Discontinue use at least 2 weeks before scheduled surgery.

Pregnancy Precautions: Bitter gourd is possibly unsafe during pregnancy, as certain chemicals may pose risks to the developing foetus.

Conclusion

In conclusion, bitter gourd emerges as a promising natural remedy for improving diabetic conditions and associated complications, offering numerous health benefits with a low toxicity profile when consumed orally. It is crucial, however, to be mindful of potential side effects and consult with a healthcare professional, especially during pregnancy or before surgery