

BITTER MELON

(Momordica charantia)

Clinical Summary

Actions

- Hypoglycaemic
- Anti-inflammatory
- Antioxidant
- Antibacterial
- Antiviral
- Antifungal
- Digestive aid
- Hepatoprotective
- Adaptogen
- Cholagogue
- Vermifuge
- Immunomodulatory
- Emmenagogue (high doses)

Indications

- Diabetes, insulin resistance, metabolic syndrome, polycystic ovarian syndrome, mild autoimmune conditions (where metabolic dysregulation is present)
- Weight management
- Liver and gallbladder support, hepatitis, non-alcoholic fatty liver disease
- Sluggish digestion, indigestion, bloating, constipation, poor appetite, chronic dysbiosis, especially in hot, damp constitutions or climates
- Skin conditions such as acne, eczema and boils, particularly when associated with 'heat' or internal toxicity
- Parasitic and microbial infections: Traditional use for intestinal worms and skin infections
- Viral infections (adjunctive)

Traditional and Empirical Use

In traditional Chinese medicine and Ayurveda the seeds, fruit, leaves and root of the plant have been used to treat a variety of ailments including digestive disorders (such as diarrhoea and colic), fever, skin conditions, microbial infections, menstrual stimulation, wound healing, inflammation, hypertension and as a laxative and emetic. The fruit is also used as a blood purifier and in

managing diabetes, where it has earned significant recognition.

Energetics

Bitter, cooling, drying, purgative and detoxifying

Constituents

Cucurbitane-type triterpenoids (charantin, momordicines), cucurbitane-type triterpene glycosides (goyaglycosides), proteins and peptides (such as polypeptide-p, a plant insulin), flavonoids (luteolin, quercetin, kaempferol), phenolic acids (gallic acid, caffeic acid), sterols (beta-sitosterol, stigmasterol), alkaloids (mormordicine), vitamins and minerals, fatty acids and volatile oils

Use in Pregnancy

Not recommended during pregnancy due to its potential to stimulate uterine contractions and induce miscarriage.

Contraindications and Cautions

Bitter melon is generally safe but may cause gastrointestinal discomfort in sensitive individuals, especially in large doses or on an empty stomach. It should be avoided by those with G6PD deficiency due to the risk of haemolytic anaemia. Caution is also advised for individuals with deficiency states as its bitterness may worsen these conditions.

Drug Interactions

Bitter melon may lower blood glucose and enhance the effects of antidiabetic drugs like GLP-1 agonists, increasing hypoglycaemia risk and GI side effects. It may inhibit P-glycoprotein and affect CYP450 substrates, anticoagulants, and fertility drugs, so close monitoring is advised.

Administration and Dosage

Liquid extract 1:2 in 55% alcohol
20 to 40mL weekly