

Nutritional formula for healthy uric acid levels

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Uric-X™ features an extract from the plant, *Terminalia bellerica*, which has historically been used extensively in Ayurvedic medicine, and has been clinically shown to help maintain healthy blood uric acid levels.* Its primary effect is inhibition of xanthine oxidase, an enzyme involved in the synthesis of uric acid. The other featured ingredient in Uric-X™ is tart cherry fruit (*Prunus cerasus*). Cherries contain high levels of anthocyanins with anti-inflammatory and antioxidant properties, and cherry intake may reduce serum uric acid levels and plasma creatinine. The tart cherry in this product is standardized to contain 2% proanthocyanidins.

The accumulation of crystallized uric acid within the joints may result in gout, an extremely painful and debilitating form of arthritis. Hyperuricemia (elevated serum uric acid levels) is sometimes asymptomatic, but in many individuals it leads to symptoms of gout, which can contribute to cardiovascular disease and is a risk factor for kidney disease.¹⁻³ According to data from the National Health and Nutrition Examination Survey (NHANES) 2007-2008, the prevalence of gout in the U.S. is approximately 4% (8.3 million people),⁴ with men experiencing a much higher incidence than women (as much as a fourfold higher prevalence among adults under age 65).⁵ Prevalence of gout and hyperuricemia have increased over the years, even after adjusting for body mass index and hypertension. While a reduction of dietary animal protein may offer relief for some individuals, many will not experience symptomatic improvement from dietary changes alone, which suggests other underlying factors are driving this condition.

Gout is often attributed to excessive alcohol consumption, excessive fructose intake, and a high intake of purine-rich animal proteins, especially those in red meat and certain types of seafood. However, a high intake of purines—which the body breaks down into uric acid—may not, in and of itself, be responsible for gout. It is not the presence of uric acid alone that leads to gout; gout occurs when uric acid is not excreted properly and is left to accumulate and precipitate into uric acid crystals (monosodium urate), which may be deposited into the joints, kidneys, and other tissues. Insulin plays a large role in this process, as elevated insulin inhibits the excretion of uric acid.⁶ This may also explain why gout often clusters together with other conditions associated with chronic hyperinsulinemia and metabolic syndrome, such as obesity, hypertension and type 2 diabetes.⁷⁻¹⁰

Even upon changes in diet and lifestyle to address hyperinsulinemia, some individuals may need additional support to achieve healthy uric acid levels. The potent ingredients in Uric-X™ have been shown to be effective for this purpose.

Terminalia bellerica

Terminalia bellerica is a deciduous tree common in Southeast Asia and the Indian subcontinent. Its fruit and kernel oil have been employed in Ayurvedic and Unani (Greek) medical traditions since ancient times owing to their antimicrobial, analgesic, antispasmodic, anti-hypertensive, antipyretic and thrombolytic activity.¹¹ Each one-capsule serving of Uric-X™ provides 500 mg of non-GMO *Terminalia bellerica* extract standardized to contain 6% gallic acid and 0.5% ellagic acid.

In streptozotocin-induced diabetic rats, orally administered gallic acid derived from *Terminalia bellerica* significantly decreased serum uric acid and creatinine levels, as well as total cholesterol, triglycerides and LDL-cholesterol, while improving glucose tolerance.¹² Considering the interrelationships between gout, metabolic syndrome and cardiovascular disease, *Terminalia bellerica* may be especially beneficial, as it has been shown (in vitro) to inhibit oxidation of LDL particles and to reduce the macrophage inflammatory response.¹³ Additionally, this compound has been shown to enhance adipocyte differentiation and increase secretion of adiponectin. According to researchers, "gallic acid mediates the therapeutic effects of TB [*Terminalia bellerica*] on metabolic disorders by regulating adipocyte differentiation."¹⁴ Dysfunctional adipose tissue may be one of the earliest steps in the development of insulin resistance/hyperinsulinemia, and, as a potential consequence, gout.

Prunus cerasus

In a study involving 633 adults with recurrent gout, intake of fresh cherries, cherry juice and extracts was associated with a 35% lower risk of gout attacks.¹⁵ Small studies have shown that tart cherry juice concentrate taken daily resulted in some individuals with gout being free of attacks during the supplementation period and some being able to discontinue NSAID usage.¹⁶

Cherry consumption increases urinary uric acid and decreases plasma uric acid levels in healthy subjects, clearly establishing that cherries influence the excretion of uric acid even when levels are not pathologically elevated. (Female subjects who consumed 280 grams of Bing cherries after an overnight fast had decreased plasma uric acid 5 hours post cherry consumption and increased urinary uric acid peaking at three hours post consumption.)¹⁷

On the other hand, tart cherry juice given to rats via oral gavage had no significant effect on uric acid levels in healthy rats, but significantly reduced the serum uric acid levels of hyperuricemic rats. In a study using allopurinol as a positive control, tart cherry juice inhibited hepatic xanthine oxidase activity and resulted in an increase in serum total antioxidant capacity in both healthy and hyperuricemic rats, leading the authors to write that even though the hypouricemic effects of tart cherry are weaker than those of allopurinol, the antioxidant effects—which allopurinol does not provide—make it “an attractive candidate for the prophylactic treatment of hyperuricaemia, particularly if it is to be taken on a long-term basis.”¹⁸

Supplement Facts

Serving Size 1 capsule

Amount Per Serving	% Daily Value
Belleric Myrobalan (<i>Terminalia bellerica</i>)(fruit) [standardized to contain 6% gallic acid and 0.5% ellagic acid]	500 mg *
Tart Cherry (<i>Prunus cerasus</i>)(fruit) [standardized to contain 2% proanthocyanidins]	75 mg *

*Daily Value not established.

Other Ingredients: Cellulose (capsule), microcrystalline cellulose, vegetable stearate, silicon dioxide.

Recommended Use

- As a dietary supplement, take one capsule twice daily after breakfast and dinner, or as directed by your health care practitioner.
- Consider combining Uric-X™ with insulin-modulating protocols such as a reduced carbohydrate diet, as well as with Designs for Health products intended to aid in management of hyperinsulinemia and metabolic syndrome, such as Metabolic Synergy™, Sensitol™, Chromium Synergy™, Berb-Evail™ or GlucoSupreme™ Herbal.

For a list of references cited in this document, please visit:

<https://www.designsforhealth.com/techsheet-references/uric-x-references.pdf>

Dosing recommendations are given for typical use based on an average 150 pound healthy adult. Healthcare practitioners are encouraged to use clinical judgement with case-specific dosing based on intended goals, subject body weight, medical history, and concomitant medication and supplement usage. Any product containing botanical substances has the potential for causing individual sensitivities. Individual monitoring, including liver function tests, may be appropriate.

*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

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