

Quercetin Bioflavonoid Complex

Immune Modulatory Complex of Quercetin, Hesperidin, and Rutin

Quercetin is a polyphenolic flavonoid compound naturally found in fruits, vegetables, and medicinal herbs.^{[1], [2]} These include onions, apples, red wine, *Ginkgo biloba*, and St. John's Wort, to name a few.^[3] The name "quercetin" was derived in 1857 from the Latin word *quercetum*, which means "oak forest," after the oak genus *Quercus*.^[4] Pure quercetin has a distinct yellow colour and is known for its antioxidant, anti-inflammatory, anticarcinogenic, and immunomodulatory properties.^[5]

Quercetin is well-established for its anti-inflammatory effects, making it a valuable adjunct in managing conditions such as prostatitis, rheumatoid arthritis, polycystic ovarian syndrome (PCOS), and other inflammation-related disorders.^[6] It mediates these effects through inhibition of key proinflammatory enzymes, including cyclooxygenase (COX) and lipoxygenase (LOX), thereby modulating eicosanoid pathways.^[7] Quercetin also exhibits significant antioxidant activity, largely through its capacity to enhance intracellular glutathione levels and scavenge reactive oxygen species (ROS).^[8] These mechanisms have shown clinical and experimental relevance in oncology and in reducing exercise-induced muscle damage.^[9] Furthermore, quercetin demonstrates antiallergic properties by stabilizing mast cells, inhibiting histamine release, downregulating pro-inflammatory cytokines, and supporting T_h1 / T_h2 immune homeostasis.^{[10], [11]} Epidemiological data also suggest an inverse correlation between quercetin intake and the risk of coronary artery disease, malignancy, and all-cause mortality.^[12]

Quercetin Bioflavonoid Complex includes supporting ingredients to assist immune and cardiovascular function, with the addition of bromelain to enhance all bioactive compound absorption.



Mechanism of Action:

Quercetin 250 mg

- Lowers histamine,^[13] inhibits NF- κ B^[14]
- Promotes T-cell regulation,^[15] supports B-cell antibody production^[16]

Hesperidin 125 mg (from 250 mg citrus bioflavonoids)

- Reduce proinflammatory cytokines TNF- α , IL-6, and IL-4 (anti-inflammatory); and reduces CRP and malondialdehyde (MDA), a marker of lipid peroxidation (human trials and meta-analysis)^{[17], [18]}
- Tightens gap junctions^[19]

Rutin 50 mg

- Vascular protection, supports collagen stability^[20]
- Tight-junction support^[21]

Clinical Indications and Adjunctive Support

- Seasonal allergies and antiviral
- Adaptive and regulatory immune system response
- Auto-immune (IBD)
- Long CVD, postviral fatigue
- Cardiovascular support : blood pressure, type 2 diabetes mellitus, metabolic syndrome, high LDL

The synergistic combination of quercetin, hesperidin, and rutin offers broad-spectrum support through complementary anti-inflammatory, antioxidant, and vascular-protective mechanisms, enhancing immune modulation, endothelial function, and overall cellular resilience.

The first company in the industry to have invested in an ISO 17025-accredited laboratory to test for identity, potency, oxidation, disintegration, purity, and more.



References

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Each vegetable capsule contains:

Quercetin	250 mg
Citrus bioflavonoids (from bitter orange [Citrus × aurantium]), 50% hesperidin	250 mg
Bromelain (from pineapple [Ananas comosus var. comosus] stem) (1,800,000 FCC PU)	50 mg
Rutin	50 mg

Nonmedicinal ingredients: Vegetable magnesium stearate in a non-GMO vegetable capsule composed of vegetable carbohydrate gum and purified water.

Directions of use: Adults ≥ 19 years old: Take 1 capsule daily with food or as directed by your health-care practitioner.

Duration of use: Consult a health-care practitioner for use beyond 4 weeks.

Cautions and warnings: Consult a health practitioner prior to use if you are pregnant or breast-feeding; if you are taking prescription medication; if you have gastrointestinal lesions/ulcers; if you are taking anticoagulant agents, anti-inflammatory agents or antibiotics; or before having surgery.

Known adverse reactions: Hypersensitivity/allergy has been known to occur; in which case, discontinue use. Nausea, vomiting, and diarrhea have been known to occur; in which case, discontinue use and consult a health-care practitioner.

Product #0310 · 90 vegetable capsules · NPN 80037398 · V0190-R3