

Quercetin LipoMicel™

Highly Absorbable Quercetin

Available in 60 softgels

Quercetin LipoMicel™ is a concentrated, highly absorbable quercetin formulation. Patent-pending delivery technology is used to create a liquid micelle matrix that disperses quercetin into small micro-droplets, resulting in a superior delivery system for enhanced absorption. Quercetin is a potent antioxidant that ameliorates oxidative/free radical damage in the body. Quercetin also has anti-inflammatory and analgesic properties and is effective for supporting immune system balance and function.

- Delivered in a unique LipoMicel™ resulting in 10 times higher absorption than standard forms of quercetin.
- Concentrated, single ingredient formulation for targeted and flexible therapeutic dosing.
- Easy to swallow softgel capsule for improved compliance.
- Free from preservatives, dairy, gluten, soy and genetically modified ingredients.



AUSTL - 356749

Active Ingredient

Each softgel contains:

Quercetin dihydrate	279.80 mg
Quercetin	250 mg

Features & Benefits

Quercetin LipoMicel™ delivers a concentrated dose of quercetin in patent-pending delivery technology to promote superior absorption. Enhanced absorption of quercetin maximises its physiological and therapeutic actions including antioxidant, anti-inflammatory, analgesic and immune modulating. These actions underlie quercetin's therapeutic benefits for reducing oxidative stress and inflammation and supporting immunity/immune function.

CLINICAL EVIDENCE

The plant-derived aglycone quercetin (3,3',4',5,7-pentahydroxyflavone) is the most widely distributed bioflavonoid found in foods including apples, onions, tomatoes, broccoli, green leafy vegetables, tea, red wine, grapes, berries, seeds, nuts and buckwheat.¹⁻³ Though quercetin has

a widespread presence in plant foods as a pigment, in its natural form it has a low solubility and bioavailability profile.^{1,4} Consequently harnessing quercetin's significant biological potential requires either high dosage regimens or use of specific technology to enhance its solubility and bioavailability.

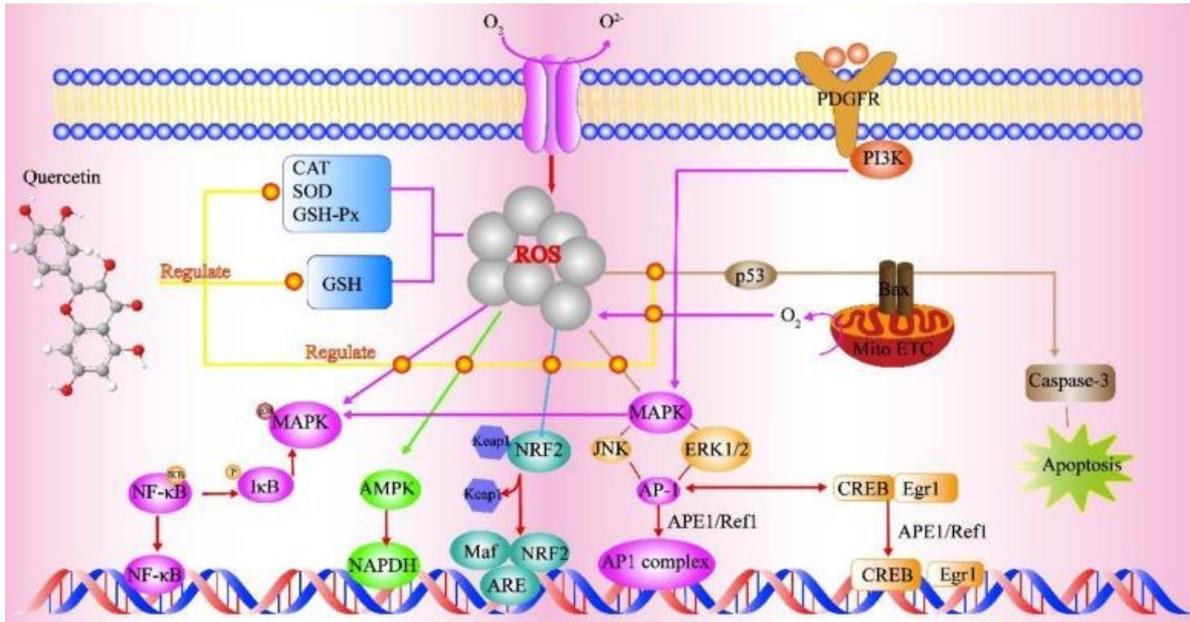
LipoMicel™ Matrix

LipoMicel™ Matrix is a unique, patent-pending technology that overcomes quercetin's naturally low bioavailability profile by creating a liquid micelle matrix that disperses quercetin into tiny microdroplets. This superior delivery system results in enhanced absorption that is 10 times higher than demonstrated by standard forms of quercetin.^{1,4}

Antioxidant

One of quercetin's key biological properties responsible for its potent therapeutic effects is its powerful antioxidant activity, having demonstrated a total antioxidant capacity 3.5 times higher than curcumin.² Mechanistically, quercetin has been shown to scavenge and neutralise free radicals including reactive oxygen species (peroxynitrite, hydroxyl radicals, hydrogen peroxide), potentiate/enhance the antioxidant activity of other antioxidants (e.g. vitamin C), chelate metals, improve erythrocyte and plasma redox status (reduced/oxidised glutathione ratio and reduced thiobarbituric acid reactive substance [TBARS] levels) and activate the nuclear erythroid 2-related factor 2-antioxidant response element (Nrf2-ARE) pathway.^{1,2, 5-7}

Figure 1: Antioxidant signalling pathways regulated by quercetin.¹³



Immunity, Inflammation and Pain

Other significant effects of quercetin that underlie/contribute to its therapeutic activity is its immunomodulatory, anti-inflammatory and analgesic actions.^{4, 8-10}

These actions of quercetin are linked via multiple mechanisms which include inhibition of pro-inflammatory mediators such as nuclear-factor kappa B, tumor necrosis factor alpha (in whole blood, macrophages, lung and glial cells), interleukins (IL-12), tryptase,

prostaglandins; inhibiting histamine release from mast cells; suppressing inflammation-inducing enzyme activity (cyclooxygenase (COX) and lipoxygenase (LOX) and hepatic C-reactive protein release; decreasing immunoglobulin-E antibody release from B cells, and modulating dendritic cells towards a tolerogenic phenotype functional expression.^{2,3,8,9,10}

These anti-inflammatory and analgesic effects were confirmed in two separate systematic reviews and meta-analyses

reviewing the efficacy of quercetin on inflammatory biomarkers.^{11,12} Quercetin was found to significantly reduce circulating C-reactive protein levels in diagnosed inflammatory disease states when levels were elevated (>3mg/L) when used at a daily dose of at least 500 mg.^{11,12}

**References available on request.*

Directions for use: Adults: 2-4 softgels per day or as directed by a health care practitioner.

WARNING: If symptoms persist consult your health professional.



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