# **Resveratrol Max**

Code: FE2445 – 60 vegetable capsules



Each capsule of **Resveratrol Max** contains 250 mg of trans-resveratrol, the biologically active form of this polyphenol.

Resveratrol (also known as trans-resveratrol or trans-3,4',5-trihydroxystilbene) is a potent antioxidant polyphenol found in grape skin (*Vitis vinifera*), berries, plants such as *Fallopia japonica* and red wine.

**Ingredients:** Japanese knotweed (*Fallopia japonica*) root extract, anti-caking agents (magnesium salts of fatty acids and silicon dioxide), vegetable capsule (glazing agent: hydroxypropylmethylcellulose, purified water).

Nutritional information:	1 capsule (600 mg)	Size and format: 60 vegetable capsules.
Fallopia japonica (extract)	500 mg	
Providing: trans-Resveratrol	250 mg	Recommended daily dose: 1 capsule per day. Do not exceed the stated recommended daily dose.

### Indications and uses:

- Cardiometabolic health (metabolic syndrome, diabetes, blood pressure).
- Inflammatory processes (rheumatoid arthritis, etc.).
- Hormonal health (polycystic ovary syndrome).

#### **Cautions:**

Do not use in case of pregnancy. Consult a health-care practitioner prior to use if you are breast-feeding or if you are being treated with medication.

#### DETAILS:

**Resveratrol Max** is formulated with a 50% trans-resveratrol extract of *Fallopia japonica*, with the highest power available on the market.

The antioxidant action of resveratrol neutralises free radicals that can damage cells throughout the body. Free radicals are produced as a by-product of metabolism (energy creation), while environmental toxins can also contribute to free radical production.

#### **INGREDIENTS:**

<u>RESVERATROL</u>: resveratrol has been shown to exert a number of therapeutic effects including anti-inflammatory, antitumour and antioxidant properties, which may help in the prevention and treatment of cardiometabolic diseases, inflammation, endocrine disorders, etc. <sup>(1,2)</sup>.

Human studies show that resveratrol metabolism occurs mainly in the liver and results in the production of conjugated glucuronides and sulphate metabolites, which have biological activity <sup>(3)</sup>.

The half-life of resveratrol varies from one to five hours and it is generally well tolerated. Some of the most frequently reported side effects include gastrointestinal symptoms such as nausea, flatulence, bowel movements, abdominal discomfort, loose stools and diarrhoea, associated with doses up to 2.5 g or even 5 g  $^{(1,4)}$ .

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## **Clinical trials**

## Cardiometabolic health:

A 2018 meta-analysis of 24 randomised controlled trials found that supplementing resveratrol had diverse antioxidant effects among patients with metabolic syndrome and related diseases. Resveratrol significantly reduced C-reactive protein and tumour necrosis factor- $\alpha$  (TNF- $\alpha$ ), which are clinically significant changes as well as predictors of heart disease, for example <sup>(5)</sup>.

A systematic review and meta-analysis of six studies examining a total of 196 patients with type 2 diabetes (104 resveratrol, 92 control/placebo) found that supplementing resveratrol was more effective than placebo/control in improving systolic blood pressure, haemoglobin A1c and creatinine, although not for fasting glucose, a Homeostatic Model Assessment for Insulin Resistance (HOMA-IR), diastolic blood pressure, insulin or cholesterol <sup>(6)</sup>.

Another meta-analysis (11 randomised clinical trials and 384 patients) evaluating the effect of resveratrol on diabetes found that resveratrol "significantly reduced fasting glucose, insulin, glycosylated haemoglobin [HgbA1C] and insulin resistance (HOMA-IR) levels in participants with diabetes", but not in patients without diabetes <sup>(7)</sup>.

Another meta-analysis by the same team measured the effect of resveratrol on blood pressure. A total of 6 clinical trials and 247 subjects were included, and the results showed that resveratrol supplementation significantly reduced systolic (SBP) but not diastolic blood pressure. Furthermore, subgroup analyses showed that higher doses of resveratrol ( $\geq$  150 mg/d) significantly reduced SBP by -11.90 mmHg, while lower doses of resveratrol did not show a significant SBPlowering effect <sup>(8)</sup>.

A study in patients with minimal hepatic encephalopathy, a condition associated with end-stage liver disease such as cirrhosis, found that supplementing resveratrol reduced symptoms of depression (Beck Depression Inventory) and anxiety (State-Trait Anxiety Questionnaire) and improved physical function, body pain, general health, vitality and social function, compared to the control group <sup>(9)</sup>.

### Anti-inflammatory/Rheumatology:

A randomised controlled trial assessed 100 patients with rheumatoid arthritis who received 1 g of resveratrol along with conventional treatment for 3 months, and a control group who received conventional treatment alone. After 3 months, clinical endpoints, swelling and pain on palpation, as well as disease activity score, were significantly reduced in the resveratrol-treated group. In addition, serum levels of biochemical inflammatory markers decreased in resveratrol-treated patients, including C-reactive protein, erythrocyte sedimentation rate, decarboxylated osteocalcin, matrix metalloproteinase 3, tumour necrosis factor alpha and interleukin 6<sup>(10)</sup>.

Another study evaluated the effect of resveratrol in patients with knee osteoarthritis. This randomised, double-blind, placebo-controlled, multicentre study assessed 110 patients treated with meloxicam, with adjuvant resveratrol (500 mg daily) or placebo for 90 days. Results showed that patients taking resveratrol had a significant reduction in pain severity and functional disability compared to placebo-treated patients, as assessed by the Western Ontario McMaster Universities Osteoarthritis Index (WOMAC)<sup>(11)</sup>.

### Endocrine health

Predictably, given its effect on diabetes, resveratrol may also improve polycystic ovary syndrome (PCOS). A total of 34 women with PCOS were randomised to 1500 mg resveratrol or placebo daily for 3 months. The results showed that resveratrol was associated with a significant decrease in total testosterone (by 23.1%), a 22.2% decrease in dehydroepiandrosterone sulphate (DHEAS), a decrease in fasting insulin level (by 31.8%) and an increase in insulin sensitivity index <sup>(12)</sup>.

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#### **References:**

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