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Resveratrol

What is it?

Resveratrol is a chemical found in red wine, red grape skins, purple grape juice, mulberries, and in smaller amounts in peanuts. It is used as a medicine.

Resveratrol is most commonly used for high cholesterol, cancer, heart disease, and many other conditions. However, there is not strong evidence to support the use of resveratrol for these uses.

How effective is it?

Natural Medicines Comprehensive Database rates effectiveness based on scientific evidence according to the following scale: Effective, Likely Effective, Possibly Effective, Possibly Ineffective, Likely Ineffective, Ineffective, and Insufficient Evidence to Rate.

The effectiveness ratings for **RESVERATROL** are as follows:

Possibly ineffective for...

- **Heart disease**. People who consume higher amounts of dietary resveratrol do not seem to have a lower risk of heart disease compared to people who consume lower amounts. Also, taking resveratrol by mouth does not seem to improve levels of cholesterol or blood fats called triglycerides in people at risk for heart disease. One early study shows that taking 10 mg of resveratrol daily for 3 months may improve how well the heart pumps blood in people with a history of heart attack and evidence of damaged heart blood vessels. However, the improvement is small, and resveratrol doesn't improve blood pressure or blood thickness in people with this condition.

Insufficient evidence to rate effectiveness for...

- **Acne**. Early research shows that applying a gel containing resveratrol to the face for 60

days reduces the severity of acne.

- **Seasonal allergies (hay fever)**. Early research shows that using a nasal spray containing resveratrol and beta-glucan three times daily for 2 months reduces runny nose and sneezing in young children and adolescents with pollen allergy.
- **Cancer**. People who consume higher amounts of dietary resveratrol do not seem to have a lower risk of cancer compared to people who consume lower amounts.
- **Mental function**. Resveratrol might improve mental function and memory in women after menopause. But it doesn't seem to improve mental function in young adults.
- **Diabetes**. Some research shows that resveratrol improves blood sugar control in people with diabetes. But other research shows no benefit. Resveratrol might help lower blood sugar in only patients with blood sugar levels that are not well controlled. More research is needed to confirm.
- **Lung disease (chronic obstructive pulmonary disease, COPD)**. Early research suggests that taking a combination product containing resveratrol, vitamin C, zinc, and flavonoids slightly reduces coughing and mucus production in people with COPD. But it's not clear if the benefit is due to resveratrol or other ingredients.
- **Metabolic syndrome**. Early research suggests that taking resveratrol helps to reduce body fat in people with metabolic syndrome. However, taking resveratrol does not help to lower blood pressure or levels of cholesterol or blood sugar. Other research shows that resveratrol does not affect body fat. But this may be because the dose of resveratrol was too low.
- **Fatty liver disease not related to alcohol (nonalcoholic fatty liver disease; NAFLD)**. Most early research shows that resveratrol does not improve liver function or liver scarring in people with NAFLD..
- **Dialysis through the stomach (peritoneal dialysis)**. Early research shows that resveratrol might improve the speed of filtering the blood in people undergoing peritoneal dialysis.
- **An ovary disorder known as polycystic ovary syndrome (PCOS)**. Early research shows that resveratrol decreases testosterone in women with PCOS. But it doesn't improve weight, lipid levels, acne, or unwanted hair growth in women with this condition.
- **Rheumatoid arthritis (RA)**. Taking resveratrol along with drugs for RA seems to reduce the number of painful and swollen joints. But it's not known if resveratrol also helps reduce joint damage.
- **Inflammatory bowel syndrome (ulcerative colitis)**. Early research shows resveratrol might improve symptoms and reduce the activity of ulcerative colitis.
- **Aging of the skin**.
- **"Hardening of the arteries" (atherosclerosis).**.
- **Other conditions**.

More evidence is needed to rate resveratrol for these uses.

How does it work?

Resveratrol might expand blood vessels and reduce the activity of cells important in blood clotting. Some research suggests that resveratrol has weak estrogen (a female hormone) effects. It may also decrease pain and swelling (inflammation). Resveratrol might reduce levels of sugar (glucose) in the blood and help the body fight against disease. It might also prevent proteins in the brain from sticking together to help prevent diseases such as Alzheimer's disease.

Are there safety concerns?

Resveratrol is **LIKELY SAFE** when used in the amounts found in foods. Resveratrol is **POSSIBLY SAFE** when applied to the skin for up to 30 days or when taken by mouth in doses up to 1500 mg daily for up to 3 months. Higher doses of up to 3000 mg have been taken by mouth safely for up to 8 weeks.

In children, resveratrol is **POSSIBLY SAFE** when sprayed in the nostrils for up to 2 months.

Special precautions & warnings:

Pregnancy and breast-feeding: Resveratrol is **LIKELY SAFE** when used in amounts found in some foods. However, during pregnancy and breast-feeding, the source of resveratrol is important. Resveratrol is found in grape skins, grape juice, wine, and other food sources. Wine should not be used as a source of resveratrol during pregnancy and breast-feeding.

Bleeding disorders: Resveratrol might slow blood clotting and increase the risk of bleeding in people with bleeding disorders.

Hormone-sensitive condition such as breast cancer, uterine cancer, ovarian cancer, endometriosis, or uterine fibroids: Resveratrol might act like estrogen. If you have any condition that might be made worse by exposure to estrogen, don"t use resveratrol.

Surgery: Resveratrol might increase the risk of bleeding during and after surgery. Stop using resveratrol at least 2 weeks before a scheduled surgery.

Are there interactions with medications?

Moderate
Be cautious with this combination.

Medications changed by the liver (Cytochrome P450 1A1 (CYP1A1) substrates)

Some medications are changed and broken down by the liver. Resveratrol might decrease how quickly the liver breaks down some medications. In theory, taking resveratrol along with some medications that are broken down by the liver may increase the effects and side effects of some medications.

Some medications changed by the liver include chlorzoxazone, theophylline, and bufuralol.

Medications changed by the liver (Cytochrome P450 1A2 (CYP1A2) substrates)
Some medications are changed and broken down by the liver. Resveratrol might decrease how quickly the liver breaks down some medications. In theory, taking resveratrol along with some medications that are broken down by the liver may increase the effects and side effects of some medications.

Some medications changed by the liver include clozapine (Clozaril), cyclobenzaprine (Flexeril), fluvoxamine (Luvox), haloperidol (Haldol), imipramine (Tofranil), mexiletine (Mexitil), olanzapine (Zyprexa), pentazocine (Talwin), propranolol (Inderal), tacrine (Cognex), zileuton (Zyflo), zolmitriptan (Zomig), and others.

Medications changed by the liver (Cytochrome P450 1B1 (CYP1B1) substrates)
Some medications are changed and broken down by the liver. Resveratrol might decrease how quickly the liver breaks down some medications. In theory, taking resveratrol along with some medications that are broken down by the liver may increase the effects and side effects of some medications.

Some medications changed by the liver include theophylline, omeprazole, clozapine, progesterone, lansoprazole, flutamide, oxaliplatin, erlotinib, and caffeine.

Medications changed by the liver (Cytochrome P450 2C19 (CYP2C19) substrates)
Some medications are changed and broken down by the liver. Resveratrol might decrease how quickly the liver breaks down some medications. In theory, taking resveratrol along with some medications that are broken down by the liver may increase the effects and side effects of some medications.

Some medications changed by the liver include amitriptyline (Elavil), carisoprodol (Soma), citalopram (Celexa), diazepam (Valium), lansoprazole (Prevacid), omeprazole (Prilosec), phenytoin (Dilantin), warfarin, and many others.

Medications changed by the liver (Cytochrome P450 2E1 (CYP2E1) substrates)
Some medications are changed and broken down by the liver. Resveratrol might decrease how quickly the liver breaks down some medications. In theory, taking resveratrol along with some medications that are broken down by the liver may increase the effects and side effects of some medications.

Some medications changed by the liver include acetaminophen, chlorzoxazone (Parafon Forte), ethanol, theophylline, and anesthetics such as enflurane (Ethrane), halothane (Fluothane), isoflurane (Forane), methoxyflurane (Penthrane).

Medications changed by the liver (Cytochrome P450 3A4 (CYP3A4) substrates)
Some medications are changed and broken down by the liver. Resveratrol might decrease how quickly the liver breaks down some medications. In theory, taking resveratrol along with some medications that are broken down by the liver may increase the effects and side effects of some medications. However, some early research shows conflicting results.

Some medications changed by the liver include some calcium channel blockers (diltiazem, nicardipine, verapamil), chemotherapeutic agents (etoposide, paclitaxel, vinblastine, vincristine, vindesine), antifungals (ketoconazole, itraconazole), glucocorticoids, alfentanil (Alfenta), cisapride (Propulsid), fentanyl (Sublimaze), lidocaine (Xylocaine), losartan (Cozaar), fexofenadine (Allegra), midazolam (Versed), and otherslovastatin (Mevacor), ketoconazole (Nizoral), itraconazole (Sporanox), fexofenadine (Allegra), triazolam (Halcion), and many others.

Medications that slow blood clotting (Anticoagulant / Antiplatelet drugs)
Resveratrol might slow blood clotting. Taking resveratrol along with medications that also slow clotting might increase the chances of bruising and bleeding.

Some medications that slow blood clotting include aspirin, clopidogrel (Plavix), diclofenac (Voltaren, Cataflam, others), ibuprofen (Advil, Motrin, others), naproxen (Anaprox, Naprosyn, others), dalteparin (Fragmin), enoxaparin (Lovenox), heparin, warfarin (Coumadin), and others.

Are there interactions with herbs and supplements?

Herbs and supplements that might slow blood clotting (Anticoagulant/Antiplatelet herbs and supplements)
Resveratrol might slow blood clotting. Using it along with other herbs or supplements that might also slow blood clotting could increase the risk of bleeding or bruising in some people. These herbs include angelica, clove, danshen, feverfew, garlic, ginger, ginkgo, ginseng Panax, horse chestnut, red clover, turmeric, and others.

Are there interactions with foods?

Fat
Taking resveratrol with a meal that is high in fat may reduce the amount of resveratrol that is absorbed by the body.

What dose is used?

The following doses have been studied in scientific research:

ADULTS

BY MOUTH:
- **For diabetes**: 250-1000 mg daily for up to 3 months.

Other names

3,5,4' TriHydroxy-Transstibene, (E)- 5-(4-hydroxystyryl)benzene-1,3-diol, 3,4',5-stilbenetriol, 3,5,4' -trihydroxystilbene, 3,4',5-trihydroxystilbene, 3,5,4'-trihydroxy-trans-stilbene, Cis-Resveratrol, Extrait de Vin, Extrait de Vin Rouge, Kojo-Kon, Phytoalexin, Phytoalexine, Phytoestrogen, Phyto-œstrogène, Pilule de Vin, Protykin, Red Wine Extract, Resvératrol, Resveratrols, Resvératrols, RSV, RSVL, Stilbene Phytoalexin, Trans-Resveratrol, Trans-Resvératrol, Wine Extract, Wine Pill.

Methodology

To learn more about how this article was written, please see the *Natural Medicines Comprehensive Database* methodology [https://medlineplus.gov/druginfo/natural/methodology.html] .

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Last reviewed - 08/16/2018

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Not helpful **Very helpful**

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Page last updated: 20 December 2018