

Bitter orange

Seville orange



Bitter orange (*Citrus aurantium*) is a fruit-bearing tree native to Asia. It contains an active ingredient called synephrine that is similar to ephedra.

In 2004, the FDA banned ephedra due to serious effects on the heart. Since then, many weight loss and bodybuilding products have used bitter orange and caffeine in its place. Bitter orange contains many chemicals that affect the nervous system. These chemicals might cause heart problems in healthy adults.

Bitter orange is used for obesity, athletic performance, and many other purposes, but there is no good scientific evidence to support its use.

Bitter orange (synephrine) is considered a banned substance by the National Collegiate Athletic Association (NCAA). Don't confuse bitter orange with other orange species such as sweet orange and bergamot.

When taken by mouth: Bitter orange is likely safe when eaten in the amounts found in food. But bitter orange is possibly unsafe when taken in the larger amounts used as medicine. Bitter orange, taken by itself or with stimulants such as caffeine or caffeine-containing herbs, might

increase the risk for high blood pressure, fainting, heart attack, stroke, and other serious side effects. There are also reports that bitter orange can trigger headaches in some people.

When applied to the skin: Bitter orange essential oil is possibly safe. The oil can cause sensitivity to the sun. Wear sunblock outside, especially if you are light-skinned.

When inhaled: Bitter orange essential oil is possibly safe when inhaled as aromatherapy.



Major Interaction

Do not take this combination

Medications for depression (MAOIs) interacts with BITTER ORANGE

Bitter orange contains chemicals that stimulate the body. Some medications used for depression can increase these chemicals. Taking bitter orange with these medications might cause serious side effects including very fast heartbeat and very high blood pressure.

Some common MAOIs include phenelzine (Nardil), selegiline (Zelapar), and tranylcypromine (Parnate).

Midazolam (Versed) interacts with BITTER ORANGE

Bitter orange can decrease how quickly the body breaks down midazolam. Taking bitter orange along with midazolam might increase the effects and side effects of midazolam.

Moderate Interaction

Be cautious with this combination

Caffeine interacts with BITTER ORANGE

Bitter orange is a stimulant. Caffeine is also a stimulant. Taking these products together can increase blood pressure and cause the heart to beat rapidly. This can cause serious adverse effects such as heart attack and stroke.

Dextromethorphan (Robitussin DM, and others) interacts with BITTER ORANGE

Bitter orange might decrease how quickly the liver breaks down dextromethorphan. Taking bitter orange along with dextromethorphan might increase the effects and side effects of dextromethorphan such as nervousness, drowsiness, and others.

Felodipine (Plendil) interacts with BITTER ORANGE



The liver breaks down felodipine to get rid of it. Bitter orange might decrease how quickly the liver gets rid of felodipine. Taking bitter orange along with felodipine might increase the effects and side effects of felodipine.

Indinavir (Crixivan) interacts with BITTER ORANGE

The liver breaks down indinavir to get rid of it. Bitter orange might decrease how quickly the liver breaks down indinavir. Taking bitter orange along with indinavir might increase the effects and side effects of indinavir.

Medications changed by the liver (Cytochrome P450 3A4 (CYP3A4) substrates) interacts with BITTER ORANGE

Some medications are changed and broken down by the liver. Bitter orange might change how quickly the liver breaks down these medications. This could change the effects and side effects of these medications.

Medications that can cause an irregular heartbeat (QT interval-prolonging drugs) interacts with BITTER ORANGE

Bitter orange might affect electrical currents in the heart. This can increase the risk of having an irregular heartbeat. Some medications can have this same effect. Taking bitter orange with these medications might increase the risk for a serious heart issue.

Stimulant drugs interacts with BITTER ORANGE

Stimulants, such as amphetamines and cocaine, speed up the nervous system. By speeding up the nervous system, stimulant medications can increase blood pressure and speed up the heartbeat. Bitter orange might also speed up the nervous system. Taking bitter orange along with stimulant drugs might cause serious problems including increased heart rate and high blood pressure.

Medications for diabetes (Antidiabetes drugs) interacts with BITTER ORANGE

Bitter orange might lower blood sugar levels. Taking bitter orange along with diabetes medications might cause blood sugar to drop too low. Monitor your blood sugar closely.

Colchicine interacts with BITTER ORANGE

Bitter orange might affect levels of colchicine. Using colchicine with bitter orange may reduce the benefits or increase the side effects of colchicine.

Sildenafil (Viagra) interacts with BITTER ORANGE

The body breaks down sildenafil to get rid of it. Bitter orange can decrease how quickly the body breaks down sildenafil. Taking bitter orange along with sildenafil might increase the effects and side effects of sildenafil.

Minor Interaction

Be watchful with this combination

Medications changed by the liver (Cytochrome P450 2D6 (CYP2D6) substrates) interacts with BITTER ORANGE

Some medications are changed and broken down by the liver. Bitter orange might change how quickly the liver breaks down these medications. This could change the effects and side effects of these medications.

Dosing

Bitter orange is available in supplements and topical oils. Supplements containing bitter orange are often marketed for athletic performance and weight loss. The active chemical in bitter orange, synephrine, can cause serious side effects, and products containing this ingredient have been shown to contain amounts much higher than what is listed on the product label. They've also been found to contain many other synthetic stimulants that are banned in supplements.

