Elderberry Introduction:

Elderberry, or elder, has been used for centuries to treat wounds, when applied to the skin. It is also taken by mouth to treat respiratory illnesses such as cold and flu. In many countries, including Germany, elder flower is used to treat colds and flu. Some evidence suggests that chemicals in elder flower and berries may help reduce swelling in mucous membranes, such as the sinuses, and help relieve nasal congestion. Elder may have antiinflammatory, antiviral, and anticancer properties.

Elderberry also contains flavonoids, which have antioxidant properties and may help prevent damage to the body' s cells. However, very few studies have been done in humans, so researchers don't know how effective elder may be.

There are several species of elder, but *Sambucus nigra*, or European elder (also called black elder), is the one used most often for medicinal purposes. Avoid dwarf elder (*Sambucus ebulus*), which can be toxic. Use a trusted preparation of elder because raw or unripe fruit -- as well as the leaves, seeds, and bark -- contain a chemical related to cyanide, which is poisonous.

Alternative Names:

Elder; Elder flower

Plant Description:

European elder is a large shrub or small tree that grows up to 30 feet tall in wet or dry soil in a sunny location. Elder is native to Europe, Africa, and parts of Asia, but it has become widespread in the United States. Deciduous leaves grow in opposite pairs and have five to seven leaflets. Flowers are white and flat-topped with five primary rays. Berries are green, turning red, then black when ripe.

Parts Used:

The berries and flowers are used as medicine. Berries must be cooked before they are taken. Raw berries contain a chemical similar to cyanide.

Medicinal Uses and Indications:

Coldsand Flu

Elderberry may help treat cold and flu symptoms by reducing congestion and possibly making you sweat more. One study suggested that using a standardized elderberry extract, Sambucol, could shorten the duration of flu

by about 3 days. Sambucol also contains other herbs plus vitamin C, so no one knows whether elderberry by itself would have the same effect.

Another preliminary study found that a lozenge with elderberry extract (ViraBLOC) helped reduce flu symptoms when taken within 24 hours of symptoms starting. In the lab, one study suggested that elderberry could kill the H1N1 virus ($\hat{a}\in c$ swine flu $\hat{a}\in$) in test tubes, but researchers don't know whether it would be effective against H1N1 in people.

Bacterial Sinusitis (Sinus Infection)

One study examined the use of a proprietary product, Sinupret, to treat bacterial sinusitis along with an antibiotic (doxycycline or Vibramycin) and a decongestant. People who took the combination did better compared to those who did not take Sinupret. However, Sinupret contains other herbs along with elderberry, so no one knows whether taking elderberry alone would work as well.

Available Forms:

Elderberry is available as a liquid, syrup, and tincture, as well as in capsule and lozenge forms. Dried elder flower is usually standardized to at least 0.8% flavonoids. Sambucol is standardized to 38% elderberry extract for adults and 19% for children. Sinupret contains 18 mg of elder flower.

How to Take It:

Pediatric

Do not give elderberry or any product containing elder to a child without first talking to your pediatrician.

Adult

- Sinupret: 2 tablets taken three times a day for bacterial sinusitis
- Sambucol: 4 tbsp. a day for three days for colds and flu
- Tea: Steep 3 5 g dried elder flower in 1 cup boiling water for 10 15 minutes. Strain and drink three times per day.

Precautions:

The use of herbs is a time-honored approach to strengthening the body and treating disease. Herbs, however, can trigger side effects and interact with other herbs, supplements, or medications. For these reasons, you should should herbs only under the supervision of a health care provider.

Do not use unripe or uncooked elderberries. They may be poisonous.

Elderberry appears to have few side effects when used properly for short

periods of time (up to 5 days).

Pregnant and breastfeeding women should not take elderberry.

If you have an autoimmune disease, such as rheumatoid arthritis or lupus, you should ask your doctor before taking elderberry, as it may stimulate the immune system.

Possible Interactions:

If you are being treated with any of the following medications, you should talk to your health care provider before taking elderberry:

Diuretics (water pills) -- Diuretics help the body get rid of excess fluid and increase the amount of urine your body makes. Elderberry may also act as a diuretic, so taking it along with a diuretic could make that drug stronger and raise your risk of dehydration. Diuretics include:

- Hydrochlorothiazide
- Bumetanide (Burinex)
- Furosemide (Lasix)
- Amiloride (Midamor)
- Metolazone (Zaroxolyn)

Diabetes medications -- Elderberry may lower blood sugar levels. If you are also taking drugs for diabetes, taking elderberry may increase your risk of developing hypoglycemia, or low blood sugar.

Chemotherapy -- Elderberry may interact with some chemotherapy drugs. If you are undergoing chemotherapy, ask your oncologist before taking any herb or supplement.

Laxatives -- Elderberry may act like a laxative and should not be taken at the same time as other laxatives.

Theophylline (TheoDur) -- Elderberry may reduce levels of theophylline, a drug taken for asthma and other respiratory conditions. That could make the drug not work as well.

Drugs that suppress the immune system -- Because elderberry may stimulate the immune system, it could interfere with medications taken to suppress the immune system. These medications include corticosteroids (prednisone) and medications used to treat autoimmune diseases. People with organ transplants should also avoid elderberry.

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Supporting Research

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