



ECHINACEA

WHAT IS ECHINACEA?

Echinacea is a flowering plant. It is sometimes called Purple Coneflower. It grows mainly in Europe and the North America. There are several closely related species: *Echinacea purpurea*, *angustifolia*, and *pallida*. They have slightly different medicinal properties. *Echinacea purpurea* seems more active in the test tube. *Echinacea angustifolia* appears more effective in people.

Echinacea was the main medicinal herb used by Native Americans in the Great Plains region. Since the late 1930s, German researchers have studied echinacea and its effects on the immune system. Echinacea is one of the most frequently sold herbs in the United States.

The German government has approved *Echinacea pallida* root and *Echinacea purpurea* leaf for use against colds, flu, and chronic respiratory or urinary infections. Many studies support its use. However, a US study in 2006 found no benefits from one particular preparation.

HOW IS ECHINACEA USED?

Advocates of Echinacea suggest drinking it from small batches made from herbs less than one year old. Echinacea is available in capsules containing a powder of the dried plant or root, and also as a tincture (an alcohol-based preparation). In some cases, people drink pressed juice from fresh plants. For treating skin conditions, special preparations containing pressed juice are used.

The suggested dosage of echinacea depends on which species and which parts of the plant were used. In general, it should not be used for more than 1-2 weeks at a time.

WHAT ARE THE BENEFITS OF ECHINACEA?

The major use of echinacea is to treat colds and flu. It is also used for urinary tract infections, skin wounds that aren't healing well, and skin conditions such as psoriasis and eczema.

Echinacea stimulates the immune system. It promotes CD4 cell activation and increases the activity of the immune system. It helps white blood cells attack germs. These effects may decrease if people take echinacea for more than a few weeks.

Echinacea is generally not recommended for use by people with diseases of the immune system such as HIV, multiple sclerosis, or tuberculosis. The German government recommends against using echinacea if you have these conditions. Some researchers believe that echinacea could actually worsen these immune system problems.

WHY DO PEOPLE WITH HIV USE ECHINACEA?

Many people with HIV have used echinacea because it stimulates the immune system, or for short-term treatment of colds and the flu. The use of echinacea for people with HIV is controversial.

Some doctors believe that it is not a good idea to stimulate the immune system in people who have some type of immune disorder. Increasing the activation of CD4 cells could give HIV more "target cells" to infect. Other doctors believe that some parts of the immune system are already overactive, causing damage to healthy cells and tissues.

They are also concerned about an animal study showing that echinacea increased levels of tumor necrosis factor alpha (TNF-alpha), a substance produced by the immune system to kill unhealthy cells. High levels of TNF-alpha have been linked to the progression of HIV disease.

Unfortunately, as with most herbal products, there is no careful research in people with HIV. There is no published research to document any dangerous results from the use of echinacea by people with HIV. There is no research on the use of echinacea by pregnant women. They should be careful with tinctures due to their high alcohol content.

Some researchers believe that short-term use of echinacea (up to two weeks) to treat colds or flu does not present any serious risks to people with HIV. However, both AIDS researchers and herbalists warn against long-term use of echinacea.

WHAT ARE THE SIDE EFFECTS?

There are no known side effects from internal or external use of echinacea. The warnings about negative effects of echinacea use in people with immune disorders are based on laboratory studies. There are no human studies that document these side effects.

HOW DOES IT INTERACT WITH OTHER THERAPIES?

Most interactions between herbs and medications have not been carefully studied. Echinacea has been shown to reduce blood levels of some antiretroviral medications. However, none of these interactions appear to be significant or to require dose adjustments. Tell your doctor if you are using herbal supplements.

THE BOTTOM LINE

Echinacea (purple coneflower) is a flowering plant used for respiratory problems and to stimulate the immune system. It is a very popular herb in the United States. There are hundreds of published research studies on echinacea, mostly done in Europe. These studies document echinacea's effects on the immune system and its benefits for treating colds and flu.

Some researchers believe that echinacea's effects on the immune system might cause problems for people with HIV. However, there are no published studies showing any harmful effects from echinacea. There may be no risk from using echinacea for less than two weeks.

Reviewed May 22, 2011