



PATIENT & CAREGIVER EDUCATION

Alfalfa

This information describes the common uses of Alfalfa, how it works, and its possible side effects.

Tell your healthcare providers about any dietary supplements you're taking, such as herbs, vitamins, minerals, and natural or home remedies. This will help them manage your care and keep you safe.

What is it?

Alfalfa may be effective at reducing cholesterol levels, but there is no evidence that it can treat cancer, and it has many side effects.

Alfalfa contains fiber and a substance called saponins, which are thought to bind with cholesterol in the body and may reduce cholesterol levels. Alfalfa plants also contain phytoestrogens, which act like some human hormones. In fact, alfalfa phytoestrogens caused the growth of estrogen-dependent breast cancer cells. Alfalfa seeds also contain a toxic amino acid, L-canavanine. Levels of this amino acid vary widely across various cultivations of plants, and decrease as the plant matures. It is thought that this amino acid may be responsible for alfalfa's ability to cause a relapse of lupus symptoms in patients who are in remission from the disease, and large levels of L-canavanine from alfalfa supplementation may have additional detrimental effects in humans.

What are the potential uses and benefits?

- **To treat diabetes**

Although alfalfa appears to lower blood glucose levels in animals, no studies have tested whether it has any significant effect in patients with diabetes.

- **To treat high cholesterol**

Two small trials have shown that alfalfa supplements lower cholesterol levels in people with high cholesterol, but larger, controlled trials are necessary to confirm these results.

- **As a diuretic**

This is not backed by experimental evidence.

- **To treat gastrointestinal disorders**

No scientific evidence supports this use.

- **To treat asthma and hay fever**

There are no studies to back this use.

- **To treat thyroid problems**

No scientific evidence supports this use.

- **To increase lactation**

Scientific evidence is lacking for this claim.

- **To promote menstruation**

There are no studies to support this claim.

What are the side effects?

- Increased fecal volume and defecation frequency, loose stools and diarrhea as well as abdominal discomfort and intestinal gas have all been reported in patients, following supplementation with alfalfa.

What else do I need to know?

Patient Warnings:

- Alfalfa sprouts have been linked to a number of food poisoning (*E. coli* and *Salmonella* infection) outbreaks in California and Europe.

Do Not Take if:

- You are **pregnant or nursing** (Because of its hormonal effects, alfalfa should be avoided during pregnancy and nursing.)
- You have **lupus** (Patients with systematic lupus erythematosus should avoid alfalfa tablets because they may lead to relapse.)
- You have **gout** (Due to the high content of purines, alfalfa should be avoided in patients with gout.)

If you have questions or concerns, contact your healthcare provider. A member of your care team will answer Monday through Friday from 9 a.m. to 5 p.m. Outside those hours, you can leave a message or talk with another MSK provider. There is always a doctor or nurse on call. If you're not sure how to reach your healthcare provider, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

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