



PATIENT & CAREGIVER EDUCATION

Lobelia

This information describes the common uses of Lobelia, 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?

Current evidence shows that lobelia is not effective for smoking cessation, asthma, or any other medical condition.

The active compound in lobelia is lobeline, which has a similar activity in the body to nicotine. This explains its attempted use as an aid in smoking cessation. Like nicotine, lobelia stimulates the central nervous system (CNS), dilates lung passage ways, and increases respiration rate. However at higher doses, lobelia has the opposite effect and causes CNS depression and reduced breathing rate.

In experiments with rats and mice, lobeline increased the release of stimulatory neurotransmitters dopamine and norepinephrine from specific parts of the brain, but it is still unclear what significance this has in the human body. Lobeline can have both additive and opposing effects when used at the same time as nicotine.

Data in humans are limited. A review of studies as well as a large multicenter trial do not support its use for smoking cessation.

What are the potential uses and benefits?

- **To treat asthma**
Although lobelia is thought to dilate the bronchial tubes, human data are lacking.
- **To treat depression**
Lobelia causes release of excitatory neurotransmitters in the brains of research animals. Human studies are needed.
- **To relieve symptoms from drug withdrawal**
No scientific evidence supports this use.
- **To induce vomiting**
There is no research to back this claim.
- **To reduce inflammation**
No scientific evidence supports this use.
- **To help with smoking cessation**
A review of studies and a large multicenter trial concluded that this herb is not effective for smoking cessation.

What are the side effects?

Dizziness, nausea, and vomiting; possible throat irritation with tablets or pastilles.

What else do I need to know?

Do Not Take if:

- **You are using nicotine-containing products:** Lobelia may have additive effects, resulting in toxicity.

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.

Lobelia - Last updated on February 9, 2022

All rights owned and reserved by Memorial Sloan Kettering Cancer Center