

Patient Fact Sheet

EPHEDRA

EPHEDRA (*Ephedra sinica*), also known as Ma Huang, is a shrub native to China. The green stems of the plant have been used as a medicine in Traditional Chinese Medicine. Ephedra is available as the dried herb and in pills, capsules, and powders. The main active ingredients are called *ephedra alkaloids*, particularly *ephedrine*.

WHAT IS IT USED FOR?

- ◆ Ephedra is used as a decongestant.
- ◆ It is used in Traditional Chinese Medicine (TCM) for asthma.
- ◆ It is used as a diuretic (to increase urine output) in TCM.
- ◆ It is included in some herbal diet pills.
- ◆ It is included in some herbal stimulants or “energy boosters”.

WHAT HAVE STUDIES SHOWN?

- ◆ Ephedra is an effective decongestant. The medicine pseudoephedrine, “Sudafed”, is a synthetic form of one of the ephedra alkaloids.
- ◆ Ephedrine (the main active ingredient of ephedra) is a bronchodilator (a medicine that opens the lungs and can help asthma attacks). However, it has more side effects than the prescription medicines that are now used as bronchodilators.
- ◆ Ephedrine may be helpful as part of a weight loss program. However, the studies that showed this were small and their results were mixed. They often used higher doses of ephedra than are recommended, and the patients had high rates of side effects.
- ◆ There are no studies of ephedra’s use as a diuretic (to increase urine output).

WHAT ARE THE SIDE EFFECTS?

Normal doses of ephedra can cause:

- ◆ Fast heartbeat
- ◆ Anxiety, jitteriness and insomnia
- ◆ Allergic reactions, including itching and hives.

Higher doses of ephedra can cause very fast heartbeat, high blood pressure, irregular heartbeats, stroke, vomiting, psychosis, and even death.

Long-term use may cause weight loss and heart problems.

(continued)

IS IT SAFE FOR CHILDREN AND PREGNANT WOMEN?

Ephedra is not recommended for children or for women who are pregnant or nursing.

WILL IT INTERFERE WITH MY OTHER MEDICATIONS OR MY MEDICAL CONDITION?

- ◆ In general, people with the following conditions should not use ephedra: High blood pressure, heart problems, diabetes, cerebral insufficiency (not enough blood to the brain), thyroid problems, depression, anxiety, insomnia, anorexia or bulimia, kidney stones, urinary retention, or an enlarged prostate gland. If you have any of these conditions and want to take ephedra, check with your health care provider first.
- ◆ In general, it is not safe to use ephedra if you are using any of the following kinds of medicines: Decongestants, heart medications, MAO inhibitors (a kind of antidepressant), nervous system stimulants including amphetamines, steroids (including Decadron), or medicines for diabetes.
- ◆ Taking ephedra and caffeine (in coffee, tea, guarana, or cola nut) together can cause more side effects than taking either one alone.

WHAT ARE TYPICAL DOSAGES?

The FDA recommends no more than 24 mg of ephedrine per day (8 mg three times per day), for no more than 7 days in a row. Whole ephedra herb may contain 1% ephedrine (on average), so 800 mg of whole ephedra herb may contain 8 mg of ephedrine. Herbalists have traditionally recommended doses up to two or three times higher than this.

The following doses have been recommended for adults:

- ◆ Tea from whole ephedra herb: 1-4 grams per day, steeped in 1/2 cup of boiling water and divided into 4 or more doses per day.
- ◆ Tincture: 1-4 mL three times daily.

Follow your health care provider's instructions.

WHAT ELSE DO I NEED TO KNOW?

- ◆ Always tell your doctor or nurse practitioner if you are taking any herb, and before starting any new herb. Your health care provider needs to know everything you are taking to help you make decisions about your health care. Herbs can cause problems with other herbs, dietary supplements, or medications.
- ◆ Herbal products may contain chemicals or other species of plants.

SEE ALSO:

Ephedra Complete Monograph: <http://www.mcp.edu/herbal/ephedra/ephedra.pdf>

Ephedra Clinician Information Summary: <http://www.mcp.edu/herbal/ephedra/ephedra.cis.pdf>