

# PERFORMANCE ENHANCERS FACTS AND BOTTOM LINE



## EPHEDRA/EPHEDRINE

### What is it?

Ephedra are herbs from which you can extract a number of useful chemicals – including ephedrine. Ephedrine can also be manufactured synthetically.

### What are Ephedrine's uses?

Ephedrine is found in many medical products used to treat such things as stuffy noses, asthma, bronchitis, motion sickness and allergies. Ephedra/Ephedrine are also found in many traditional Chinese medicines.

### Do dietary supplements contain Ephedra/Ephedrine?

Yes! Many dietary supplements contain Ephedra/Ephedrine and promote their use for: weight loss, metabolic enhancement, increased personal energy or wakefulness, appetite suppression, improved mood, increased exercise tolerance and bodybuilding.

### How do I know if my supplement contains Ephedra/Ephedrine?

Hundreds of dietary supplements contain Ephedra/Ephedrine and may not list these substances in their ingredients. This is possible for two reasons:

1. Dietary supplements are under-regulated and so you cannot be certain what substances they actually contain. Check for a Drug Identification Number (DIN) because only products with a DIN have been approved for use by Health Canada.
2. Your supplement could have its Ephedra/Ephedrine content concealed under many possible alternative names such as: Cao Mahuang, Desert Herb, Ephedrae herba, Ephedra sinensis, Joint Fir, Ma Huang, Ma-Huang, Mahuang, Mahuanggen (ma huang root), Muzei Mahuang, Sea Grape, Yellow Astringent, Yellow Horse, Zhong Mahuang, Ephedra sinica, Ephedra intermedia, Ephedra equisetina, Ephedra distachya, Ephedra gerardiana, Ephedra shennungiana, Chinese Ephedra, Ma huang extract, Ephedra extract, Ephedra herb powder, ephedron and sida cordifolia

### Are products that contain Ephedra/Ephedrine safe?

Studies show that dietary supplements containing ephedrine can cause serious and possibly fatal side effects especially when combined with caffeine or other stimulants. Ephedrine has been linked to over 60 medical complications in Canada and 81 deaths in the United States.



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## **What are the side effects from using Ephedra/Ephedrine?**

They include such things as: dizziness, decreased appetite, stomach/bowel upset, restlessness, anxiety, irritability, sleep difficulties, headache, anorexia, nausea, vomiting, flushing, sweating, tingling, difficulty urinating, increased blood pressure, heart failure, tremors, headaches, irregular heart beat, seizures, psychosis, heart attacks and strokes.

## **Who is at the greatest risk?**

Anyone using dietary supplements containing Ephedra/Ephedrine is at some health risk but the people at greatest risk are those suffering from diabetes, heart conditions, anorexia, bulimia, enlarged prostate, glaucoma, thyroid disease, high blood pressure, kidney stones, anxiety, urinary retention and pheochromocytoma (an adrenalin producing tumor). These products should not be used during pregnancy or while breast-feeding.

## **Could Ephedra/Ephedrine interfere with my medications?**

Yes! Ephedra/Ephedrine may interfere with the function of certain medications, including: Dexamethasone, Digoxin, Ergotamine products (such as Migranal, DHE 45, Cafergot, Gravergol, Ergomar), Oxytocin, Theophylline and MAO inhibitors such as Manerix. If you have concerns about potential medication interactions, you should discuss them with your physician or pharmacist.

## **What has Health Canada done to protect Canadians?**

Health Canada has authorized the use of ephedrine only in nasal decongestants and it does not permit the sale of products:

1. Containing more than 8 milligrams per dose;
2. That recommend the use of more than 32 milligrams of ephedrine a day;
3. That recommend being used for more than 7 days;
4. That combine ephedrine with other stimulants such as caffeine; and
5. That make claims regarding appetite suppression, weight loss, metabolic enhancement, increased exercise tolerance, increased energy or wakefulness, bodybuilding and euphoria.

## **Can I sell or supply Ephedra/Ephedrine products that I receive from foreign suppliers?**

No - due to concerns that Ephedra/ephedrine can be altered to produce certain "street" drugs. In the interest of public safety, importing or reselling ephedra/ephedrine products is illegal unless you are a manufacturer or wholesaler licensed to produce or sell these products. Customs Canada is now confiscating ephedra/ephedrine products being brought into Canada.



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## **Are there concerns for athletes?**

Yes. The World Anti-Doping Agency and CISM (the Conseil International Du Sport Militaire) have restricted the use of Ephedra/Ephedrine. Ephedra/ephedrine are not restricted when used “out of competition”. However, during competitions, ephedra/ephedrine are prohibited when the athlete’s urine concentration exceeds 10 micrograms/ml.

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