

# **Don't Get Burned by Fat Burners**

By Eric D'Agati

In America's quest for a quick fix for fitness and weight loss, supplements that promise to boost energy and fat metabolism have flooded the marketplace. In 1997, 60 million Americans spent \$3.24 billion dollars on herbs. Mostly due to manufacturer's claims that their products are "all-natural", many supplements are thought of as safe by the general public. Natural does not always equal safe, however, and many innocent people are unknowingly putting themselves at risk by taking these products.

The substance that most of these so-called "fat-burners" contains is called ephedrine. Ephedra is derived from an Asiatic shrub and contains ephedrine, which has a molecular structure similar to amphetamine. Ephedrine is found in herbal teas and dietary supplements containing Ma Huang (Chinese ephedra or herbal ephedrine) as well as supplements marketed for weight loss and for increasing energy. Popular products containing ephedrine on the market include Stacker (2 & 3), Ripped Fuel, Metabolife 356, Xenadrine, Ultimate Orange, Diet Fuel, Advocare, and Hydroxycut. Ephedrine is also found in various asthmatic and cold and cough medications in pill, tablet, or inhaler form, including Primatene, Bronkotabs, Co-Tylenol, Vicks Inhaler, and Alka-Seltzer Plus.<sup>i</sup>

According to Dr. Michael Colgan, "Use of these compounds should be very judicious. Any more than 25-50 mg per day of the active drug will cause quick habituation and loss of effect, as well as a host of side effects including raised blood pressure, anxiety, and insomnia."<sup>ii</sup> Ephedrine should not be used by persons who have anxiety disorder (panic attacks), glaucoma, high blood pressure, or anyone taking MAO inhibitor drugs, commonly prescribed for depression."<sup>iii</sup>

Ma huang (ephedrine) also has been associated with nervous and cardiovascular system effects including stroke, psychosis, heart attack, seizure, and abnormal heart rhythm. Ma Huang has been linked to over 800 reports of illness and 38 deaths in the United States.<sup>iv</sup>

In June of 1999, a significant lawsuit was filed in the State Supreme Court of NY, alleging that a 37-year-old female health club member died because of nutritional supplements that were recommended to her by a personal trainer. The mother of two had a stroke while performing a light set of squats at the gym. She was taken to a local hospital where a CAT scan determined that she suffered a large hemorrhage in her brain. She died later that night.<sup>v</sup>

It is believed that Thermadrene, a product containing ephedrine, interacted with medication she was taking for hypertension, causing her untimely death. Unfortunately this woman's death is not an isolated incident. In a recent report from the Division of Clinical Pharmacology and Department of Medicine at the University of California Poison Control System, investigators reviewed 140 reports of adverse events related to the use of dietary supplements containing ephedra alkaloids. Ten events resulted in death and 13 events-representing 26 percent of the definite or probable cases-produced permanent disability. Instances cited included individuals from ages 22 to 59 who suffered permanent disabilities or death from using the product for as little as *one day*. Many of these victims also showed no preexisting conditions or concurrent risks prior to use of the product.<sup>vi</sup> The Washington Post reports that at least 75 lawsuits have been filed around the country.

The FDA has proposed a maximum daily dosage for ephedrine of 24 milligrams per day for no more than 7 days.<sup>vii</sup> Due to the Dietary Supplement Health and Education Act of 1994, the FDA does not regulate ephedrine or any other substance sold as a dietary supplement. These loose guidelines allow for many loopholes for many supplement manufacturers in an industry that is primarily self-regulated. Some states, including Florida, Nebraska, New York, and Ohio have taken the issue upon themselves and banned the sale of certain ephedra products.

Nonetheless, ephedrine products are sold at stands in every local mall, health food stores, and even at convenience store counters. This leaves the opportunity for the very potentially dangerous substance to be sold by unqualified sales representatives to many buyers who should not be purchasing the product. Ephedrine has also become very popular among teenagers and twenty-some things as party drug, with its energy boosting properties allowing them to party longer and stronger than without. Deadly consequences can arise from mixing ephedrine with alcohol, as was the case when a young college student died in Florida last year when he took ephedrine while partying on Spring Break.

Until stricter laws are enforced to the distribution and use of ephedra-based products, consumers need to take extreme precaution when considering any weight loss or energy boosting substances. A medical professional should be consulted prior to adding any dietary supplement to the diet.

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<sup>i</sup> The Ergogenics Edge, Pushing the Limits of Sports Performance - Melvin H. Williams

<sup>ii</sup> The New Nutrition, Medicine for the Millennium - Dr. Michael Colgan

<sup>iii</sup> Prescription for Nutritional Healing, 2<sup>nd</sup> Edition - Dr. James Batch, Dr. Phyllis Batch

<sup>iv</sup> Contemporary Nutrition

<sup>v</sup> "Health Club Sued for \$320 Million" -D.Herbert, Fitness Management magazine, October 1999

<sup>vi</sup> "Ephedra Alkaloids and Adverse Events" - Ralph LaForge, Idea Source magazine, March 2001

<sup>vii</sup> Contemporary Nutrition