



4905 5th Ave. Fort Rucker, AL 36362-5363
Comm. (334) 255-3770 Fax (334) 255-2266
<https://safety.army.mil>

The Skinny on Stimulants

Col. Manuel Valentin
Command Surgeon
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

As Soldiers, we're expected to meet rigorous height and weight standards and perform well physically. Unfortunately, many Soldiers resort to an "easy" solution for weight loss and physical fitness improvement through metabolic enhancers.

While many of these enhancers, including thermogenics and stimulants, are legal and readily available for purchase at commissaries, exchanges, local chain stores and online, banned products continue to be sold on the market. Soldiers should be aware the purchase or use of drugs, supplements or banned products, or the misuse of prescription drugs, is illegal and may be punishable under the Uniform Code of Military Justice. In addition, these items generally just aren't good for you — let's take a look to see exactly how they affect the human body.

Thermogenics are drugs or supplements that promote weight loss and increase energy. Most thermogenic products usually contain stimulants that increase energy levels and blood flow, leading to a rise in body temperature. They are typically classified by the Food and Drug Administration as food additives; therefore, they're not controlled by state or federal medical agencies. Common thermogenic substances contain different forms of caffeine such as kola nut, guarana and green tea. Other thermogenics include bitter orange, ma huang (ephedra) and dimethylamylamine, or DMAA, which was originally sold as a nasal decongestant.

In 2004, the FDA banned the use of ephedra in over-the-counter supplements. Recently, the Department of Defense suspended the sale of products containing DMAA at all military installations after a Soldier collapsed and died during a unit run and another died following a physical fitness test. Both Soldiers were reportedly using supplements that contained DMAA.

Even over-the-counter thermogenic supplements can produce significant or life-threatening side effects such as changes in heart rate, increased body temperature, addiction, gastrointestinal problems and anxiety, among others. Nationwide, many deaths have been associated with their use because of significant cardiac compromise or severe heat injuries. Although many over-the-counter supplements and energy enhancers can produce injury or death, the emphasis on DMAA is the result of the possible link between the two Soldiers' deaths and their suspected use of products containing this supplement.

Most medical professionals acknowledge DMAA is linked to serious medical conditions including dangerous increases in blood pressure, headaches, lightheadedness, stroke, depression, irregular heartbeat, dehydration, tremors and lethal exhaustion. In our Army population, the usual mechanism of bodily harm from the use of thermogenics is heat injury, which could lead to heat stroke. Although increased ambient temperature is one possible cause, heat injuries can also occur with low ambient temperature, and we've seen an increased trend during the cooler months of fall, winter and early spring. It's well known that thermogenic substances can

cause a dramatic and rapid increase in body temperature, possibly leading to heat stroke or death if the body's natural compensating mechanisms are overwhelmed.

For now, the FDA and DOD continue to study many of these substances, including DMAA. Although these products remain legal, many have been placed on the U.S. Anti-Doping Agency's banned list. The DOD has promised better guidance for many of these drugs is forthcoming after a review of past and current research.

Although the use of vitamins and certain amino acids are encouraged for most individuals, the use of performance-enhancing substances and over-the-counter weight loss supplements are not recommended. If you feel you must use these products for any reason, consult your personal physician, as he or she can discuss the pros and cons of each product as it pertains to your specific health and circumstances.

In the meantime, there's no substitute for a well-balanced diet, good rest and moderate exercise to achieve your personal weight loss goals and performance standards. Don't bet your life on the alternative!

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