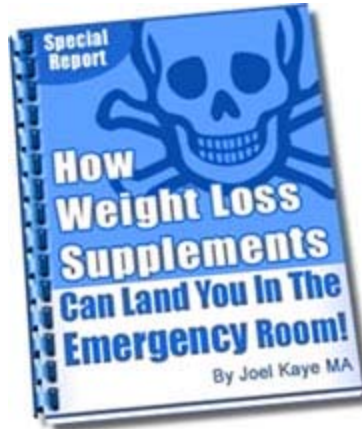


**Special Report: How Weight Loss Supplements Can Land You In The Emergency Room!**



**By Joel Kaye, MA**

People are looking for that magic pill to lose weight. It is only human to want to take the easy way out. How great would it be to eat whatever you want, not have to exercise and just take a pill that will cause you to lose weight? This is what the manufacturers of diet supplements want you to believe. How many ad's have you seen that included a before picture of a person who was heavy and then the after picture where they look like a Greek god?

The fact of the matter is this. If this were true then everyone would eat whatever he or she wanted and still look like a Greek god or goddess. Not only are weight loss supplements ineffective but also they can be extremely dangerous. This is not just a matter of saving your money but saving your life.

Consumer reports conducted a report on some of the most dangerous weight loss supplements. Every one of these time bombs can be bought over the counter. These unsafe supplements include:

**Aristolochia** - An herb conclusively linked to kidney failure and cancer in China, Europe, Japan, and the U.S.

**Yohimbe** - A sexual stimulant linked to heart and respiratory problems.

**Bitter Orange** - Has ingredients similar to those of the banned weight-loss stimulant ephedra.

**Chaparral, Comfrey, Germander, and Kava** - All known or likely causes of liver failure.

As stated in the consumer report article, 76 million dollars was spent on just three of these supplements - Androstenedione, Kava and Yohimbe. Many of these supplements are banned in other countries but not in the United States.

The Consumer Reports article states the following: These widely available dietary supplements may cause cancer, severe kidney or liver damage, heart problems, or even death. Consumers should avoid them.

- These supplements are sold under a number of different names, making it difficult for consumers to know what they're purchasing.
- Most also appear in combination products marketed for a broad array of uses, such as aphrodisiacs, athletic-performance boosters, and treatments for anxiety, arthritis, menstrual problems, ulcers, and weight loss. Even though the dangers are known about these diet supplements, they are still readily available in the USA. The only weight loss supplement that has been banned is ephedra. This banning was a result of some deaths from athletes taking this supplement.

"The standards for demonstrating that a supplement is hazardous are so high that it can take the FDA years to build a case," said Bruce Silverglade, legal director of the Center for Science in the Public Interest, a Washington, D.C., consumer-advocacy group.

"Consumers are provided with more information about the composition and nutritional value of a loaf of bread than about the ingredients and potential hazards of botanical medicines," said Arthur Grollman, M.D., professor of pharmacological sciences at the State University of New York, Stony Brook, and a critic of DSHEA.

Gretchen Fitzgerald age 21 suffered seizures. She took Xenadrine EFX "thermogenic" diet pills to boost her energy while studying for final exams, believing they were safe because they were labeled ephedra-free. After three weeks of taking the

product she had a seizure. The neurologist who she consulted told her the bitter orange in the Xenadrine was the probable cause. Bitter orange mimics ephedra in chemical composition and function.

Contaminants also regularly turn up in supplements. In 1998 Richard Ko, Ph.D., of the California Department of Health Services reported that 32 percent of the Asian patent medicines he tested contained pharmaceuticals or heavy metals that weren't on the label. In 2002, the FDA oversaw a voluntary manufacturer recall of a "prostate health" supplement called PC SPES, that, according to tests by the California department, contained a powerful prescription blood thinner, warfarin. More investigation by consumer reports states that many manufacturers market their supplements as "natural," exploiting assumptions that such products can't harm you. "That's a dangerous assumption", said Lois Swirsky Gold,

Ph.D., director of the Carcinogenic Potency Project at the University of California, Berkeley, and an expert on chemical carcinogens. "Natural is hemlock, natural is arsenic, natural is poisonous mushrooms," she said.

The dangers of aristolochic acid have been known since at least 1993, when medical-journal articles began appearing about 105 patrons of a Belgian weight-loss clinic who had suffered kidney failure after consuming Chinese herbs adulterated with Aristolochia. At least 18 of the women also subsequently developed cancer near the kidney. These findings prompted the FDA to issue a nationwide warning against Aristolochia in 2001 and to impose a ban on further imports of the herb. But in early 2004, more than two years after the import ban went into effect, Consumer Reports was able to purchase products online that were labeled as containing Aristolochia.

In 2003, Gold identified more than 100 products for sale online with botanical ingredients listed by the FDA as known or suspected to contain aristolochic acid.

Weight loss supplement manufacturers are given plenty of leeway in saying their supplements are pure and unprocessed. This allows them to strengthen the ingredients making them dangerously active compounds. This is especially true with regard to the ones sold as thermogenic stimulants that boost the metabolism making them very dangerous. One manufacturer listed an ingredient as theophylline derived from black tea. Theophylline is a prescription drug and is used for treating asthma, but is not prescribed much because it can produce seizures and irregularly heartbeats even at relatively low doses.

ALBANY, NY, August 10, 2001-- State Health Commissioner Antonia C. Novello today warned against the use of products containing



Dinitrophenols or DNP as a supplement for weight loss. The warning results from a report to the Department's Pesticide Poisoning Registry on the recent death of a Long Island resident who had reportedly used DNP for four days. DNP is an agricultural pesticide (a herbicide) but is not registered for use in New York State.

According to the Agency for Toxic Substances and Disease Registry, it was sold in the 1930's in diet pills but was banned in 1938 because of severe health effects.

Dinitrophenols are toxic to the liver, kidney and nervous system. The chemical causes hypothermia (increased body temperature), dehydration, tachycardia (rapid heartbeat), restlessness and manic behavior and convulsions, which typically signify an immediate life-threatening intoxication. There are anecdotal reports of other deaths from DNP as a weight loss supplement. Although DNP use in diet pills was banned in 1938, it is currently

being marketed and used by body builders, and is also advertised and marketed on the Internet. The extent of its use is unknown at this time.

The State Health Department has contacted the federal Food and Drug Administration (FDA) to explore ways to warn consumers about the dangers of DNP, to identify product names under which it is being sold and to dissuade its further use. The warning also will be sent to DNP web sites identified by the Department, bodybuilding web sites and bodybuilding magazines. Metabolife is just one of several popular diet pills - others include Xenadrine, Trimspa, Hydroxycut, ThermaSlim, Thermbuterol, Stacker 2, Diet Pep and Diet Fuel.

The dangers of diet pills like these stem from the fact that they combine caffeine with the stimulant known as mahuang. Diet pills such as these constrict the blood vessels while speeding the heart and the nervous system. What worries experts is that it's chemically identical to

ephedrine, a synthetic compound regulated for safety. Asthmatics take ephedrine to shrink swollen tissue in their airways.

Until the 1980s, it was also used in over-the-counter cold and allergy pills, as nasal decongestants. But when states started restricting sales, manufacturers switched to a gentler chemical called pseudoephedrine. "Ephedrine had too much potential for abuse," says Dr. Darrell Hulisz of the University Hospitals of Cleveland. "It was used as cheap, legal speed."

Weight-loss drugs include benzene derivatives, laxatives, herbal preparations, amphetamines, appetite suppressants, serotonin reuptake inhibitors, neuropeptide- $\gamma$  inhibitors, hormones, beta-3 adrenergic receptor stimulants, and any others in the research and development phase. Weight-loss drugs have long been promoted as an effective treatment for "obesity," even though they very rarely produce long-lasting weight loss or

improved health status, and often have serious side effects.

Currently, the agency responsible for regulating weight-loss drugs, the Food and Drug Administration, appears to bow to pressure from drug companies to approve weight-loss drugs without requiring sufficient long-term testing, and has not demonstrated a commitment to guard the public's health.

Here are a few facts:

1.) Weight-loss drugs fail to achieve permanent weight loss and can result in negative health consequences.

2.) The governmental agency responsible for regulating weight-loss drugs has not protected consumers from dangerous weight-loss drugs.

3.) People taking diet drugs are rarely given sufficient information to allow them to give true informed consent.

Because of the above statements, most of these weight loss quick fixes include a small-print recommendation that you adopt a lower-calorie diet and an exercise program -- which is going to help you lose weight anyway. Supplements generally aren't well regulated, so the actual content of the active ingredients in diet pills can vary widely from product to product.

All diet pills have potentially dangerous side effects. The diet channel presented the following information: Be aware of the following information about herbal preparations and nutritional supplements little known to the consumer:

Unlike prescription medications, neither the Food and Drug Administration nor any other governing body oversees the manufacturing of these

products. The supplement manufacturers currently have the advantage - their products don't have to be tested for their safety, quality, effectiveness, or appropriate dosage. The public tends to believe that over-the-counter herbal products and nutrition supplements have been researched, tested, and inspected.

Many times, what the manufacturer claims is in the product is not actually present in the quantities labeled.

Manufacturers do not have to fund studies to prove the effectiveness, side effects, or appropriate dosage of these products as manufacturers of medications do. Since studies can cost millions of dollars, and studies on "nutritional supplements" are not legally required, most manufacturers, for financial reasons, choose not to do studies. Those that do choose to conduct research, generally do "in-house" studies, which are not reliable.

Independent organizations, not product manufacturers with a vested interest in the product, should conduct research on a product, in order for research to be valid. Many manufacturers rely on anecdotes from users who claim the product works. Anecdotes are not valid research. The manufacturers fail to tell you about any negative customer testimonials associated with the product or any potential side effects. They also fail to research the reason behind how the product works if it does appear to work or makes you feel better - many times the product "working" is due to significant pharmacological and physiological actions in the body which produce terrible long-term side effects. Many times, what makes us feel better (or in this case, lose weight) can take a terrible toll on the body in other ways (consider the "all natural" marijuana, and cocaine). Natural does not necessarily equal safe and harmless.

You can't tell if one brand is superior to another unless studies are done to compare each product's effectiveness. Expensive brands do not guarantee quality, but they do fatten pocketbooks.

Manufacturers can make numerous claims for what these products can do, even if research has never been done to substantiate the claim. Because various claims are legal to make, many manufacturers do make outrageous claims.

The salespeople who promote these products generally have little to no medical or nutritional background, and cannot and do not offer sound advice about how the product works or its potential side effects.

Due to strong public interest in natural remedies and herbs, we see more and more research done on these products, which is a very good thing. Many products show quite promising effects. On the other hand, many appear to be simply expensive,



useless, and overly hyped. Of course, without the proper research done, you can't know the difference.

The following list describes some of the most common ingredients in many of today's marketed weight loss supplements:

**Ephedra (Ma Huang)** - The active ingredient in ephedra (also known as ma huang) is ephedrine, which is structurally similar to amphetamines. Ephedra has been linked to hundreds of incidents, including high blood pressure, abnormalities in heart rhythms, seizures, heart attacks, and even death. Some states have laws that ban the sale of ephedra because of its demonstrated serious side effects. Ephedra is in products such as metabolife and "herbal phen-fen."

**St. John's Wort** - Here's an example of an herbal preparation that actually has been researched extensively overseas in independent studies and

shows promise. Studies show that St. John's Wort can raise serotonin levels and treat mild depression. But, if you don't suffer from depression-related weight gain, significant food cravings, or an alteration in serotonin levels, St. John's Wort might not help in your weight loss quest. Thus far, there have been few reports of weight loss associated with St. John's Wort. St. John's Wort has shown some side effects such as light sensitivity. St. John's Wort is the accompaniment to ephedra in "herbal phen-fen" preparations. Due to the side effects of ephedra, however, don't take this combination.

**Chromium Picolinate** - Despite the hype and claims, chromium picolinate is not a miracle pill that helps you lose weight, burn fat, and build muscle. It is a prime example of a supplement manufacturer extrapolating false theories from poorly done research and turning it into a weight loss panacea.

Some flawed studies done in the 1990's suggested that chromium might help build muscle mass. From this research, the manufacturers extended the list of claims for what this supplement could do from metabolic rate increases to weight loss and beyond. This old research has since been shown to be inaccurate by better, more extensive studies. In order to put an end to the false claims touted by chromium picolinate manufacturers, the Federal Trade Commission (FTC) stepped in. The FTC ruled that companies that distribute chromium picolinate do not have sufficient scientific evidence to substantiate that chromium picolinate could increase metabolic rate, promote weight loss, or reduce body fat.

**Pyruvate** - The claims made about pyruvate run just as far and just as false as the claims for chromium picolinate. Again, it's a case of manufacturers'

extrapolating from flawed research studies, inconclusive studies, or no studies at all to make a profit. No established connection exists between pyruvate and weight loss.

**Guarana** - Despite being touted as a metabolism booster and fat burner, Guarana's active ingredient is caffeine, which can cause a temporary increase in metabolic rate.

**Phenylpropanolamine (PPA)**- Phenylpropanolamine (PPA) is the active ingredient found in over-the-counter weight loss pills like Dexatrim and Acutrim. PPA has been shown in studies to help increase weight loss but not significantly. In studies, PPA, along with diet and exercise increased weight loss by only an average of three pounds, compared to diet and exercise alone. Taking more than the recommended dosage has been linked to elevated blood pressure, stroke and heart palpitations. The FDA has now banned the use of

PPA in over the counter remedies due to many potential documented serious side effects.

**Herbal Weight Loss Teas/Senna** - Herbal teas, many of which contain senna, aloe, buckthorn, and other plant-derived laxatives, can cause diarrhea, vomiting, nausea, stomach cramps, chronic constipation, fainting, and even death if you take excessive amounts. These products that you can buy in health food stores and through mail-order catalogs, are used for weight loss based on some consumers' belief that increased bowel movements prevent absorption of calories, thus preventing weight gain. However, a special committee of the FDA concluded in 1995 that studies show that laxative-induced diarrhea does not significantly reduce absorption of calories. Laxatives do not work on the small intestine, where calories are absorbed, but rather on the colon, the lower end of the bowel.

**Chitosan/Chitin** - Chitosan is a fiber that comes from the skeletons of crabs and other crustaceans. Lately, there have been a slew of claims that chitosan "traps fat" and can help you lose weight. Some research on mice shows that chitosan can be helpful in reducing blood sugar and cholesterol levels. But, it does not show that it reduced the weight of obese mice. The European Journal of Clinical Nutrition printed an article that told of a well-controlled study of 34 overweight people. It showed no correlation between chitosan intake and weight loss. Thus, weight loss claims associated with this product appear to be unsubstantiated.

Be especially wary of the following claims for products:

- Fat burner/Burn fat/Fat trapper/Fat Blocker
- Quick and easy weight loss

- Secret formula or ancient formula
- Weight loss breakthrough or scientific breakthrough
- Weight Loss without dieting or exercise
- New revolutionary method
- Secret, "magical," or "synergistic" ingredients

If a miracle pill existed, obesity rates would decline or at least remain the same. Keep this in mind next time you're tempted when you hear claims of easy, magic, quick weight loss.

-Joel Kaye

# References

*Online Resources:*

The Diet Channel at <http://www.thedietchannel.com>