Beware of Dietary Supplements – They Aren’t Always What They Seem
-- Dietary supplements can contain contaminants, be addictive and interact poorly with medications --

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Newark, N.J. — Jan. 13, 2011 — Dietary supplements are becoming more and more popular each year. According to the National Institutes of Health’s National Center for Complementary and Alternative Medicine, a 2007 survey found that 17.7 percent of American adults used dietary supplements other than vitamins and minerals every year.1 A more recent survey found that statistic has grown to more than half of the U.S. adult population,2 and in 2009 Americans spent $26 billion on dietary supplements.3 Consumers must be aware that dietary supplements are regulated differently than drug and food products, exposing users to potential dangers to their health.

“The evidence supports the fact that there is an increase annually in U.S. adults incorporating dietary supplements into their diets, which can be good and bad news,” says Dr. Steven Marcus, executive and medical director of NJPIES. “For some, dietary supplements will improve one’s health, but consumers need to heed warnings and be aware of all of the ingredients in the dietary supplement they take, because some ingredients can result in side effects that can cause serious harm, from diarrhea to severe organ damage.”

The Food and Drug Administration defines a dietary supplement as any product that is intended to supplement the diet that contains one or more ingredients including a vitamin, mineral, herb or botanical, amino acid, concentrate, metabolite, constituent, extract or any combination of these ingredients.4 Thousands of dietary supplements are sold in the U.S. today at retail stores and over the Internet.

A voluntary test and audit program for dietary supplement manufacturers is available through The United States Pharmacopeial Convention.5 USP is a not-for-profit organization that offers dietary manufacturers voluntary verification services, and all dietary supplements that are put through the USP’s testing and verification process can display the USP verified mark. According to Marcus, even if the supplement has the USP mark on the product, it is wise for consumers to do serious research and check with their
physician before ingesting any of these supplements. With the annual weight-loss resolution season approaching, when many of us who overindulged in holiday feasting want to lose those extra pounds gained, it is important to recognize that there is no magic bullet or diet supplement that will solve this issue. Keep these tips in mind before using dietary supplements:\(^6\)

- Avoid dietary supplements that you don’t need.
- Select supplements with only the ingredient(s) that you need.
- Avoid supplements with more than one herbal ingredient.
- Consult your pharmacist or physician if you take prescription medications or have health conditions.
- Avoid supplements sold to “treat” an illness. [If a supplement states it is to treat an illness, the FDA has authority to regulate it and remove it from the market!]
- Avoid supplements that claim to help you lose weight or improve your sexual or athletic performance.
- Purchase supplements at retail, not over the Internet.
- If you experience a side effect, stop using the supplement and inform your physician and the FDA.

According to Marcus, because dietary supplements are not tightly regulated, there is a great chance that you will never really know all the ingredients, which can be harmful to your health.

**Industry background**

According to the FDA’s website MedWatch, some dietary supplements contain lead, arsenic and mercury. In addition, the FDA reports that some supplements have ingredients that are addictive and/or stimulants that can cause hyperactivity, increased heart rate and insomnia. Some ingredients may also interact negatively with certain health conditions and prescription medications.

Generally, manufacturers do not need to register their products with the FDA nor get FDA approval before producing or selling dietary supplements. Since the FDA does not regulate supplement manufacturers, these manufacturers and distributors are not required to prove the effectiveness of their product nor do they have to tell consumers the possible side effects.

The FDA regulates dietary supplements under a different set of regulations than those covering “conventional” food and drug products (prescription and over the counter). Under the Dietary Supplement Health and Education Act of 1994 (DSHEA), the dietary supplement manufacturer is responsible for ensuring that a dietary supplement is safe before it is marketed. FDA’s post-marketing responsibilities include monitoring safety — e.g., voluntary dietary supplement adverse event reporting; product information, such as labeling, claims and package inserts; and accompanying literature. The FDA is responsible for taking action against any unsafe dietary supplement product after it reaches the market. Manufacturers must make sure that product label information is truthful and not misleading.\(^7\)

Domestic and foreign facilities that manufacture/process, pack or hold food for human or animal consumption in the U.S. are required to register their facility with the FDA. For more information, see Registration of Food Facilities. The Federal Trade Commission regulates dietary supplement advertising.
About NJPIES
As New Jersey's only poison control center, the New Jersey Poison Information and Education System provides information on poison prevention and treatments. Chartered in 1983, NJPIES provides free consultation through telephone hotline services and the Web. Medical professionals such as physicians, registered nurses and pharmacists offer confidential advice regarding poison emergencies and provide information on poison prevention, drugs, food poisoning, animal bites and more. These specialists are available 24 hours a day, seven days a week.

NJPIES coordinates state poison education and research and is designated as the regional poison center by the New Jersey Department of Health and Senior Services and the American Association of Poison Control Centers. It tracks incidences of adverse reactions to food, drugs and vaccines in order to monitor potential public health issues and provide data to the U.S. Food and Drug Administration and the Centers for Disease Control and Prevention. A division of the Department of Preventive Medicine and Community Health of the New Jersey Medical School of the University of Medicine and Dentistry of New Jersey, its state-of-the-art center is located on the school's Newark campus.

New Jersey residents seeking immediate information about treating poison emergencies, and those with any drug information questions, should call the toll-free hotline, 800-222-1222, anytime. The hearing impaired may call 973-926-8008. For more information, visit www.njpies.org or call 973-972-9280.

About UMDNJ
The University of Medicine and Dentistry of New Jersey is the nation's largest freestanding public health sciences university, with more than 5,500 students attending. The state's three medical schools, a dental school, a graduate school of biomedical sciences, a school of health-related professions, a school of nursing and a school of public health are housed on five campuses — Newark, New Brunswick/Piscataway, Scotch Plains, Camden and Stratford. Annually, there are more than 2 million patient visits at UMDNJ facilities and faculty practices at the campuses. UMDNJ operates University Hospital, a level I trauma center in Newark, and University Behavioral HealthCare, a mental health and addiction services network.

Cited sources:
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