# Colorado State University

### Extension

# Nutrition Misinformation: How to Identify Fraud and Misleading Claims

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Food and Nutrition Series | Health

by L. Bellows and R. Moore\*

With the growing body of knowledge supporting the connection between diet and overall health, many consumers are taking personal health and nutrition decisions into their own hands. Individuals are becoming more reliant on nutrition information from sources such as websites, television, radio, newspapers, advertisements, friends, and family, thereby creating opportunities for nutrition misinformation and health fraud. Health fraud is defined as misrepresentation of health claims, and can range from a self-proclaimed medical expert who has discovered a so-called "miracle cure," to a food supplement or drug that is promoted with unsubstantiated health claims. Accurate nutrition information is science-based. peer reviewed, and replicable. Nutrition misinformation is not supported by science and may be misleading and incomplete. It can be challenging for consumers to tease out reputable versus fraudulent nutrition information and claims.

The following information regarding nutrition misinformation and fraud should serve as a guide, allowing the consumer to sift through nutritional claims in order to make the best decision for his or her personal health. Consumers should be aware of these top ten red flags for misleading claims:

- 1. Recommendations that promise a quick fix.
- 2. Dire warnings of danger from a single product or regimen.
- 3. Claims that sound too good to be true.
- 4. Simplistic conclusions drawn from a complex study.
- Recommendations based on a single study.
- 6. Dramatic statements that are refuted by reputable scientific organizations.

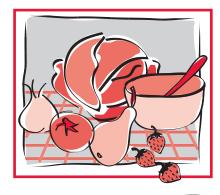
- 7. Lists of "good" and "bad" foods.
- 8. "Spinning" information from another product to match the producer's claims.
- 9. Stating that research is "currently underway," indicating that there is no current research.
- 10. Non-science based testimonials supporting the product, often from celebrities or highly satisfied customers.

Problems within the industry that aid in the promotion of fraudulent nutrition claims include:

- Limited enforcement of laws and regulations that prevent a producer from labeling and selling a product under the term "dietary supplement."
- Individuals identifying themselves as nutritionists who have dubious credentials from non-accredited schools.
- Research scientists who go public with their findings before their study has been published in a scientific journal or duplicated, resulting in consumer confusion.

# Who Are the Nutrition Experts?

A qualified nutrition expert is known as a registered dietitian (RD) or a licensed dietitian (LD), and has specialized degree in dietetics, nutrition, public health, or related sciences from an accredited university. These individuals may also hold advanced degrees such as M.S., M.Ed., Sc.D., M.D. or Ph.D., and must undergo continuing education on a regular basis. On the other hand, the terms "nutritionist" and "diet counselor," are not regulated and may be used by self-proclaimed experts without proper qualifications.



### **Quick Facts**

- Food fads, fad diets, health fraud, and misdirected health claims are all types of nutrition misinformation.
- A nutrition expert is known as a registered dietitian (RD) or a licensed dietitian (LD), and has a specialized degree in dietetics, nutrition, public health, or related sciences.
- Do not rely on manufacturer claims when determining if a product is safe. Instead, seek out unbiased science-based research.
- Consult a medical professional with questions about dietary supplements including vitamins, minerals, herbs and botanicals.
- The best way to protect against questionable health products and services is to be an informed consumer. Be aware of the common claims and themes that accompany nutrition misinformation.

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\*L. Bellows, Colorado State University Extension food and nutrition specialist and assistant professor; R. Moore, graduate student. 9/2013

### Resources to find a nutrition expert

- Receive a referral from a personal doctor or local hospital.
- Check with the Academy of Nutrition and Dietetics (AND) website to find a referral for a dietitian in your area: www.eatright.org.
- Contact your local public health department, Extension Service, or nutrition department of a state or local university.

### How to recognize reliable nutrition advice from media sources

Internet: Websites should be from credible web addresses ending in .edu (an educational institution), .gov (government agency), or .org (non-profit). Any web pages that end in .com (commercial) or .net (networks) should be reviewed with caution.

Books, newspapers, and magazines: Examine the author's qualifications. He or she should be educated in the field of nutrition/dietetics, and preferably hold a degree from an accredited university (RD, DTR, LD, or MD). These individuals should also belong to a credible nutrition organization.

**Television**: Make sure that the findings are well researched and repeatable; one study doesn't make a finding absolute. Be critical and look for follow up studies.

For all media sources: Make sure the information is referenced with cited sources. Seek out multiple perspectives regarding nutrition advice, and ask a nutrition expert about the source of the findings. Ensure that the information is current and informing, not attempting to advertise or sell a product.

### Types of Nutrition Misinformation

Food Fads and Fad Diets are defined as unusual diets and eating patterns that promote short-term weight loss, with no concern for long-term weight maintenance or overall health. These diets are often trendy and may be popular for short periods of time. Food fads and fad diets have no scientific basis, and promote ideas that consuming (or not consuming) certain food items, vitamin and mineral supplements, and combinations of certain foods, will help one lose weight or prevent/

cure a disease. Examples include the "grapefruit diet" or "low carb diet."

Health Fraud is similar to food fads and fad diets, except that it is intentionally misleading, with the expectation that a profit will be gained. Health fraud includes products or diets that have no scientific basis, yet are still promoted for good health and well-being. Common examples include promises of "fast, quick, and easy weight loss," or a "miracle, cure-all product."

Misdirected Health Claims are misguided statements made by producers that lead consumers to believe a food is healthier than actually the case. Examples include foods that are low in fat or low in carbohydrates, yet still high in calories.

### Target Populations for Questionable Treatments

Alternative treatments are designed to appeal to many individuals, however, certain age groups or those with a particular medical condition are more likely to be targeted. A healthy lifestyle-including a nutritious diet, regular physical activity, and avoiding tobacco products, may help delay conditions associated with aging, chronic pain, and other conditions.

#### **Older Adults**

A large portion of healthcare fraud is targeted to those over the age of 65, and many victims belong to this population. Many products claim to reverse or delay conditions associated with aging, such as vitamins and minerals that claim to cure or prevent disease or lengthen life. There are no anti-aging treatments that have been proven to slow or reverse the aging process.

## Chronic Pain and Inflammation (Arthritis)

Individuals who suffer from chronic, painful, and/or incurable illnesses may turn to questionable treatments. Many of these illnesses, such as arthritis for example, may go into spontaneous remission, where pain and swelling can disappear for days, weeks, months or even years. When individuals experience such a remission, they may believe that a certain remedy or treatment has provided relief. These treatments not only are ineffective, but they may also do considerable harm and delay proper diagnosis and treatment. Those who suffer

from arthritis should see a physician for therapy tailored to their needs.

#### Cancer

Rates of Complementary and Alternative Medicine (CAM) use by Americans are particularly high among patients with cancer. Effective cancer treatment depends on early diagnosis and treatment, and the use of alternative treatments may allow the disease to progress beyond the treatable stage. For example, diets that are low in protein and many drugs marketed for cancer patients have no proven results. However, a small number of alternative treatments are finding a place in cancer treatment as a compliment to therapy in helping patients feel better and recover faster. Acupuncture, for example, has been effective in managing chemotherapy-associated nausea and vomiting and in controlling pain associated with surgery. Red flags for fraudulent cancer treatment claims:

- Treats all forms of cancer
- Skin cancer will disappear
- Shrinks malignant tumors
- Non-toxic
- Doesn't make you sick
- Avoid painful surgery, radiotherapy, chemotherapy, or other conventional treatments
- Treats non-melanoma skin cancers easily and safely

### **HIV/AIDS**

Some individuals who are HIV-positive or who have AIDS may spend millions of dollars collectively, abroad or illegally in this country, to obtain unproven drugs and therapy. These drugs provide little benefit and are often toxic. People who are HIV positive or who have AIDS may delay and/or interfere with effective treatment by using alternatives. For example, garlic and St. John's wort have been shown to adversely interfere with HIV medication.

#### Weight-Loss

Weight-loss schemes and devices are the most popular form of fraud. Weight-loss is a multibillion dollar industry that includes books, fad diets, drugs, special foods, and weight-loss clinics. Some products or treatments may lead to weight-loss, but the effect is usually temporary. In addition, fad

diets may not provide adequate calories or nutrients and can be harmful. Most dietary supplements are not reviewed and tested by the government before they are placed on the market.

The only way to lose weight effectively and safely is to increase activity while decreasing food intake. Weight-loss should be gradual, 1 to 2 pounds per week, to allow for the development and maintenance of new dietary habits. Consult a registered dietitian or medical professional to determine a safe and effective weight loss program.

#### Adolescence

Adolescents may experience feelings of insecurity about physical development, causing many to experiment with products that promise to enhance appearance or speed development. Weight loss methods are extremely popular and as many as 46% of teens report that they are currently trying to lose weight. Fad diets are especially dangerous during adolescence because teens have high nutritional needs required to support rapid growth and development.

#### **Athletes**

Athletes may be susceptible to unsubstantiated claims for ergogenic aids, or performance enhancing supplements, as they attempt to gain a competitive edge. Ergogenics are defined as substances or procedures that are reported to increase energy or otherwise enhance athletic performance. Athletes that already adhere to proper training, coaching, and diet, may look for an advantage by resorting to nutritional supplements. Nutritionally based ergogenic aids have increased in popularity with the ban of anabolic steroid use. The popularity of ergogenic aids may also be due to media sources such as magazines containing nutrition information for athletes. Popular products include aspartic acid, bee pollen, brewer's yeast, choline, gelatin, ginseng, glycine, inosine, kelp, lecithin, protein supplements and wheat germ oil.

# Summary: How Can You Protect Yourself?

The best way to protect against questionable health products and services is to be an informed consumer. The following list of claims and themes are common

with nutrition misinformation, and may help consumers evaluate questionable advertising and sales techniques:

- Does the seller promise immediate, effortless or guaranteed results?
- Does the advertisement contain words like "break-through," "miracle," "special" or "secret"? These are used to appeal to your emotions and are not scientific or medical words.
- Is the product or service a "secret remedy" or a recent discovery that cannot be found anywhere else?
- Is the product recommended for stress, or being promoted as "natural," claiming it will help "detoxify," "revitalize" and "purify" your body?
- Does the manufacturer claim that the product is effective for a wide variety of ailments, or a "cure all"? The broader the claims, the less likely they are to be true.
- Do the promoters offer testimonials or case histories of patients who have been "cured"?
- Are vitamin and mineral dose recommendations greater than the Dietary Reference Intake (DRI)? Reliable sources will make only recommendations that are in line with the DRIs.
- Is the product being sold by a selfproclaimed "health advisor"? Insist on identification and professional credentials that are nationally accredited and recognized, such as a registered dietitian (RD).
- Does the sponsor claim to have a cure for a disease (like arthritis or cancer) which is not yet understood by medical sources?
- Do the promoters use guilt or fear to sell the product?
- Does the advertisement claim Food and Drug Administration (FDA) approval? It is illegal to suggest FDA approval as a part of any marketing claim. However, all medical products sold across state lines must be registered with the FDA. Ask for the FDA proof of product listing if in doubt.
- Do the producers claim that the product is available in limited quantities and recommend the consumer pay in advance?
- Is there promise of a "money-back guarantee"?

### **Additional Resources**

For more information on spotting fraudulent claims, see the FDA website at: <a href="www.fda.gov/ForConsumers/">www.fda.gov/ForConsumers/</a>
<a href="ProtectYourself/HealthFraud/default.htm">ProtectYourself/HealthFraud/default.htm</a>.

The following fact sheets, available from Colorado State University Extension, include reputable information from nutrition experts:

- Nutrition for the Athlete
- Weight Loss Diet Books, Programs, and Products
- <u>Dietary Supplements: Herbals</u> and Botanicals
- <u>Weight Management: It's All</u> <u>About You</u>
- <u>Dietary Supplements: Vitamins</u> <u>and Minerals</u>

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