

Functional Foods – Super Nutrition or Marketing Hype?

Do you drink calcium-enriched orange juice, eat oatmeal to help lower your cholesterol or pick up an energy bar enhanced with antioxidants and Ginseng or Guarana to ward off the afternoon slump? If so, you - like millions of Americans everyday - are consuming one of many products on the market today that fall under the heading of *functional foods*.

Functional foods - the umbrella term for nutraceuticals and designer foods – have gone from a near nonexistent market in 1992 to a \$10 billion a year industry in 1999. And as one of the fastest-growing segments of the food industry, it continues to grow at a rate of nearly 10% each year in the U.S. Consumers are increasingly interested in the relationship between diet and health and eager to find foods that can help in their pursuit to achieve wellness. This interest has driven the market to introduce thousands of new products, some based on sound scientific evidence and many with unsubstantiated or questionable health claims.

Because functional foods fall into a variety of categories, regulation has been confusing and controversial. While there is no official definition of functional foods, they are considered to be *any food that may provide health benefits beyond the traditional nutrients it contains*. They include a wide range of foods and food products from whole foods such as fruits and vegetables that contain phytochemicals and antioxidants and whole grains and oats that contain soluble fiber that helps reduce serum cholesterol and risk of heart disease, to vitamin- or mineral-enriched foods like calcium-enriched orange juice and folate-enriched cereals, and to the more controversial products like soups supplemented with Echinacea or St. John's Wort (recently pulled off the market) or beverages with Ginseng or Ginkgo biloba.

The major concerns in industry and government are the inconsistency in regulatory guidelines for functional foods and the challenge of sending safe messages to consumers through scientifically-sound, truthful and lawful labeling of health claims. Because of the different classes of functional foods, there is no one law that mandates the labeling of food ingredients and their role in health promotion and disease prevention. Therefore, functional foods are marketed under a variety of government laws.

Currently, there are 11 approved health claims authorized under the Nutrition Labeling and Education Act (NLEA) of 1990 that have sound scientific evidence and consensus about the relationship between a nutrient or food ingredient and a disease or health-related condition. Functional foods carrying approved health claims have the most well-established and accurate approach in marketing and labeling and are subject to the tightest regulation.

The NLEA-approved health claims include the relationship between:

1. soluble fiber such as in whole oats and psyllium husk and coronary heart disease;
2. calcium and osteoporosis;
3. folate and neural tube birth defects;
4. dietary fat and cancer;
5. dietary saturated fat and cholesterol and risk of coronary heart disease;
6. sodium and hypertension (high blood pressure);
7. sugar alcohols and dental caries (cavities);
8. fruits, vegetables and grain products that contain fiber, particularly soluble fiber, and risk of coronary heart disease;
9. fiber-containing grain products, fruits and vegetables and cancer;
10. fruits and vegetables and cancer;
11. soy protein and heart disease.

Many functional foods today are marketed as dietary supplements and therefore fall under the less strict Dietary Supplement Health and Education Act (DSHEA) of 1994. This act permits the use of “structure/function” claims on products, such as “calcium builds strong bones,” without prior FDA authorization. Structure and function claims simply describe the effects of a vitamin, mineral or other compound on the normal function of the body. Significant scientific evidence is not required by this act and therefore, consumers should be more cautious about the claims made on these products. The growing selection of functional foods marketed as dietary supplements is increasing constantly, causing concern by government officials, scientists and dietitians. Evidence is limited, incomplete or unsubstantiated on many products bearing “structure/function” claims.

While there may be an important role the American diet for many of the functional foods on the market, experts agree that consumers should use some caution in evaluating some of the health claims. Functional foods can be a healthy addition to a lifestyle that includes a diet consisting of a wide variety of foods in addition to regular exercise. Recent efforts have been made in tightening regulation of functional foods and debate will continue as the market for functional foods continues to boom in the 21st century.

References:

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