How to Read Food and Dietary Supplement Labels

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From 1990–1997, use of nutritional supplements in the United States increased 130% (Eisenberg et al., 1993, 1998). In 1997, $5.1 billion was spent on supplements in the United States (Eisenberg et al., 1998). Nutritional supplementation has become an important component of many diets because people believe they do not get adequate nutrition from food alone (Murray, 1996). Ideally, nutritional needs should be met via whole foods and supplements should be used only when researched and found to have documented protective effects (“Position of the American Dietetic Association [ADA],” 2001).

According to the U.S. Food and Drug Administration (FDA) (2000), obtaining two-thirds of the recommended dietary allowances of nutrients from food sources is adequate nutritional intake for healthy people. However, food sources alone may be inadequate because studies sponsored by the U.S. government have found nutrient deficiencies in about 50% of the U.S. population (FDA, 2000). In fact, 80% of the U.S. population consistently consumes less than the recommended daily allowances (Murray, 1996; National Research Council, 1989). Furthermore, ADA (“Position of ADA,” 2001) and FDA (2000) do not address the unique needs of patients with cancer or other illnesses. Nutritional requirements change over people’s lifespans and increase with the stress of illness and treatment.

**Dietary Supplements**

In 1994, the U.S. Congress passed the Dietary Supplement Health and Education Act (DSHEA), which included an expanded definition of dietary supplements and dietary ingredients and required specific information for ingredient and nutrition labeling. As defined in DSHEA, the term dietary supplement goes beyond essential nutrients and includes herbs, fish oils, enzymes, glandulars, and combinations of these items (FDA, 1995). FDA’s definition (1995) of a dietary supplement includes any product (except tobacco) that

- Is intended to supplement the diet and contains one or more of certain ingredients such as a vitamin, mineral, herb or botanical, or amino acid
- Is any dietary substance used to supplement the diet by increasing total intake
- Is a concentrate, metabolite, constituent, extract, or combination of these
- Is intended for ingestion
- Is labeled as a dietary supplement
- Is not a conventional food.

DSHEA allows for the use of a variety of acceptable statements and claims on product labels. Claims concerning the use of supplements to diagnose, prevent, treat, or cure specific diseases cannot be made. For example, a product may not claim to cure or treat cancer. DSHEA also mandates that retail providers make third-party materials available to help consumers understand health-related benefits and risks associated with dietary supplements. This information cannot be specific to particular brands and may not have product promotion materials attached. Despite these efforts, consumers often are confused about what sometimes appears to be contradictory information on labels.

A basic concern is that many people are not able to decipher the components of foods or supplements. For example, what percentage of a juice product is juice? What is natural? What is a serving size? How much fiber is adequate? How much protein is enough? What is RDA (recommended daily allowance), DRI (dietary reference intake), %DV (percent daily value)? For many, reading food or supplement labels is one of life’s great mysteries. Table 1 defines acronyms commonly included on food and supplement labels. Consumers, including healthcare professionals and patients with cancer, must become more knowledgeable about the foods they eat and the supplements they take. This begins with learning how to read labels.

**Table 1. Terms Commonly Included on Food and Dietary Supplement Labels**

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>RDA</td>
<td>Recommended daily allowances were designed to evaluate groups of people, not individuals. They are based on the needs of healthy people under usual environmental stress but do not address individuals with unique nutritional needs.</td>
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<tr>
<td>RDI</td>
<td>Reference daily intakes are for proteins, vitamins, and minerals. These values are based on RDAs.</td>
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<tr>
<td>DRV</td>
<td>Daily reference values are measurements of food nutrient components, such as fat and fiber, that do not have established RDAs but do have a relationship with health or wellness.</td>
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<tr>
<td>DRI</td>
<td>Dietary reference intakes are revised and updated RDA recommendations. DRIs were established in 1997 and based on 1989 RDAs. They represent a collaborative effort between the United States and Canada.</td>
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<tr>
<td>%DV</td>
<td>Percent daily value is a measurement of a particular nutrient in a serving of a food or supplement. It is based on a 2,000-calorie diet.</td>
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<tr>
<td>UTL/UL</td>
<td>Upper tolerable limit or upper limit represents the maximum amount of a nutrient (i.e., food plus supplemental intake) that can be consumed in a day without adverse effects.</td>
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