



ELITE  
Personal Training and Fitness Solutions

# HEALTH TOPIC OF THE WEEK

## 9/18 - Alphabet Soup: Understanding RDAs and Other Values

### Introduction

The field of nutrition is filled with confusing terms found on the labels of foods you purchase - Recommended Dietary Allowances (RDAs), Daily Values (DVs), Dietary Reference Intakes (DRIs), and more. Few people aside from nutritionists really understand the differences between these terms. This article provides clarification.

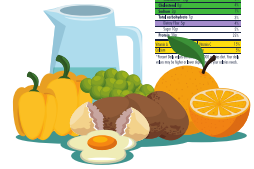
So this week's health topic is designed to help you understand some of the confusing terms found on your food labels. I'm betting that you will find this newsletter to be a bit dry and tedious. However, the content is intended more as a reference to help you figure out food labels and assist you in determining what to put into your body.



**Food labels could be complicated and confusing**

### Recommended Dietary Allowance (RDA)

This value refers to the average minimum daily amount of a specific nutrient needed to prevent clinical nutrient deficiency in almost all healthy people in a particular group defined by age and sex. RDAs were developed to address only a selected set of nutrients and nutrient deficiency diseases and are now just one category of measurements included in broader dietary reference intakes.



### Dietary Reference Intake (DRI)

Introduced in 1997, DRI values were established to support guidelines for a broad range of nutrients and minerals, not only to prevent nutrient deficiencies, but also to enhance health and reduce the risk of chronic diseases such as osteoporosis, cancer, and cardiovascular disease. DRIs are what underlie the U.S. dietary guidelines and food labeling regulations.



Elite Personal Training and Fitness Solutions does not provide medical treatment or intervention. We acknowledge scientific evidence that appropriately intensive exercise and sustainable nutritional intervention can have significant impact on chronic health disorders and obesity, dramatically improving symptoms when recommendations are followed. Please visit us at [Eliteptf.com](http://Eliteptf.com) for more information and to schedule your evaluation.

## Adequate Intake (AI)

This value is determined as a range of recommended intake (rather than just a minimum) and is used for nutrients—such as vitamin K, manganese, and potassium—for which there is not a corresponding clinical deficiency disease. Tolerable upper intake level (UL) is the maximum amount of a nutrient that is considered safe for individuals, including those in sensitive subgroups, to consume daily for an extended period.



Exceeding the UL does not mean that harmful effects will always occur. However, the more you exceed the UL, the greater the risk of adverse effects.



## Estimated Average Requirement (EAR)

This is the daily amount of a nutrient that is estimated to prevent clinical nutrient deficiency in half of all healthy people in a particular group defined by age and sex. EARs are used as the basis for RDAs, and as such, apply to a relatively limited set of nutrients and their corresponding nutrient deficiency diseases.

## Daily Value (DV)

This reference number, developed by the FDA, is designed to help consumers determine if a food contains a lot or a little of a specific nutrient, based on the DRI for that nutrient. It may be similar to the RDA or AI for that nutrient, but not always. DVs—which are used on Nutrition Facts panels—don't account for your age, sex, or other factors affecting your daily calorie needs. They're based on the highest average daily allowance value and are presented as percentages of total daily intake, calculated for an average individual eating 2,000 calories a day.

## Note

Another point of confusion can be the units used for measuring various vitamins and minerals. Amounts may be presented as milligrams (mg), micrograms (mcg), or international units (IU). To convert one to another, consult this calculator: [www.health.harvard.edu/iu-converter](http://www.health.harvard.edu/iu-converter).

## Background on RDAs

In 1941, the U.S. Food and Nutrition Board published the first in a series of reports on Recommended Dietary Allowances (RDAs). These reports were directly inspired by concern about nutrient deficiencies, which in the early 20th century were still relatively common in the United States, and which the government and nutrition experts worried could be worsened by food shortages caused by the Great Depression and World War II.



The RDAs in turn were used as the foundation for the first U.S. Dietary Guidelines for Americans. These guidelines are revised every five years to reflect advances in nutrition knowledge.



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**This process—setting RDAs based on concern about potential nutrient deficiencies, and then basing the dietary guidelines on these standards—has continued with relatively little change since the 1940s. Although this has contributed to success at largely eliminating nutrient deficiencies in the United States, it has also had unintended consequences.**

**The isolated focus of the RDAs on single nutrients—which works so well for preventing diseases like rickets or scurvy that are caused by a lack of single nutrients—has questionable relevance for staving off heart disease, cancer, and other chronic diseases.**

**The establishment of RDAs is now a highly complex and expensive process.** New RDAs, or even a revised value for an existing RDA, can be determined by only one private, nonprofit agency known as the Health and Medicine Division of the National Academies of Sciences, Engineering, and Medicine—and only after it receives a special commission and special funding from the U.S. government.

The process is lengthy and pricey, taking up to three years and millions of dollars to revise a single RDA! As a result, such revisions are infrequent. The most recent RDA revision—for vitamin D and calcium—was published in 2011. Because RDAs were designed to prevent clinical nutrient deficiencies, they apply only to a limited set of nutrients and their corresponding nutrient deficiency diseases.



To create guidelines for appropriate intakes of other nutrients, other criteria have been developed, such as adequate intakes, or AIs. Together, these sets of criteria for nutrient consumption are called dietary reference intakes (DRIs).

The DRIs are intended to be evidence-based standards that go beyond amending single nutrient deficiencies. They also suggest the amounts of nutrients needed for preventing complex chronic diseases and enhancing health.

### **EPT Pro Tip**

Rather than being overly consumed with the minutia of food labels and constantly tracking micro and macro nutrients, we recommend a way that is much more sustainable and enjoyable.

If you eat a diverse range of whole, minimally processed foods—fruits, vegetables, nuts, whole grains, fish, lean beef, vegetable oils, dairy and take appropriate supplements – there's little need to become a nutrition label mathematician.



Who knew things could get so complicated! Keep in mind that Elite Personal Fitness trainers offer more than expert exercise instruction. We are also certified functional nutritionists. Let us help you make sense of those confusing labels. We can help you improve your health through proper nutrition. Call 215-947-2099 to schedule a consultation.



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