



# Finding the Truth I:

## Reliable Nutrition and Health Information

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**The last weight control diet you will ever need!**

**Lose pounds while you sleep!**

**Contains rare elements your body must have!**

**Removes waste products from your body!**

**Supplementation is vital in today's world!**

**Revolutionizes nutrition science!**

It's everywhere! Your hairdresser, grocery clerk, next-door neighbor, everyone has some nutrition breakthrough to share. It comes from the latest news release from a research institution, this month's men's and women's magazines, talk shows galore, "infomercials" and a multitude of Web sites. What's the truth and what's not?

Each year, billions of dollars are spent on worthless and sometimes potentially harmful nutrition and health advice. It comes in the form of magazines, books, treatments, supplements, gadgets, programs and special diets.

It is impossible to keep up with each new study, fad, fraud, cure, exposé, warning or hope that is being promoted or reported by someone. We can, however, build ourselves a box of tools to help us analyze these claims. It is best to have a plan for looking at information before it confronts us because all of us can be fooled some of the time. A preplan can give us a head start in making a rational decision. We can't count on others to protect us. Each of us needs to determine what makes sense and what doesn't.

Consider these points before making a decision or choice:

### Yes or No?

#### 1. Is a quick fix promised?

There are seldom quick, effortless or simple solutions to complicated medical problems.

#### 2. Are doubts cast about current food or lifestyle practices?

A pitch that makes us feel guilty or inadequate needs to be questioned. Many worthless products are sold to make us look or feel younger, sexier or more popular. Question whether or not you need the product to make you healthier, or are there some other changes you could make for a healthier you? Often some

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changes in our lifestyle, diet and exercise habits are the thing which could help us to feel better and more energetic, not some “special” product or food.

### 3. Does it sound too good to be true?

Be careful when a product is advertised as a “cure” for serious diseases such as cancer, heart disease or arthritis. Delaying medical treatment could have serious consequences. Be careful when a product is being sold for many different conditions. Some of the lists run the whole gamut of the body from migraine headaches to ingrown toenails, from fatigue to allergies.

### 4. Are simple conclusions drawn to complex studies?

Stories on new research findings frequently omit details that would enable you to judge how the study could relate to your own diet and nutritional needs.

### 5. Are recommendations based on a single study?

One study may not prove anything, but several studies, in which evidence accumulates bit by bit, can uncover the truth.

### 6. Are doubts cast about reputable scientific organizations?

It is important not to be made skeptical or fearful by implication. Facts which support or counter accusations should be sought.

### 7. Are lists of bad and good foods given?

Variety is not only the spice of life, it is the basis of a safe and healthy diet. Don't exclude foods or food groups. What you don't eat can affect your health, too. There is no miracle food or product and no forbidden food for healthy individuals. A vegetable such as broccoli has components which contribute to better health. That does not mean that “broccoli pills” are necessary or will provide the same benefits. Combinations of truth, misinformation and distorted logic are often difficult to sort out.

### 8. Is a product being sold as the solution to the problem?

Keep in mind that the seller may be more interested in your money than in your health. These people are usually very convincing and many of them are true believers in what they are selling.

### 9. Are studies reported in nonscientific sources referred to?

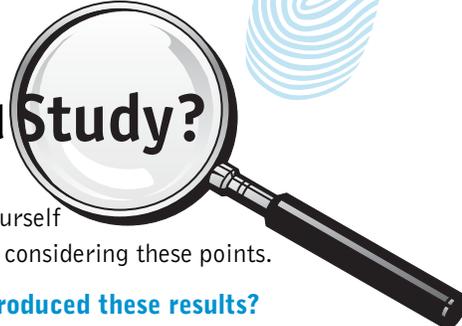
Publication in a peer-reviewed journal is a good indication that claims have been reviewed by an expert panel. Success based on testimonials

and case studies do not prove the usefulness or safety of any product. (For example: Aunt Matilda was crippled with painful arthritis and cured with bee pollen and XYZ supplement.) Testimonials may be genuine, fabricated or even paid for. Listen to commercials. How often are products promoted with “doctors recommend” or “I use”? Who are these doctors, these I's? What does a “star” or “big name” endorsement really mean?

### 10. Are recommendations drawn from studies that ignore differences among individuals or groups?

Animals and people are different. Men and women are different. Also, age, economics, race and many other factors are important.

Each **Yes** answer raises a red flag. Dig a little deeper and look a little farther when the flags go up.



## What is a Good Study?

You can recognize a good research study by asking yourself the following questions and considering these points.

### How many studies have produced these results?

One study may not prove anything, but several studies can provide a base for changing health habits.

### Why was the study performed?

Is the study to determine the cause and effect, or to explore a possible relationship between two things?

### Did the study show an association between two factors or actually show a causal relationship?

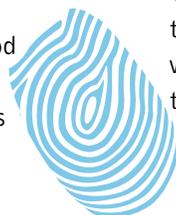
For instance, studies have shown an increased incidence of cancer in English-speaking countries. Clearly, other factors beside language may be responsible. This does not mean the English language is the cause of cancer.

### Did the study include a control or comparison group?

If there is no control or comparison group, a study is unsound. It is important to have a basis for comparison.

### How long was the study and how many subjects were included in it?

The fewer the number of subjects and the shorter the time, the greater the chance that the findings are wrong. If the age and sex of the subjects are different than yours, the results may not apply to you.



### Was the study a double-blind design?

In this type of study, neither the researcher nor the subject know who is receiving the drug or special food or diet and who gets the placebo (the regular food or the “sugar pill”). This prevents bias in the way researchers collect and interpret data and in how the subjects report information.

## What’s the Harm?

Misinformation and product scams can be harmful to people in a number of different ways. Some of the more likely and possible are:

### Failure to seek needed medical care.

Early and timely diagnosis and treatment of some conditions can be lifesaving.

### Failure to continue essential treatment.

Example: You decide to take garlic in place of your prescribed high-blood pressure medication.

### Nutrient toxicities.

Too much of even good things, such as iron, can be harmful.

### Potentially toxic components of foods or products.

The best way to minimize exposure to any one toxin is to eat a variety of foods from many sources in moderate quantities.

### Undesirable nutrient-drug interactions.

Example: Even though high doses of vitamin E may not be toxic, they can interfere with vitamin K action and enhance the effect of anticoagulant (blood thinning) drugs.

### Interference with sound nutrition practices.

A balanced diet is basic to good health.

### Economic loss.

Money which could be spent on healthful foods is lost when purported remedies and cures do not work.

### Adverse effect on public policy.

## The Words

A seller or promoter may shower you with all kinds of scientific sounding terms, phrases and explanations which mean nothing to you. Many of them may actually have little meaning but can be intimidating and sound convincing. These should not make you buy the product or idea. Discuss claims made with trained professionals who can help you understand the message.



### Listen to the Words

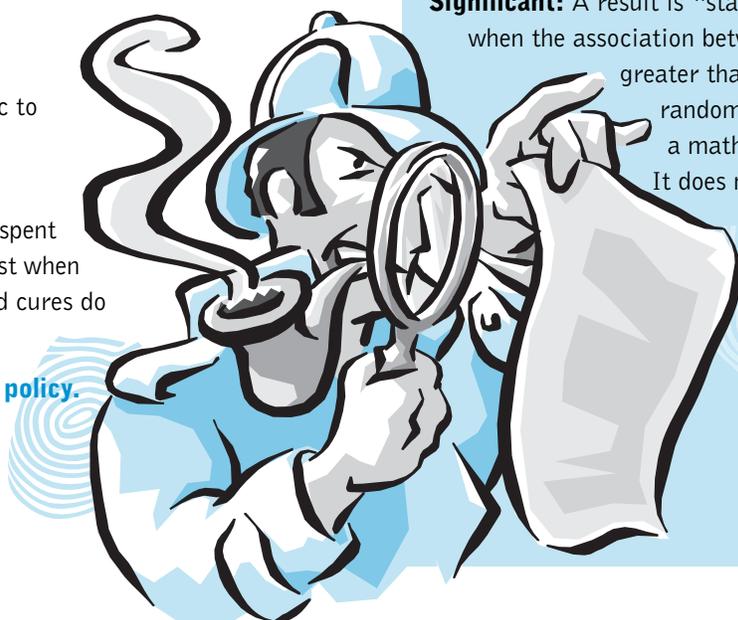
#### When Science Reports: It Does NOT Mean:

Contributes to; is linked to; associated with	Causes
May	Will
Suggests; indicates	Means or proves
Some scientists believe	All scientists believe
In some people	In all people
Animal studies show	Human studies would show
High intakes elevates X	Low intakes decrease X

**Breakthrough:** happens only now and then. The word is overworked today and has little meaning.

**Doubles the risk or triples the risk:** Do you know what the risk was in the first place? If the risk was 1 in a million, and you double it, that’s still only 1 in 500,000. If the risk was 1 in 100 and doubles, that’s a big increase.

**Significant:** A result is “statistically significant” when the association between two factors is greater than would occur at random (this is worked out by a mathematical formula). It does not necessarily mean major or important.



## How Can You Find Reliable Information?

Each person will make decisions in his or her own way. How do you do it? Compare how you make decisions regarding your food, nutrition and health to how you'd buy a car. Do you get all the information you need from one salesperson? Do you visit with people who have no training or experience? Do you look at magazines with a history of reporting on automobiles? Do you buy a special luggage rack when you don't need it? What else do you do to prepare yourself for making a wise car choice?

Treat yourself to the same assurance when making food, nutrition and health choices. There are many reliable sources of information available to you. These include scientific and professional associations; government agencies; the Extension Service; nutrition departments of accredited colleges and universities; nutrition departments of local hospital/medical centers and clinics; reputable consumer organizations; and reliable industry groups.

Check to be certain that the people you consider as experts are indeed credible sources. People may claim credentials which may not be legitimate, are overrated or are from some dubious field of science. Registered dietitians, licensed nutritionists and extension agents are good sources of reliable information on food and nutrition topics.



The old adage still holds true:  
"If it sounds too good to be true, it probably is."



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[www.ndsu.edu/ndnc/](http://www.ndsu.edu/ndnc/)

## Visit these Web sites for More Information

**American Dietetic Association (ADA)** provides information on nutrition and health.  
[www.eatright.org](http://www.eatright.org)

**Centers for Disease Control and Prevention (CDC)** provides health information on diseases, health risks and prevention guidelines. [www.cdc.gov](http://www.cdc.gov)

**Food and Drug Administration (FDA)** regulates food, drugs and oversees dietary supplements.  
[www.fda.gov/](http://www.fda.gov/)

**Federal Citizen Information Center** provides consumer information on topics ranging from food/health to computers and cars.  
[www.pueblo.gsa.gov/](http://www.pueblo.gsa.gov/)

**Healthfinder** is a U.S. Department of Health and Human Services gateway site provides links to reviewed resources on consumer health.  
[www.healthfinder.gov](http://www.healthfinder.gov)

**Quackwatch** is a nonprofit corporation that combats health-related fraud and myths.  
[www.quackwatch.org](http://www.quackwatch.org)

**NDSU Extension Service** has many online publications and links to reliable information sources.  
[www.ag.ndsu.edu/food/](http://www.ag.ndsu.edu/food/)

For more information on this and other topics, see: [www.ag.ndsu.edu](http://www.ag.ndsu.edu)