## Natural Vs. Synthetic Vitamins How They Are Different and How to Tell Them Apart

## Did you know...

- that the vitamins you are now using are very likely synthetic?
- that synthetic vitamins have only one component out of a whole family of micro-nutrients that accompany them in their natural state?
- that only 50% of a synthetic vitamin can be utilized somewhat efficiently?
- that some sensitive people may actually have an adverse reaction to the synthetic vitamins?
- that scientists can chemically reproduce sea water but when you put fish in this synthetic sea water they die?

Today many respectable people insist that synthetic and natural vitamins have identical molecular and chemical structure. Thus, they insist that synthetic vitamins are just as effective as natural vitamins. Is this reason sufficient basis to form a pro-synthetic judgement? In the laboratory, chemists can duplicate sea water that is chemically identical to natural sea water, but if you put fish in this synthetic water they will die. Obviously, there is a life-supporting difference between natural and synthetic.

### Natural or Whole Food Supplements vs. Isolated Chemical Compounds

When we say natural or whole food supplements, we're speaking of products that contain the total complex family of micro-nutrients (known and unknown) just as they are found in nature. These micro-nutrients are indispensable for proper vitamin absorption and maximum utilization. That's the only way you can have optimum nutrition. Synthetic vitamins lack this wonderfully marvellous supporting family.

For example, chromium is a mineral that is not prevalent in the diet because it is missing from the soil in this country. In it's natural state, chromium is a glucose tolerance factor or GTF and it helps protect us against diabetes. But GTF is not really just one factor. It's a whole family of factors.

Almost all chromium products on the market are from chromium picolinate, which is a single isolated compound that is made in the laboratory. Chromium picolinate does not contain the glucose tolerance factor. And yet, GTF is the main benefit of the natural micro-nutrient chromium. So, it doesn't make sense to take the isolated synthetic chromium. You are not receiving expected health benefits. You might as well be throwing your money away.

Most micro-nutrients are found in families like those in chromium. Another example is beta-carotene. Almost all of the beta-carotene on the market is an isolated synthetic compound made from acetylene gas. It's no wonder that some of the testing done with the synthetic form of beta-carotene has produced mixed results, and in one study on smokers, produced a negative result.

In nature, beta-carotene is part of a family of carotenoids. It is never found alone. For example,

Because the synthetic vitamin is half "dextro" (right) and half "levo" (left), the letters "dl" often appear on labels at the beginning of the synthetic name.

A synthetic vitamin is like the image in a mirror. It looks like the real thing but doesn't function like the real thing. Half of it will work in the body and the other half won't work as well. Dr. Charles Schneider, Ph.D., professor of Chemistry, University of Cincinnati concluded wisely, "Get the vitamins that say natural. There is a difference. The "dl" (synthetic) will be cheaper, but if you could figure it out per energy unit or per use, the natural one will be cheaper."

Which would you rather have, the food in the mirror ... or the real food?

### **Safety**

Medical findings indicate that synthetic substances may cause reactions in chemically susceptible individuals. Interestingly, the same individuals can tolerate naturally derived vitamins.

#### When is Natural REALLY Natural?

Did you know that most vitamins on the market claiming to be natural only have to be 10% natural to make this claim! If you decide to spend your hard-earned money on natural, it is critically important you learn to read labels to assure receiving your money's worth.

A product can even be 100% organic and not be natural at all. To be called organic a molecule need only have at least one carbon atom. This definition broadens the range from acceptable food sources of animal and plant tissues to raw materials including coal tar and wood pulp (yum!). Many synthetics are made from coal tar derivatives. That's the same stuff that causes throat cancer for tobacco smokers. Don't you think your body can tell the difference? Surely your cells can make a distinction between food and coal tar, just as a fish knows the difference between natural and synthetic sea water.

Many so-called natural vitamins have synthetics added to increase potency, or to standardize the amount in a capsule or batch. In addition a salt form is added to increase stability of the nutrient (i.e. acetate, bitartrate, chloride, gluconate, hydrochloride, nitrate, succinate). These terms added to the vitamin name help you identify synthetics.

Generally speaking, you can identify natural by reading the label and finding a listed "food" source such as citrus, yeast, fish, vegetable, etc. If a chemical is listed or the source is blank, it is synthetic.

#### See How to Read Labels chart below.

The synthetic vitamin marketers would like you to believe that there's no difference between natural and synthetic, because synthetic vitamins are much cheaper to make and mean much more profit for the company. They are not efficiently utilized in the body as natural supplements due to the "dl" factor and the lack of complete families which include all surrounding micro-

few of us can spend our entire day hunting, gathering, and carefully preparing our food!

# Is There A More Practical Solution For Today's Lifestyle?

YES, we can supplement our diet with the most natural, most researched, most effective **whole food** supplements on the market. This is not an excuse for a poor diet, but supplements can definitely help.

We want you to have an unbiased way to determine whether your vitamins are natural or synthetic. The following list, "How to Read Labels," will help you determine what you are paying for with your hard earned money.

#### How to Read Labels

Item:	If source Given Is:	It Is:
	Fish Oils	Natural
	Lemon Grass	Co-Natural
Vitamin A	Acetate	Synthetic
	Palmitate	Synthetic
	If source not given	Synthetic
Vitamin B-Complex	Brewers Yeast	Natural
Vitaliili B-Complex	If source not given	Synthetic
	Yeast	Natural
Vitamin B1 (Thiamine)	Thiamine Mononitrate	Synthetic
	Thiamine Hydrochloride	Synthetic
Witania D2 (Dilaglaria)	Yeast	Natural
Vitamin B2 (Riboflavin)	Riboflavin	Synthetic
Daniel Arie	Yeast, Rice Bran or Liver	Natural
Pantothenic Acid	Calcium D-Pantothenate	Synthetic
Wite min DC (Desident)	Yeast	Natural
Vitamin B6 (Pyridoxine)	Pyridoxine Hydrochloride	Synthetic
	Liver	Natural
Vitamin B12	Micro-organism fermentation	Co-Natural
	Cobalamin Concentrate	Co-Natural
DADA	Yeast - Para-aminobenzoic Acid	Natural
PABA	Aminobenzoic Acid	Synthetic
T 1' A '1	Yeast or Liver	Natural
Folic Acid	Pteroylglutamic Acid	Synthetic
	Soy Beans	Natural
Inositol	Reduced from Corn	Co-Natural
	Soy Beans	Natural
Choline	Choline Chloride	Synthetic
	Choline Bitartrate	Synthetic
Biotin	Liver	Natural