Why GNLD Children's Vitamins are the BEST Kids' Vitamins of All

By Susan Adams, RN
Prices quoted are as of October 2009



I know the **GNLD Vita-Squares** are good, but I did not know how little competition they have in both quality and in price. A friend asked me to recommend a kids' multivitamin to take to an orphanage in Haiti. She hoped there might be something much cheaper than GNLD and maybe just as good—or almost as good. I did some research and will share with you what I discovered.

Summary: In comparing GNLD Vita-Squares with 9 other products, GNLD is the only brand that is 'whole food' and that uses a truly natural Vitamin E. Of course, GNLD is the only one to include Treen-en in its children's vitamin. Tre-en-en increases the ability of the child's cells to absorb & use the vitamins & minerals. I was pleasantly surprised to find that GNLD's best price at 9 cents each (27 cents/serving) is considerably lower than most of the other brands, with 3 exceptions. Please see the comparison chart.



Flintstones are the number one kid's chewable vitamin that people think of first. Why? Advertising by Bayer and also each box proclaims: "Pediatricians' #1 Choice!" Flintstones now come in six varieties: Regular, Complete, Plus calcium, Plus immunity, My First Flintstones, and Gummies. Unfortunately many of the ingredients are synthetic, the Vitamin E is synthetic, and Flintstones contain both artificial flavorings and artificial colors. The sweetener may be sucrose or Aspartame.

Cost per tablet: 8-20 cents each depending on the type and where it is purchased. Serving: 1/day

If you will take a close look at these ingredients of just two of the Flintstones varieties, you will begin to appreciate how irresponsible Bayer is to market these as vitamins for children!

Ingredients of *Flintstones Complete* from http://flintstonesvitamins.com/complete/index.html

Sorbitol, Dicalcium Phosphate, Magnesium Phosphate, Choline Bitartrate, Sodium Ascorbate, Ferrous Fumarate, Gelatin, Natural & Artificial Flavors (including fruit acids), Pregelatinized Starch, Vitamin E Acetate, Stearic Acid, Carrageenan, Hydrogenated Vegetable Oil (Soybean, Castor), Magnesium Stearate, Zinc Oxide, Niacinamide, FD&C Red #40 Lake, D-Calcium Pantothenate, FD&C Yellow #6 Lake, Aspartame†, Xylitol, FD&C Blue #2 Lake, Cupric Oxide, Pyridoxine Hydrochloride, Sucrose, Riboflavin, Thiamine Mononitrate, Vitamin A Acetate, Beta-Carotene, Monoammonium Glycyrrhizinate, Folic Acid, Potassium Iodide, Biotin, Vitamin D, Magnesium Oxide, Vitamin B12.

[my note: *all 5 sweeteners above & the 3 below are in red italics*, and one is Aspartame! If you do not know how bad Aspartame is for everyone, especially children, please research 'dangers of aspartame' yourself or ask me for my 2 page summary document on it...(Aspartame is also called 'NutraSweet'& is in 'Equal,' —the little blue packet)]

As ingredients must be listed in order of quantity in the product, both Flintstones products deliver more artificial food colorings, flavorings and Aspartame than most of the vitamins! In the above lists of ingredients I've underlined & bolded the vitamins & colored them green. Minerals are colored blue. Everything else is for binding, flavor and color. Furthermore, the Calcium carbonate in the *Flintstones plus Calcium* is the cheapest and least absorbable (least bio-available) form of calcium.



Website

Ingredients of Flintstones plus Calcium

Calcium Carbonate, *Sorbitol*, Pregelatinized Starch, <u>Sodium Ascorbate</u>, Natural and Artificial Flavors (Including Fruit Acids), Stearic Acid, Gelatin, <u>Magnesium Stearate</u>, <u>Vitamin E Acetate</u>, <u>Niacinamide</u>, Fd&c Red No. 40 Lake, Fd&c Yellow No. 6 Lake, *Aspartame (A Sweetener) (Phenylketonurics: Contains Phenylalanine)*, Fd&c Blue No. 2 Lake, <u>Pyridoxine Hydrochloride</u>, <u>Riboflavin, Thiamin Mononitrate</u>, <u>Vitamin A Acetate</u>, <u>Monoammonium Glycyrrhizinate</u>, <u>Folic Acid, Beta Carotene</u>, <u>Vitamin D</u>, <u>Vitamin B12</u>.

This superb article is a Must Read for all parents whose children eat artificial food colors: <u>Artificial Food and Cosmetic Coloring - A Hidden Source of Toxic Metals</u>.

<u>Website</u>

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--Generic brands of Children's Chewable Vitamins

There are various 'generic' brands to be found in pharmacies, Wal-Mart's, Sam's, dollar stores and online. The first one I picked up in a drug store was 7 cents/tablet. Like Flintstones, only cheaper, it contains dangerous synthetic ingredients, artificial colors and flavors, and was also sweetened with Aspartame!

--Some Natural Chewable Vitamins. Thankfully, there are many brands available <u>without</u> artificial colorings & flavorings or Aspartame. They use natural colors & flavors and sweeten with safe sweeteners. Are they 'whole food' and truly able to be used by the body? Are they economical? Let's look at just a few examples:

--Nature's Plus - Source of Life® Animal Parade® - Assorted Chewables - Website

Nature's Plus promotes themselves as 'World Leader in Advanced Energy Supplements.' Their popular chewable is widely available at Health Food stores such as Vitamin Shoppe. Economical? Yes.

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BUT, the Vitamin E they use is D-Alpha Tocopheryl Acetate. Is it 'Natural?' Technically, yes. Is it 'Whole food?' No, it isn't. Might the Vit. E come from China? Probably. But...is this brand good enough for YOUR child? Please read the explanation of Vitamin E that follows. Then YOU decide. Website.

Cost per tablet: 8-12 cents (\$21.95/180 retail, \$13.92/180 discount at Vitamin Shoppe) —Serving: 2/day



-- Michaels Naturopathic Childrens Multi

Here is a brand that appears quite responsible. We are still seeing 'natural-sourced' Vitamin E (as d-alpha Tocopheryl Succinate) but not whole food natural E (d-alpha tocopherol). (\$11.99/60) Cost per tablet: 20 cents each Serving: 2/day Website

-- Jarrow Formulas Kids Multi Chewable

This initially appears VERY economical for another responsible vitamin, if you can overlook the d-alpha-tocopheryl succinate they use as the Vitamin E.

Online I found a big bottle of 120 vitamins normally \$16.95 discounted for only \$9.10! That's only 7 ½ cents each. Sounds good until you read the label and find that serving size is 6/day. Now the bottle lasts only 20 days at a cost of 45 cent/day. Website



There are so many different kids' vitamins, it would take a long time to research them all, but these three major companies deserve to be mentioned:

--Shaklee Kids Incredivites



Shaklee does very well to have no artificial colors or flavors, and they also replace the sugars with xylitol, sorbitol, and stevia. They are the only company I've seen who has increased the vitamin D to 600 IU/day rather than the typical 400 IU which is still the RDA. And they go the extra mile to include mixed tocopherols (other forms of Vitamin E), however their primary Vitamin E is still d-alpha tocopheryl, which is not 'whole food,' but

"natural sourced" and very likely a product of China, as China now has the lion's share of natural sourced d-alpha tocopheryl Vitamin E production.

Cost per tablet: 25 cents for distributors (\$29.70/120) and 29 cents retail (\$34.95/120). Serving: 2/day Website.

--Herbalife Kids Multivites

Herbalife's children's chewable has no artificial color or flavor, but very unfortunately uses synthetic vitamin E (DL-Alpha Tocopherol Acetate).

Cost per tablet: 26-30 cents each Serving: 2/day

Website



--GNC MultiBrite kids chewables have natural flavor and color, but like Herbalife these also contain synthetic Vitamin E (dl-alpha tocopheryl acetate). Website



Cost per tablet: 24 cents (\$14.29/60 tablets) Serving: 2/day I asked the GNC store clerk why they did not have natural Vitamin E and other truly whole food ingredients in their kids' vitamins. He said, "Honestly, it would cost too much and parents just won't pay more for their kids to get a really good vitamin."

Well, I think if parents would gladly get the BEST if they KNEW the difference and where to get it. And the BEST does not cost as much as you would think!

GNLD is the only company I know who makes a totally Whole Food chewable multivitamin/multi-mineral for children. The Vitamin E, d-alpha tocopherol, is truly whole food and natural, and mixed non-alpha tocopherols are also included.



<u>Vita-Squares are also the only children's chewable vitamin on the planet that include Tre-en-en!</u>

Product data for GNLD Vita-Squares is here: Website

Cost per tablet: 10 cents/square (\$17.75/180 distributor price)

And only 9 cents/square when purchased in a case at distributor cost. Taking the recommended 3/day can cost as little as 27 cents/day. Would most parents be willing to pay this? I think so! And many children can take less than the 3/day if they are eating a healthy diet and getting daily sunshine.

At retail price, (\$23.10/180) one GNLD chewable is 12.8 cents. So even at retail price the daily dose of 3 GNLD Vita- Squares costs only 38 cents...ten cents less than GNC, and 12-14 cents less than Shaklee and Herbalife!

We have to let the parents know!

A quick review of GNLD's other superior kids' vitamins:



Liqui-Vite with Tre-en-en & Flavonoids for small children & all who wish a liquid vitamin (including all adults with digestive challenges). 43 cents/tsp serving.



Vita-gard – Antioxidants and Carotenoid Carotenoid Complex Blend in tasty chewable form. 22 cents/chewable tablet



Formula IV with Tre-en-en-For children who can swallow a capsule. 28 cents/capsule



Vegetarian Multi – Excellent economical choice with chelated minerals. 22 cents/tablet

Why do I constantly single out the type of Vitamin E in each of these vitamins?

Because I believe it is a helpful indicator of the quality of the entire vitamin product. Vitamin E's have slightly different names according to their types. If a synthetic vitamin E is included in a product, it is likely that the company will use other synthetic vitamins. Scientific studies show that synthetic vitamins which are made from 'non-food items' are more poorly used by our bodies than whole food vitamins that are found in human foods. Website

Research Summary from Page 3 of the study above:

Since the mid-1950's, researchers have been demonstrating that the body shows a preference for natural vitamin E. Dr. Robert Acuff, a leading vitamin E researcher whose studies are cited above, has said, "The natural form of vitamin E is clearly the form our bodies were designed to use." Website

First bear with this little primer on Vitamin E names: d-alpha vs. dl-alpha

If you see d-alpha...this is natural or natural sourced vitamin E. (To help you remember..D=Delivers E)

<u>d-alpha tocopherol</u> (notice the – ol ending) is natural whole food Vitamin E. *Note: GNLD always uses only <u>d-alpha tocopherol</u> because GNLD is a totally Whole Food vitamin company—the only one I know about. If you know of another, please tell me.

<u>d-alpha tocopheryl</u> (this ends in – yl) It is not whole food, but 'Natural-sourced vitamin E' This is NOT the same as 'whole food.' More on this below.

dl-alpha tocopherol or dl-alpha tocopheryl is synthetic Vitamin E.

That little 'l' in the 'dl' is your clue. I do not use dl-forms of vitamin E nor do I give it to my children. Keep reading to learn why. (To help remember..DL=Delivers Less Vit. E)

Other names for synthetic Vitamin E include:

Vitamin E Acetate (as in Flintstones) It is made from petroleum as explained below.

DI-alpha-tocopheryl acetate

dl-alpha-tocopherol acetate

dl-alpha-tocopheryl succinate

Here is some additional information I found about Vitamin E. The essential info is in RED.

This is classic: from http://www.parchem.com/vitamin/Vitamin-E-Acetate-USP-001356.aspx you can clearly see that the source of this synthetic Vitamin E Acetate is from petroleum, not food!

Product: Vitamin E Acetate USP

CAS: 7695-91-2

Synonym: dl-alpha Tocopheryl Acetate

Formula: C31H52O3

Class: Vitamins - Enzymes - Amino Acids Product

Type: Petrochemcial [copied straight off the website, sorry if they did not spell it right]
From the same website as above on this page: http://www.parchem.com/chemical-supplier-

distributor/Petrochemical-Class.aspx we can learn...

Petrochemical products are chemical products made from raw materials of petroleum or other types of hydrocarbons. Petroleum is the major source of these compounds, although some of the petrochemicals that originate from petroleum can also sometimes be derived from coal and natural gas. Most petrochemical industry occurs in major western nations although the major growth of petrochemical producers is now occurring in the Middle East and Asia. There is a substantial inter-regional trade in petrochemical products.

It gets worse:

Go here: <u>Website</u> to read the Material Safety Data Sheet (MSDS) on <u>Vitamin E Acetate</u>, aka <u>DL-alphatocopherol acetate</u>.

From Section 3 we learn "The substance may be toxic to blood, liver. Repeated or prolonged exposure to the substance can produce target organs damage."

And from Section 11 "Chronic Effects on Humans: May cause damage to the following organs: blood, liver."

<u>Please note that this exact substance is what is used in the Flintstones vitamins, the GNC Multibrite and and even in the Herbalife children's vitamins!</u>

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Last I want to highlight a major manufacturer of "natural-sourced" Vitamin E. You will be interested that Kangcare Bioindustry is in China, a country <u>not</u> presently known for excellent quality control.

[Is it not also a comfort to know that in Kangcare's "Synthetical Vitamin E" there is not more than 20 parts per million of heavy metals?] Read about it: http://www.b2bfreezone.com/product-search/vitamin-e-acetate.htm#

http://www.b2bfreezone.com/product-search/vitamin-e-acetate.htm# Product information from Kangcare Bioindustry Co., Itd

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tocopherol

website: www.Kangcare.com



Model No.: KP-202

Location: China

Minimum Order: 25KG

Minimum Order

Price:

N/A

Posted Date: November 09, 2007

Description

Tocobest is a series of natural vitamin e, with D-alpha tocopheryl succinate as our strongest product. It is the esterification product of d-a-tocopherol and succinic acid, which is a white to off-white crystalline powder with little or no odor or taste, It is derived from non genetically modified soybeans, and is thus not subject to labeling under EU Regulations (EC) 1829/2003 and 1830/2003. TocobestTM D-alpha tocopheryl succinate is intended for use as vitamin E in the dietary supplement, food and Pharmaceuticals industry. 1 mg d-a-tocopherol succenate = 1.21 IU what we can supply: TocobestTM Mixed Tocopherols, TocobestTM D- α - Tocopherol, TocobestTM D- α - Tocopheryl Acetate, TocobestTM D- α - Tocopheryl Succinate

Company Profile

Business Type: Manufacturing

Year of established: 2000

Number of Emplyees: 26-50

Thank you for reading to the end. This was long, but I hope it is helpful to YOU!

Susan Adams, RN

Two Bonuses for the Curious Chemists among us:

Here is a technical, but interesting article on Vitamin E acetate from a vitamin seller's site. Read it carefully, especially the last two sentences! The bottom line is that there is a significant difference in absorbability (bioavailability) of the various types of Vitamin E. They are NOT created equal! The natural form used by GNLD is the best of all.

Vitamin E acetate (alpha-tocopheryl acetate)

Vitamin E acetate is a dry, powder form of vitamin E that has no antioxidant power until the acetate is removed in the intestine as it is absorbed. The acetate form of vitamin E is called an ester. The ester of vitamin E is more stable to light and oxygen than tocopherol. The shelf-life of the ester tocopheryl is greater than that of the unesterified tocopherol. Vitamin E acetate is a pleasant-tasting form of powdered vitamin E that can be eaten right off the spoon. Tocopheryl acetate is naturally converted by the body to vitamin E.

The commonly available source of stable vitamin E used in animal feed is synthetic dl-alphatocopheryl acetate, which exists in equal amounts of eight isomers. Dl-alpha-tocopheryl acetate is an all-synthetic form of alpha-tocopherol. An alternative natural form of stable vitamin E is dalpha-tocopheryl acetate, which is derived from vegetable oils and exists in the form of one isomer. D-alpha-tocopheryl acetate is the acetate ester of natural-source d-alpha-tocopherol. D-alpha-tocopheryl acetate is produced by coupling racemic isophytol with trimethylhydroquinone to form d1-tocopherol. The synthesized version, dl-alpha-tocopheryl acetate exists in equal amounts of eight isomers while the natural extraction from vegetable oils, d-alpha-tocopheryl acetate, exists only as one isomer. D-alpha-tocopheryl acetate (natural) may be a better alternative to increase tissue levels and retention of vitamin E compared to dl-alpha-tocopheryl acetate (synthetic). Vitamin E forms are listed as either plain "tocopherol" or tocopheryl followed by the name of what is attached to it, as in "tocopheryl acetate". The two forms are not greatly different. However, plain tocopherol may be absorbed a little better, while tocopheryl attached forms have a slightly better shelf life.

Vitamin E acetate is a powerful antioxidant, possessesing the ability to increase the moisturisation of the skin's horny layer and thereby improve surface relief. D-Alpha-tocopheryl acetate is used in topical skin care products. It appears that it can diffuse into skin cells where it is converted to d-alpha-tocopherol. D-alpha-tocopherol may protect skin against ultraviolet damage and is also a skin moisturizer. The activity of natural or natural-source alpha-tocopherol (RRR alpha-tocopherol), on an equal weight basis, is at least twice as high as synthetic alpha-tocopherol. This is mainly because half of the stereoisomers of synthetic alpha-tocopherol are not maintained in human plasma and are, therefore, not bioavailable.

http://www.vitamins-supplements.org/tocopheryl-acetate.php

This is an interesting site on *The Chemistry of Red 40* http://www.red40.com/pages/chemistry.html

I will copy only a couple of short quotes, but read the entire link to get the context:

Red Dye #40 (and all FDA certified dyes) is referred to as a "Coal Tar" dye. The phrase has little meaning today but a hundred years ago it was used to describe synthetic chemicals that started out with coal tar as a precursor. It's more likely today to find a

petrochemical as the original base of most synthetic chemicals, though they're so highly refined

that you won't find any residual petroleum in the product.

Lakes

Often on a label you'll see a color listed as a lake, i.e.: "FD&C Red #40 Lake" or "Blue 1 Lake" So what's a lake? Most of the dyes in use are water soluble, which is wonderful if you're coloring a juice or syrup. It becomes a bit of a problem if you're trying to color the outside of a medicine tablet. The manufacturer doesn't want the color to run off if the pill gets a little wet. The answer is to use a dye in a lake form.

A lake is a solid, non water soluble form of a dye. It's produced by mixing the dye with Aluminum Hydroxide. By itself Aluminum Hydroxide is a safe food ingredient and it's often sold as an antacid. When combined with Red Dye #40, the chemicals form a deep red powder that can be applied to the outsides of tablets, gumballs and other solids. You may also notice this form listed in the ingredients as "Red 40 Aluminum Lake"

[My thought: Aluminum is linked with brain disorders like Alzheimer's so personally I avoid in foods, cooking pots, & cosmetics.]