



Deciphering the Energy Drink Label - Page 1

Supplement Facts ¹

Issue 3: 2014

Let's look at a popular energy drink label and interpret it.

Niacin: 150% RDI - The dosage is tricky because the vitamin is associated with side effects that can be serious. Feeling flush is most common. There are probably no serious side effects or benefits with this dosage.

Vitamin B6: 2,000% RDI - Adverse effects have only been documented from vitamin B₆ supplements and never from food sources. B₆ in excess of the RDI over long periods of time thus result in painful and ultimately irreversible neurological problems. In 1993 the European Community Scientific Committee on Food defines intakes of 50 mg vitamin B₆ per day as harmful and established tolerable upper intake level of 25 mg/day for adults in 2000. The Expert Group on Vitamins and Minerals of has been set by the US FDA at 100 mg/day in 2000. The nutrient reference the Food Standard Agency UK (UK EVM) derived a safe upper level (SUL) of 10 mg/day for a 60 kg adult in 2003. The tolerable upper limit values in Australia and New Zealand recommend an upper limit of 50 mg a day in adults.

Folic Acid: 100% RDI – Probably not an issue at this level.

Vitamin B12: 8,333% RDI - Excess vitamin B-12 may cause the heart to stop pumping properly, leading to symptoms of heart failure. Exposure of the liver to high levels of B-12 may cause damage to liver cells, leading to inflammation and scar formation. Excess vitamin B-12 can lead to formation of blood clots in major blood vessels. Blood clots may block blood vessels that transport blood to the heart and brain leading to heart attack and stroke.

Energy Blend: 1,870mg. These ingredients are safe when taken in appropriate amounts; but no appropriate levels have been set by the FDA. The label does not state the level for any of the energy blend components. This is very problematic as you can see from the side effects below:

- **Citicoline** - Among the side effects associated with using citicoline are headache, irregular heartbeat, diarrhea, low blood pressure, dizziness, lightheadedness, vomiting and nausea.
- **Tyrosine** - This amino acid stimulates your central nervous system and can cause your heart to accelerate or beat harder. The ingestion of L-tyrosine can increase impulses in your nerve center of your body. Increased feelings of fear and panic may occur with use of this product on a regular basis.
- **Phenylalanine** - Side effects may include: Heartburn, nausea, constipation, dizziness, headache, anxiety and hypomania (a milder form of mania), sedation, and jitteriness and trouble sleeping. Doses higher than 5,000 milligrams a day can cause nerve damage.
- **Taurine** - There is some concern that taking too much taurine might make bipolar disorder worse.

| Supplement Facts | |
|---|---------------------|
| Serving Size 2 fl. oz. | |
| Amount Per Serving | % Daily Value |
| Calories 4 | Calories from Fat 0 |
| Niacin (as Niacinamide) 30mg | 150% |
| Vitamin B6 (as Pyridoxine Hydrochloride) 40mg | 2000% |
| Folic Acid 400mcg | 100% |
| Vitamin B12 (as Cyanocobalamin) 500mcg | 8333% |
| Sodium 10mg | <1% |
| Energy Blend 1870mg | † |
| Citicoline, Glucuronolactone, N-Acetyl L-Tyrosine, L-Phenylalanine, Taurine, Malic Acid, Caffeine | |
| Enzyme Blend 1mg | † |
| Amylase, Protease, Lipase, Cellulase, Lactase | |
| †Daily value not established | |

Other Ingredients: Purified Water, Natural and Artificial Flavors; Potassium Sorbate, Sodium Benzoate and EDTA (to protect freshness); Sucralose.



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- Malic Acid - Malic acid is a medication used to clean and prepare the surface of a tooth before it receives a filling. The medication has also been used as a means to peel skin on the face. Unfortunately, there are also a number of severe side effects associated with using this medication. Some of these side effects include allergic reaction, tightness of the chest, difficulty breathing, skin rash, closing of the throat, hives and swelling of the mouth, lips, tongue and throat.
- Glucuronolactone - Glucuronolactone is a popular ingredient in energy drinks with claims that it detoxifies the body. Although levels of glucuronolactone in energy drinks can far exceed those found in the rest of the diet, the European Food Safety Authority (EFSA) has concluded that exposure to glucuronolactone from regular consumption of energy drinks is not a safety concern. The no-observed-adverse-effect level of glucuronolactone is 1000mg/kg/day.
- Caffeine - The Mayo clinic says up to 400 milligrams (mg) of caffeine a day appears to be safe for most healthy adults. 5-Hour Energy Extra Strength contains 242 milligrams of caffeine. Rockstar, Monster, NOS, Celcius, and Full Throttle all contain over 200 milligrams. The Mayo Clinic says up to 400mg. of caffeine appears to be safe. Excessive caffeine consumption can lead to insomnia, nervousness, irregular heartbeat, muscle tremors, anxiety and headache.

The decision to use energy drinks is clearly yours. Underlying health issues you may not be aware of can put you at greater risk from these supplements. When in doubt, consult with your physician or stop altogether.

¹ Research for these side effects can be found at the National Institute of Health web site: <http://ods.od.nih.gov/factsheets/>

For additional information on this subject visit our web site at www.cti-home.com and look at “Medical” under the “Articles” tab.

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