May 2016 Health Notes by Evelyn Ames

Risks of Overdosing on Vitamins and Minerals

Have you recently checked labels of the cereals, breads and snacks you consume in your abode? If not, do a cursory check and see how many have added calcium, iron, folic acid, and other vitamins and minerals. Extra nutrients are added to enrich cereals and bread, fortify milk, orange juice, and flavored bottles of water/energy drinks. Add to this a daily dose of dietary supplements, more than likely the consumer is overdosing on vitamins and minerals. Are there any health risks? The National Institute of Medicine and professionals in nutrition research suggest there is. Below is a focus on three nutrients: calcium, folic acid, and iron.

Calcium as an example, consider “Total Whole Grain Cereal.” A ¾ cup without milk contains 100% of calcium, 100% folic acid, and 100% iron. Special K French Vanilla Protein Shake contains 30% of daily value for calcium, 30% of daily value of folic acid, and 8% of daily value of iron. What are the recommended daily levels? Generally, adults need 1,000 to 1,200 mg of calcium per day. This amount can be found in beans, greens, fruit, and nuts. Registered Dietitians (RD’s) suggest that healthy individuals should not routinely exceed 2,000 to 2,500 mg, especially if added each day from supplements. Why? Adding too much calcium increases the risk of kidney stones. Calcium dietary supplements may interact with cardiovascular and thyroid drugs that a person is prescribed. Too much calcium may mask correct readings of insulin levels in diabetics. Too much can also cause nausea, diarrhea, and stomach cramps (too much zinc can do the same). Note that nutrients from foods and those from dietary supplements do not necessarily metabolize and interact similarly in the body.

Folic Acid: Definitely folic acid is a necessary and important vitamin for pregnant women. The recommendation for adults by the Institute of Medicine is 400 micrograms per day. Folic acid can be found in dark leafy greens, fruit, beans, and eggs. Enjoy eating food rather than ingesting a pill/capsule! What happens when one takes too much folic acid? It can mask vitamin B12 deficiency. This deficiency is seen in people over 50 and in vegetarians. Why the concern about lack of B12? Deficiency can lead to nerve damage and cognitive problems. Check labels for folic acid on enriched bread, cereals, flour, pasta, and rice. It is probably added! Anyone chow down on a Luna Bar? If you are a man that takes One A Day Men’s 50 Plus Healthy Advantage supplement and eats Luna bars, you are consuming double the amount your body requires. It also has 30% of the daily iron recommended.

Iron: Iron may be the most abundant mineral on the planet earth, but the human body need ingest only a small amount. The Institute of Medicine stresses that healthy people not exceed 45 mg of iron per day. The dietary recommendation in general is 8 to 18 mg per day. The situation is different for people who have iron-deficiency anemia. But, for the healthy, iron can be easily found in beans, red meat, eggs, and broccoli. And yes, cereals, pasta, and breads are frequently enriched with iron. E.g., one GNC Iron supplement contains 65 mg. Adverse health condition from too much iron: hemochromatosis (a genetic condition causing body to deposit excess iron in vital organs such as the heart). Types of iron supplements: ferrous sulfate (Feosol, Slow Fe), ferrous gluconate (Fergon), and ferrous fumarate (Femiron, Feostat). Some of the symptoms of overdosing with iron: buildup of fluid in lungs, diarrhea, metallic taste in mouth, black stools, nausea, low blood pressure, fast and weak pulse, dehydration, dizziness, and lack of desire to do anything.

In a nut shell, so to speak, if you eat a daily fortified cereal, munch on an “energy bar” during the day, drink a vitamin laced bottle of water, eat enriched pasta for dinner, and take a daily multi-dietary supplement, you have more than likely overdosed yourself! A good clue to spot a false claim about dietary supplements: the highlighted claim that the product is "totally safe," "all natural," or has "definitely no side effects." Extra fact: Did you know that too much “selenium” can lead to hair loss, fatigue, and nerve damage? The U.S. Food and Drug Administration’s “Tips for Older Dietary Supplement Users reports ‘We may think, ‘Even if a product may not help me, it at least won't hurt me.’ It's best not to assume that this will always be true. Some product ingredients, including nutrients and plant components, can be toxic based on their activity in your body. Some products may become harmful when consumed in high enough amounts, for a long enough time, or in combination with certain other substances.”

Short list of resources:
https://ods.od.nih.gov/factsheets/list-all/
http://www.fda.gov/Food/DietarySupplements/UsingDietarySupplements/ucm110493.htm (tips for older suppl. users)