

You think you've taken your daily vitamins, but what's really gone down? In a startling new study released exclusively to O readers, ConsumerLab.com found that nearly half the brands tested didn't live up to their labels—and at least one could be downright dangerous. ANDREA ROCK reports.

body wise A Dose of Reality

IN A SHAKY WORLD, WE CLING TO THINGS WE CAN COUNT on—the sun rising tomorrow, the morning newspaper, our daily calcium chews or nutritional supplements. Well, hold on, because multivitamins, those "fail-safe" cover-the-bases pills we take believing that we're doing at least one good thing for our health, may not be everything they say they are.

Over the past several months, the independent watchdog group ConsumerLab.com has been randomly plucking multivitamins off the shelf, crushing them up, and analyzing them to see if they contain what they're supposed to. Nearly half the brands tested, including two prenatal supplements, failed: Several fell

Are you being mis-lead? ConsumerLab .com testers found faults in vitamins, including too much lead.

short of providing the amount of nutrients the label claimed; one didn't disintegrate properly, which means its contents would not be absorbed by the body; and two contained excessive amounts of a toxic contaminant—lead. Alarmingly, one of the supplements with lead was a children's daily, L'il Critters Gummy Vites, a particular concern because even low levels of the heavy metal may disrupt neurobehavioral and cognitive development in young bodies.

For the past five years, Consumer-Lab.com has been on a lone crusade to test the mettle—and metal—of the pills, powders, and potions that make up the more than \$6 billion a year supplement industry. Unlike drugs, supplements do not undergo governmental scrutiny before you buy them. "Most Americans don't realize that anyone can grind up some herbs and start selling them tomorrow as a vitamin," says Tod Cooperman, MD, ConsumerLab.com's mastermind.

A 41-year-old physician in White Plains, New York, Cooperman started the company in 1999 after reading about a few cases in which supplements turned out not to be what the label promised. "No one was doing large-scale, comprehensive testing," he says. To fill the void, he teamed up with William Obermeyer, PhD, an internationally known natural products chemist who, at the time, was working for the FDA'as a specialist in the manufacturing and testing of dietary supplements. Of the hundreds of products they purchased and analyzed in the first three years, 25 percent failed. (They had little or none of the main ingredient, contained dangerous contaminants, or carried misleading or unsupported product information.) Now considered the goto source for the truth about supplements, ConsumerLab.com is frequently quoted by the press and called on by government agencies, including the National Institutes of Health, whose researchers often hire the company to analyze supplements before they are used in clinical trials.

ConsumerLab.com's major source of funding comes from subscriptions to its Web site, where new reports are published each month of passing and failing products in different supplement categories (upcoming topics include nutrition bars, vitamin E, and menopause preparations; a year's subscription is \$24). Other

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income is provided by ads on the site for supplement retailers, sales of related books, and fees from manufacturers who ask to have their products analyzed. To encourage supplement makers to pay for such testing, ConsumerLab.com agrees to post only their passing results on the site—the caveat being that the company can't supply its own vitamins or herbs. Cooperman and Obermeyer insist on purchasing every product they evaluate from a retail outlet, just as a customer would.

For this newest multivitamin report, Obermeyer, whose office is outside of Baltimore, took 40 to 60 pills from each bottle, ground them into a homogeneous powder, and sent it off in tubes (coded to hide the brand identity) to testing labs around the country, each with a different specialty. Samples, for example, were sent to Environmental Protection Agencycertified labs to be analyzed for heavy metal contaminants as well as to a North Carolina lab that uses special equipment to see whether pills disintegrate properly. Instead of checking the quantity of every single nutrient on a multisupplement's label, the labs focused on key ingredients: an oil-soluble vitamin (such as A or E), a water-soluble one (such as C or folic acid), and a mineral (calcium, iron, zinc, or magnesium). According to ConsumerLab .com's policy, any supplements that flunked were sent to a second lab to be retested.

Here, then, are the results on which adult multivitamins (general and women's) passed—and which ones failed. (The lab also analyzed multis specifically for seniors, children, men, and pets. The full

report is posted at consumerlab.com. (O readers get 25 percent off a one-year subscription rate, 33 percent off for two years; just enter "Oprah" in the box that says Promotion Code.)

PASSED

These supplements live up to their label for the ingredients they were tested for.

- Centrum Advanced Formula High Potency Multivitamin/Multimineral
- Geritol Complete High Potency Multi-Vitamin Plus Multi-Mineral
- Juice Plus+ Capsules in Orchard Blend and Garden Blend
- Nutrilite Daily Multivitamin and Multimineral
- Nature Made Essential Woman Complete Multivitamin/Mineral
- One-A-Day Women's Multivitamin/Multimineral
- Rainbow Light Just Once Naturals
 Women's One Multivitamin

PASSED CONDITIONALLY

These products also passed but exceeded the tolerable upper-intake level (UL)—the maximum daily amount of each nutrient that most people can safely consume for certain vitamins or minerals. For example, too much niacin can cause skin tingling and flushing and, at very large doses, liver damage. High levels of vitamin A have been associated with greater risk of osteoporosis, dizziness, headaches, and dry skin. Large doses of magnesium from supplements can cause diarrhea and nausea, and if they're very high, low blood pressure and muscle weakness. (Manufacturers can't be faulted for such overloads: The FDA doesn't require supplement makers to follow the UL recommendations made by the Institute of Medicine, an independent group that advises the government. Sometimes exceeding the UL is recommended under medical supervision. Otherwise the ULs are accepted by many nutritional experts, including Consumer-Lab.com.)

- Puritan's Pride Mega Vita Gel, GNC Women's Ultra Mega without Iron and Iodine, and Natural Factors Women's MultiStart, Centrum Performance Complete Multivitamin
- All are over the UL for niacin.
- Nutrilite Double X
 Over the UL for niacin and magnesium.

Twinlab Daily One Caps Without Iron Over the UL for niacin and vitamin A derived from retinol.

FAILED

Theragran-M Advanced Formula High Potency Multivitamin/Multimineral

The problem: A daily serving contained 3.65 micrograms of lead, which exceeded the 3 microgram limit set by ConsumerLab com for supplements used by adults. (And that's lenient. California has set the lead level at .5 micrograms and requires a warning if the product exceeds that amount.) The danger: In adults, high levels of lead can cause an increase in blood pressure as well as muscle and joint pain; overexposure can also adversely affect the nervous and reproductive systems.

New Chapter Perfect Prenatal

The problem: Did not properly disintegrate. The danger: "It doesn't matter what's in a supplement if it doesn't break apart properly," says Cooperman, "because the nutrients won't be absorbed by the body."

Polaris CustomPak Supplements, AM Pak

The problem: The supplement contained only 40 percent of the folic acid claimed on the label, which makes the quantity of other nutrients suspect. "If a supplement is deficient in one of the ingredients we test for," says Cooperman, "that indicates there is a problem with the manufacturing. We don't know if it means the other nutrients are deficient as well, but it's a red flag." The danger: Low folic acid could be especially problematic for potential mothers because adequate intake before and during pregnancy helps prevent birth defects.

Avon's VitAdvance Women's Complete II Balanced Multivitamin

The problem: There was less than 75 percent of the folic acid listed on the label.

The danger: Even though this product is intended for women past childbearing age, the deficiency could still be significant because folic acid may protect adults against heart disease and certain kinds of cancers.

Futurebiotics Advanced Women's Formula MultiVitamin Energy Plus

The problem: It had less than two-thirds of its claimed vitamin A.

The danger: Vitamin A is necessary for maintaining good vision and skin. Although rare in the United States, a deficiency can cause night blindness.

Stuart Prenatal

The problem: This supplement contained only 75 percent of the vitamin A it claimed to have had.

The danger: Same as above.

OTHER FINDINGS

ConsumerLab.com also tested the (vitamin) waters—literally. Glacéau Vitamin Water Multi-V, Veryfine Fruit₂o Plus Citrus Energy Boost, and Aquafina Essentials all contained much lower levels of vitamin C than claimed—the Glacéau, less than 20 percent of the C, and not even half the vitamin A listed on the label.

Looking at the bigger picture, the federal government is showing signs of taking a more aggressive oversight role for vitamins, minerals, and herbs. In March 2003, the FDA proposed a new rule that would for the first time establish standards for dietary supplements and their ingredients. "Consumers should have access to dietary supplements that are accurately labeled and free from contaminants," FDA commissioner Mark B. McClellan said at the time. Getting a law like this on the books would certainly be a step in the right direction, but it will take a while before that happens. Until then ConsumerLab.com is on the job testing away.

Back in his office, Obermeyer stands by his work, taking a multivitamin every day, along with an extra 500 milligrams of C, a B complex, and a lutein supplement for vision—"but I only take products that have passed our testing," he says. As for Cooperman, he tries to get all his nutrients from what he eats.

Top of the Pill-Board Chart

O asked ConsumerLab.com's president, Tod Cooperman, MD, about other popular supplements the company has investigated and which ones can be trusted. He pointed out three in each category that passed the quality tests with flying colors.

B VITAMINS	CALCIUM	GLUCOSAMINE/ CHONDROITIN	FISH OILS (OMEGA-3s)	VITAMIN C
Nutrilite Natural B Complex	Citracal Calcium Citrate	CosaminDS Double Strength	Carlson Super Omega-3 Fish Oils	Nature Made Vitamin C, 500 mg
Stresstabs High Potency B Complex with Antioxidants + Zinc	Enzymatic Therapy OsteoPrime	NOW Extra Strength Glucosamine & Chondroitin	Solgar Omega-3 "700" EPA & DHA	Spring Valley Ester-C, 500 mg
Puritan's Pride Vitamin B-12, 500 mcg	Viactiv Soft Calcium Chews 500+D+K	Rexall Osteo Bi-Flex Triple Strength	The Vitamin Shoppe EPA-DHA Omega-3 Fish Oil 500	Vitamin World Chewable Vitamin C-500 mg with Rose Hips