The Truth About Herbal Supplements
By **Joseph Spring** Jan 2014 - Men's Journal

From echinacea to St. John's wort, many formulas aren't what they claim to be, and some may even be hazardous to your health.

If you're taking herbal supplements, a new study shows that what's on the label may not actually be in the pill. Researchers from the University of Guelph in Ontario analyzed common herbal supplements like echinacea, St. John's wort, psyllium, and ginkgo biloba, and found a third of the samples didn't contain the main ingredient advertised on the bottle. Another third included fillers, such as rice and wheat, that weren't listed on the label, and could pose a danger to people with allergies. Others contained plants that weren't disclosed, such as Parthenium hysterophorus, which causes nausea in some people. Fewer than 20 percent of the companies tested (all the manufacturers were kept anonymous for the study) sold products without any substitutes, fillers, or contaminants.

In the past 20 years, the popularity of herbal supplements has exploded, with an estimated 18 percent of Americans taking them and companies earning $5 billion annually. Advocates believe supplements can improve health naturally – manufacturers claim that echinacea can shorten the length of a cold, for example, and that St. John's wort can fight mood disorders. Some professionals think herbal supplements can even provide a healthy alternative to pharmaceutical medications – such as taking valerian root instead of Xanax for anxiety. There are many studies on the efficacy of herbal treatments (recent studies from the National Institutes of Health on St. John's wort, for example, show the supplement works no better than a placebo in relieving depression) but little research explores the idea that the supplements actually contain the herbs they claim. "At some companies, the ingredients are being neglected; others are just fraudulent," says Dr. Pieter Cohen, a professor of medicine at Harvard University. "The combination leaves consumers completely in the dark in terms of knowing what they are buying."

There is very little oversight of the herbal supplement industry. In 1994, a law was passed that let manufacturers, rather than the government, account for the safety and accuracy of the products they sell. Herbal supplements like flaxseed oil, wheatgrass, turmeric, aloe vera, and spirulina (the top five sellers in 2012) do not require the same kind of scrutiny by the Food and Drug Administration as pharmaceutical drugs or food on the shelves of a grocery store. The only oversight the FDA requires is that companies back a single standard: that what they claim goes into the bottle is actually in the bottle and they have the equipment to test it. But even this rule is not always met.

"Most – but not all – of the botanical ingredients sold in the United States are coming from overseas," says Mark Blumenthal, who founded the American Botanical Council 25 years ago. The reason for the industry's problems, he says, is twofold: the reliance on imported ingredients and the concept of self-regulation, wherein the manufacturers carry the burden of taking on their own testing for quality. The result is an influx of tainted and even fraudulent ingredients, says Blumenthal, who pushed the American Botanical Council to set up an independent program with the University of Mississippi to test for adulterants in products.

Given the lack of government oversight, even companies that claim many of their ingredients come from the U.S., like Garden of Life and Nature Made, have to be taken at

their word, since they conduct their own quality checks. "We audit all new suppliers," says Douglas Jones, a representative for Nature Made. "And for each ingredient . . . we conduct identity testing on raw materials and confirm that they conform. Throughout the manufacturing process, we perform quality checks at multiple stages, and every batch of finished product is tested." These checks are typically paid for by the company, and since much of them are done internally, there are no public reports of the verification.

Health claims on bottles add another layer of confusion. Supplement companies are allowed to make loose assertions as long as they don't promise to cure or treat a disease. When a bottle of ginkgo biloba, for example, claims to "enhance memory, focus, and cognitive function" on the label, that is perfectly legal, despite the evidence suggesting otherwise. (More than a dozen studies of the herb were summed up in a paper by University of Hertfordshire researchers last year: "Taking ginkgo biloba supplements at any age to boost memory has no impact at all – and may be a waste of time and money.")

While the FDA isn't required to check the ingredients in a supplement, it is charged with making sure the labels don't overreach in their promises. Even so, a recent report from the Department of Health and Human Services found that a fifth of supplements made unlawful claims, such as "provides defense against heart diseases, blood pressure, diabetes, and other terrible conditions," "prevents or treats cancer," and "reduces pain associated with arthritis."

Experts say that to find the purest herbal supplements, consumers need to do their homework. The first step is to look for a seal from NSF International or the U.S. Pharmacopeial Convention (USP). The organizations award marks to fewer than 1 percent of the 55,000-plus products sold in America, so if you see it advertised on a bottle, be sure it's not a phony (see "How to Get the Herbs You're Looking For"). ConsumerLab.com, which also offers a seal, takes supplements off store shelves and tests them for accuracy and contaminants.

Consumers can also ask their doctors to suggest specific brands. "When I recommend supplements to my patients, I tell them which company to get them from," says Dr. Victoria Maizes, a director of the Arizona Center for Integrative Medicine at the University of Arizona (the center was founded by one of the most renowned alternative-medicine doctors in the country, Andrew Weil, who sells his own line of supplements as an "insurance against gaps in the diet"). With so many brands unapproved by NSF, Maizes says, it takes an expert educated in herbal remedies to know what is reliable, effective, and safe. Maizes trusts several companies, but mostly advises her patients on what to take on a product-by-product basis. "I work with people who know which the best products are," she says.

More than anything, Maizes wants to see the U.S. regulations changed to resemble Canada's, where manufacturers have to apply and register their products, show evidence that they're safe and that they work, and put cautionary labels for all potential allergies or side effects. For now, says Harvard's Pieter Cohen, "the American consumer is a guinea pig. Unfortunately, they can't always get accurate information and are exposed to real risks."