







PAID CONTENT





Why quality is crucial now

Quality ingredients and products are critical across the entire supplement industry, as manufacturers and retailers fight to earn consumer trust. They're even more important in the growing cannabis industry where consumers new to the plant and its components choose from thousands of products with varying degrees of quality.

To be sure, bad actors are out there. A 2017 study published in JAMA: The Journal of the American Medical Association found that only 26 of 84 samples of CBD oils, tinctures and vaporization liquids purchased contained the amount of CBD claimed on their labels. A quarter had less CBD than advertised. Eighteen of them contained high THC levels.

Now, on the cusp of the category's incredible growth, it's a vital time for retailers to demand the highest quality products, says Holly Johnson, Ph.D., chief science officer, American Herbal Products Association (AHPA). She urges, "Retailers should talk about quality and talk loudly when dealing with manufacturers and suppliers. [To] convey that quality is what consumers want." Doing so will help create the product selection that builds a consumer's trust and cements this sustainable industry in the public mind.

"It's similar to what happened with omega-3 fatty acids," says Laura Lagano, an integrated clinical nutritionist and co-founder of the online cannabis education program Holistic Cannabis Academy, a platform that teaches the integration of cannabis along with other forms of holistic healing. "At first, there were a lot of people selling all kinds of fish oil," she says, "but when people realized they needed to look for higher quality products, the companies making them were the ones that stayed in business."

Requesting proof, building confidence

Johnson and others in the industry are optimistic that CBD will eventually be regulated as a dietary supplement. For now, she says, "act like you're already being regulated by Part 111 [the FDA's good manufacturing practice rule for dietary supplements requiring that proper controls are in place during manufacturing, packaging, labeling and holding operations]." Ask manufacturers (usually a company's technical director or scientific rep) for a certificate of analysis (COA). These are technical reports from a third-party lab that has tested the ingredient or product.

In addition to the amount of CBD, these certificates include information about the content of a range of other cannabinoids, such as THC (which should be less than .3 percent to be sold in retail as a non-psychoactive product); pesticides, chemical solvents and microbes. COAs can vary widely. Some provide information for one test for one compound. Others provide the results of lots of tests of a variety of compounds. High-performance liquid chromatography (formerly referred to as high-pressure liquid chromatography) is one chemical technique used to separate, identify and quantify the amount of compounds, such as CBD, in a sample. Manufacturers can also provide chromatograms, or graphic snapshots, of products.

However, COAs are not always simple to understand and "don't even try to interpret chromatograms unless you're a chemist," says Johnson. So, do you need to get a chemistry degree to safely build your CBD department? No. Call an expert for help. Contact Johnson and colleagues at the AHPA. The U.S. Hemp Roundtable also offers resources. These resources can help you check for quality, especially if you don't have technical experts on your team.

Retailer checks

Consider sending a product sample out to a testing lab yourself, to see if the results match those the company provides. One of the issues in doing so, however, is that because of the federal regulations that prevent materials being sent between states, there are no standard, uniform proficiency testing methods for cannabis, like there are with other ingredients, says Johnson. To try to replicate the same test the manufacturer ran, ask them what method was used and ask the independent lab you choose to use that same method. There are always challenges testing natural products because of inherent variability, but the more information the better, when it comes to quality.



What's really in that product?

How do you know that what's on the label is what's in the bottle? "Ask for certification of completion of a current good manufacturing process (cGMP) audit by a third party," says Connie McGarrah, business development manager at Eurofins Scientific, a leading global testing lab. The audit means an inspector has visited the lab and checked the facility, personnel, grounds and machinery to make sure they're up to the FDA specs. They look at the safety systems and ensure the instruments are providing accurate readings. They analyze the company's quality control requirements and check if the company reviews them regularly. Where a COA addresses the quality of a specific product, a cGMP audit digs into the broader quality picture of a manufacturer, reflected by their operating practices.

Often, retailers are hesitant to demand a cGMP certification from a manufacturer because they think they'll have to pay for it, says McGarrah. "But it's actually very common to make the manufacturers pay for it." Many manufacturers have their cGMP certificates, along with COAs, already collected in packets ready for retailers. "We wanted to go above and beyond requirements," says Kevin Liebrock, COO of Bluebird Botanicals, one of the industry's leading hemp extract manufacturers based in Louisville, Colorado. "As a new industry, we want to show we're doing everything we can to do things right and play by the rules," he said. The company received a 99 percent score (70 percent is passing) as determined by Eurofins on their cGMP audit.

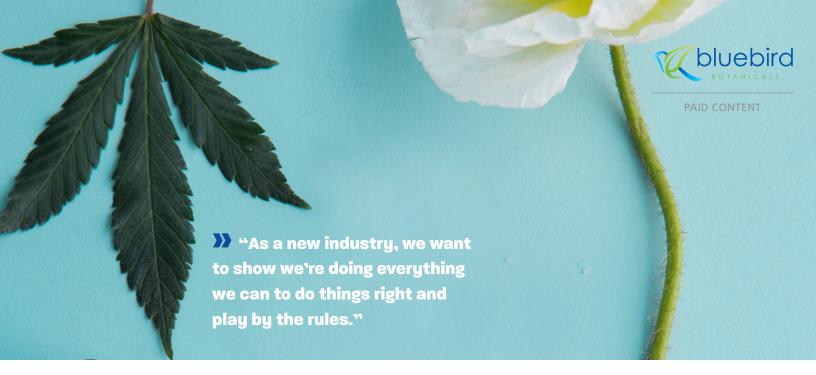
Getting to the source

Since July, Indiana has required all hemp-derived CBD products to include a QR code on labels that consumers can scan with their phones to view quality testing information. "It was really easy for us to do this because we already offered the information to consumers on our website," says Liebrock. On the Quality section of the Bluebird site, you can find a complete batch database with all the raw testing information. Unlike many companies who only provide an in-house pass/fail sheet, Bluebird shares every page of their testing results as received directly from the lab. Not only does the company perform the highest quality purity and potency tests using the best available methods, they pride themselves on an array of other tests for contaminants.

What exactly is the company testing for? "On the purity panel, there's a litany of tests for contaminants, which is important because of potential pesticide drift," says Liebrock. Bluebird uses one of the most extensive pesticide test panels available for any dietary supplement, testing every ingredient for 500 different pesticides. "Also, hemp tends to pull things from the soil, so we test for whether hemp







is handled properly. It can get moldy, so we test for that, too," Liebrock continues. "We also run a full panel for the residual solvents that may be left from extraction processes."

Liebrock says Bluebird is working to make its quality and testing information even more user-friendly to consumers and retailers who might not "speak science." "From further explanations of test results on our blog and on our podcast to more information about the Colorado farmers who grow our hemp, we want to continue to set the industry standard for customer education and radical transparency."

Asking for information about the farm and farming methods is another way retailers can ensure they're stocking the highest quality products, says Lagano, of the Holistic Cannabis Academy. Because of federal regulations, hemp cannot be certified organic, but you can look for farms that use organic and sustainable practices.

Customer callouts

Many customers are still learning the basics of CBD. Retailers interested in differentiating themselves should be sure to offer information on the endocannabinoid system, types of cannabinoids in a full-plant extract, the difference between hemp oil and CBD oil and more to consumers and staff. Then, customers are more

likely to understand and appreciate the importance of high-quality products.

In your quest for quality in the CBD space, don't forget to look at a manufacturers' values, as you might with any supplement.

"We're in it for the long run operating sustainably to do right for the people in our community and the planet, to provide hemp to help as many people as we can."

This is also about a company's partnerships with nonprofits that can help support its mission and vision.

With these things in mind, savvy retailers can help banish cannaphobia and grow the industry with quality products that help consumers lead happier, healthier lives.

A big difference: Hemp seed oil vs. high-CBD hemp extract

Hemp seed oil, or hemp oil, is made by cold-pressing hemp seeds. While they are nutritious and an excellent source of omega-3 and omega-6 fatty acids, hemp seeds do not contain cannabinoids such as CBD.

High-CBD hemp extract is a rich source of CBD and the other cannabinoids and terpenes extracted from the hemp plant.



