

STRATEGIC INFORMATION FOR THE NUTRITION INDUSTRY

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The black hole of transparency

Contract manufacturing isn't inherently bad, but it's not inherently transparent either

By Rick Polito

ark Jost remembers the episode as a wake-up call that changed not only his view of the supplement industry and the way products make it from idea to shelf but also his role in that industry. He'd been working in testing labs at NSF and then **Chromadex** when Chromadex CEO Frank Jacksch asked him to take over a finished product line in 2011. That

meant working with contract manufacturers. It also meant answering that wake-up call.

With a lab background, Jost had high expectations for ingredient identity and with such expectations, he insisted on seeing batch records for ingredients. Except nobody had them, or at least nobody offered to share them. "To a person, they all said 'We don't supply those. We don't do

NBJ Takeaways

- » Transparency between brands and contract manufacturers often still needs improvement
- » Transparency about contract manufacturing rarely occurs between brands and consumers
- » Transparency on contract manufacturing is required by the FDA, but inspectors visit only a fraction of the contract manufacturers currently operating
- » Newer brands are less likely to audit or know what questions to ask

2018 FDA INSPECTION DATA OF DIETARY SUPPLEMENT COMPANIES

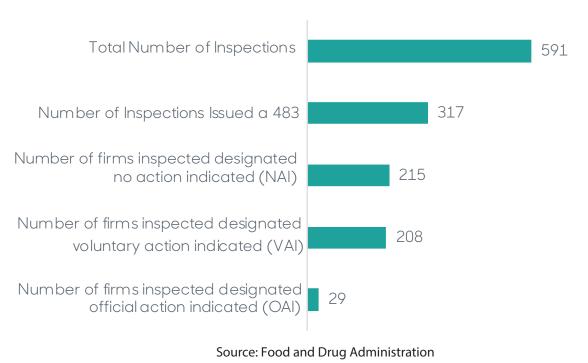




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LETTER FROM NBJ:

Every industry is talking about transparency. Internally and externally, companies are wrapping themselves in the cellophane cloak of open access to information.

Of course, that cellophane can get murky at times, and full transparency doesn't always give the clearest view. One might call it "transparency lite," or, as incubator/accelerator chief and former Megafood CEO Robert Craven describes it, "little t transparency" (see Craven's Q&A on page 24). In that shaded light, transparency is at risk of falling into buzzword status, following words like "sustainable" or even "natural" into a meaningless void. It's window dressing on a window that's only half open.

To approach transparency with such a clouded agenda seems especially foolhardy not just for the supplement and natural products industries but for, really, any industry in an era when pervasive doubt has all but eclipsed public trust in public institutions, from brands and service providers all the way up the loftiest peaks of high office.

Fact checking has long been a function of journalism, but it wasn't always a topic of public debate or even discussion. Now Google devotes an entire column on the Google News page to fact checking. The *New York Times* and other publications fact check political debates while they're happening.

Consumers of products and politics are more aware and more skeptical than ever. Casual disregard for truth has always been a marketing ploy—ask PT Barnum about that—but now it's harder to get away with. A lie may travel half way around the world before truth puts its shoes on, but truth is catching up faster than ever. Thank the internet and the public's appetite for calling out lies for truth's boosted agility.

Tell the truth and you'll get the four star reviews and some pats on the back. Consumers who are interested and following your brand will see it, and it may nudge them toward a purchase. Tell a lie and people who've never even heard of your brand will be talking about it on social media with all the exponential reach that includes.

All of this means, the little t era needs to end. This is NBJ's first Transparency Issue, and we put it together to continue the discussion on how to save transparency from buzzword status and give it meaning. How should transparency be defined? How deep should it go and who should the audience be?

Everybody's talking about transparency. Now they need to talk about how to do it, not what they've already done, because, to be transparent, what they've already done is rarely enough.



Rick Polito NBJ Editor in Chief

COVER STORY CONTINUED

that.' Out of all the contract manufacturers in the United States, I only found two that had any sort of transparency."

Jost works at **Gemini Pharmaceuticals** now. Gemini, founded as an OTC manufacturer, was the only company he could find that offered the information as a matter of course. He asked for batch records and the answer, he recalls, was "Ok. No big deal. That's part of our quality mentality."

That realization, one familiar and troubling for many in the industry, revealed to him much of what is wrong in the relationship between brands and the contract manufacturers who make their products. That relationship has been called the "black hole of transparency" for the supplement industry, one that spreads beyond the B2B level, where brands sometimes don't even know what's in the "proprietary formulation" they're selling. It gapes even wider on the B2C level, where the vast majority of consumers are likely unaware that contract manufacturing even exists, believing the brand on the label makes the product in the bottle.

Brands and individuals pushing for transparency work to close that black hole only to watch it suck in a new class of entrepreneur often unaware of the perils that lurk within it.

Jost is in business development at Gemini now. He knows companies can't ignore the ring of that wake-up call as the demand for transparency grows. Transparency is a big part of the value proposition for his company. And it's working, he says. "We're adding new customers literally every week."

A new class of conundrum

Nobody is saying that contract manufacturing is a bad thing or that every company making supplements for brands is operating in the shady recesses of that black hole. Sources interviewed for this story agree that the majority of the products on shelves in the majority of stores are made responsibly and represent high-quality

"Out of all the contract manufacturers in the United States, I only found two that had any sort of transparency."

- Mark Jost, Gemini Pharmaceuticals

standards and that contract manufacturers present a vital service to brands in every aspect from developing products to meeting regulatory requirements.

That doesn't mean the fringes don't represent a problem. It doesn't mean the problem is being addressed. And even when the product is made responsibly, quality doesn't always equate to transparency.

Scott Steinford has made the quest for transparency in contract manufacturing a major part of the mission for his **Trust Transparency Center**. For him, the fringe is a focus, and that fringe includes the brands. Too many of the astonishing number of brands that have sprung up in the e-commerce channel—**Amazon** sells more than 15,000 brands by Trust and Transparency Center reckoning—don't even know what questions to ask, Steinford says.

A burgeoning contract manufacturing sector that caters to these brands isn't rushing forward with the answers, not when the business is so good. "Brands—especially ones that are just more Amazon-specific—go to contract manufacturers and present a label and say 'We want this made but cheaper," Steinford says.

Steinford and his partner Len Monheit have developed a checklist for emerging brands that highlight some of the requirements and could guide a brand through the vetting process for a contract manufacturer. Those questions would seem clear to experienced supplement industry professionals, Steinford says, but even to newer brands that have good intentions, they often go unasked.

"These brands don't even know the questions to ask," he says.

Put to the test

Newer brands aren't the only ones seemingly skipping the boxes on Stein-

ford's checklist. Problems like the ones Jost describes persist across the brand spectrum, insiders say. Among the most troubling for Ed Wyszumiala, director of customer engagement at **USP** is brands' blind acceptance of certifications, particularly GMP certification. "A lot of companies have fallen back to check the box that they have a GMP certificate as the be-all/end-all, and that doesn't do anything for brand protection, at the end of the day," Wyszumiala says.

GMP certification can mean that a quality control system is in place, Wyszumiala explains, not that it's being used or being used correctly for ingredient identification. Instead, brands need to see not just certificates of analysis on ingredients but documentation that the tests performed were fit for purpose and performed by an accredited lab, preferably a third-party lab, he says. They should also be performed on every lot and "skip lot" testing shouldn't be acceptable.

Getting records at all, as Jost saw, can be challenging with some contract manufacturers. Chromadex CEO Frank Jaksch, who sent Jost out on that 2011 mission to find quality contract manufacturers, says that's still an issue. "I've had manufacturers, even today, tell me that batch records were confidential and they couldn't share the batch records with us, which is, in itself, a violation of GMPs, let alone a massive transparency problem."

Chromadex, with its testing background, is "smarter than the average bear," he says, and knows the questions to ask. Jaksch calls batch records "the one key code you need to get true transparency," but

notes, "a lot of these contract manufacturers will not be transparent. They won't share it."

Good contract manufacturers are tracking the information and making it available, Wyszumiala notes, but even when they are, it's likely only if the brand asks. That's transparency, he explains. Both parties need to be invested in that ideal. "It's a relationship," he says. "It really is."

Building relationships

Adel Villalobos is trying to build those relationships. It's been a long road. When he founded Lief Labs in 2008, transparency had not achieved buzzword status, but it was already part of the business plan for the contract manufacturer. That didn't mean it was easily accomplished. Verifying suppliers wasn't easy on its own-"More than half of my suppliers did not fully disclose all the compounds in the raw material," Villalobos says—but teaching brands what all of it meant has been a task of its own. He likes to explain to brands that they should see the relationship as effectively a new company. He's the chief of operations and the brand's CEO is the chief of marketing. He promises full access to all the information as part of that cooperative arrangement. Lief Labs keeps the information—batch records and all. His staff shares the certificates of analysis and explains the results. They guide the brands through the process. "What we feel is we're educating our brands and we're allowing them to learn in an industry in which, for many years, brands felt like 'Oh, you're the contract manufacturer. You deal with all that. We're just great marketers."

That guidance is crucial to establishing transparency. If brands don't know what to ask and how to ask it, transparency means little. "The brands need to apply more pressure. However, it still needs to be informed pressure," Villalobos says.

Growing calls for better transparency and so much transparency officially mandated by the Food Safety and Modernization Act (FSMA) have helped grow business for Lief Labs and grow those relationships. Brands are starting to use Lief Labs in their marketing materials, Villalobos says, effectively bragging about their contract manufacturer, a phenomenon all but unknown until recently.

Amazon made such information central to the transparency play for its **Elements** line, and more brands have been up front about such arrangements, even on the label, but Lief Labs has hired a video crew to produce footage that brands can use to promote their use of a qualified manufacturer. "We seem to attract similar type companies, and they have similar values and similar cultures built in. They're okay sharing this information."

Jaksch says Chromadex already makes clear to consumers that its Tru Niagen product is produced by a contract manufacturer and is readying to present the name of the contract manufacturer as well. Anything less wouldn't be true transparency. "If you're transparent, then it should be very clear. It should be readily accessible to the consumer, right?" Jaksch says. "If it's not, then don't say you're transparent."

Persistent problems

Actions like Villalobo's and attitudes like Jaksch's are not ubiquitous or even common. Ask a brand executive which manufacturer a competitor uses, and it's unlikely they'll know. Ask a shopper in a supplements aisle to point out which brands make their own product, and they'll shrug their shoulders.

"The brands aren't doing the job they're supposed to be doing. They're not holding the contract manufacturers' feet to the fire."

- Todd Harrison, Venable LLP

Ask one of the Amazon brands to explain its auditing program, and it might say "what auditing program?"

Ask the FDA who makes what, and they'll say they have to get back to you.

Todd Harrison, partner at Venable LLP and a vocal questioner, if not critic, of the brand/contract manufacturing relationship, says brands are largely to blame for the lack of transparency inherent to the relationship. "The brands aren't doing the job they're supposed to be doing," he says. "They're not holding the contract manufacturers' feet to the fire."

He has clients who do that: "They're constantly in their contract manufacturers facilities, constantly in their face. I'm sure their contract manufacturers think they're a big pain in the ass. But you want to know something? If something goes wrong. We know where it went wrong." Harrison is largely convinced the majority of brands will never build clarity into the system without being forced to do so through regulation and, specifically, a registry—a concept he knows is not widely or wildly popular in the supplement industry but could add rigor and clarity to the situation. "Until FDA knows who all the contract manufacturers are, until they know where all these brands are having their stuff manufactured, it's very difficult to connect the dots."

That might not be the transparency brands are talking about, but it'd be transparency that would have an effect on quality and integrity, Harrison charges.

Wyszumiala's solution stops far short of regulation. He points first to his employer's USP Verified Mark as a shorthand form of transparency for consumers, indicating that not only have the ingredient sources been verified and the ingredients been tested but the tests themselves have been tested and verified. USP has run nationally televised commercials to promote the program and explain the requirements. "A program like USP verification really starts to separate the two different markets out there: the one that is unknown and one that has gone through a very, very significant bestin-market product verification and vetting process," he says.

Steinford's approach is less formal but requires some of the same persistence. The Trust Transparency Center is taking samples off the shelf, or out of the virtual shopping cart in many cases, and testing them. When the product does not meet label claims—and 40 percent do not—he contacts the brand and lets them know. Many are entirely unaware, having trusted their contract manufacturer on testing and quality. Others take the news less than graciously.

"The response has been a combined mixture of 'We'll have our attorney sue you if you say anything about this' to 'We rely on our contract manufacturer for testing," he says.

That's the dysfunction built into the system, he observes. "Trust" is the only part of the "Trust, but Verify" maxim that gets

commonly put into practice.

The whole industry needs to get involved, Steinford says. Some of the better retailers—he points to GNC and Vitamin Shoppe—require the kinds of transparency that inject rigor into the system, but such demands are lacking in too many e-commerce outlets, particularly the biggest of them all.

Amazon may shout from the Seattle

rooftops about transparency in its Elements house brand, but the barrier to entry for other brands on the platform is essentially non-existent. With 15,000 brands made by some unknown number of contract manufacturers, Steinford says, Amazon's response to his questions can be summed up as "The consumer decides what products we put on the marketplace."

Steinford is undaunted. The Trust

Transparency Center keeps testing products, keeps reaching out to brands. Transparency is achievable for the contract manufacturing sector and the entire industry, he says. "People just look at it and say it's the other party's fault. But in reality, it's all of our responsibility."

"As education grows, more will happen," he says "And it's just a matter of how fast and at what cost."

The lab perspective

» Many of the transparency questions that hover over the contract manufacturing sector involve in-house lab testing and the conflict of interest that presents. We asked Alkemist Labs CEO Elan Sudberg for his thoughts on such testing practices. While Sudeberg notes, "there are some excellent contract manufacturers out there with really great internal," he also recommends diligence.

NBJ: How often do you work with contract manufacturers? **Sudberg:** We work with contract manufacturers often. Many have internal contract labs geared towards basic Prop 65 testing (metals, pesticides and microbiological), but only a few specialize in plant identity testing like we do, so we stay busy with this category.

NBJ: What sorts of work do you do with them?

Sudberg: Since most contract manufacturers are busy being the best contract manufacturers, they don't invest the time and money into excelling in anything other than mandatory testing. This renders them inadequate to assess aspects of the products crucial to efficacy, which are identity and strength. We also do a lot of finished product test method development, because those don't exist "off the rack" but are essential in order to prove label claims.

NBJ: What are the most troubling issues for you around contract manufacturing?

Sudberg: There are some really terrible contract manufacturers with shady internal labs working feverishly to keep passing materials so that conveyer belt can keep moving products to the store shelves. Without a thorough audit, you won't know which you have until you get a warning letter from the FDA, which is too late for your brand's reputation. Auditing the manufacturing facility is critical. Auditing the internal lab is even more critical. Too frequently products are made with the bare minimum cGMP requirements. The FDA rules leave testing requirements open to interpretation. That lack of defined methods can be tempting to a profit-centric company, creating a formula for terrible products.

NBJ: What needs to change?

Sudberg: There needs to be more attention to lab transparency, and this is true for both internal or external. Who is keeping us safe? How do they know their testing methods are effective? This industry likes to keep some things secret, like who does your contract manufacturing and your testing. I can't figure out why. If you use a great lab, celebrate it. Share the data you paid for and tell the consumers what it says and why it's important. The substandard brands can't compete if this level of transparency becomes the norm.

NBJ: Do you think consumers know how many brands don't make their own products, and what do you think would happen if they found out?

Sudberg: I think after Amazon told them that contract manufacturers are a thing, now they know. Before that, there was no reason to wonder who actually made a product since the average consumer didn't know most brands sub everything out. As consumer's knowledge around quality of whatever it is they are buying grows, they will begin to expect a greater level of transparency: from the farmer who planted the seeds and the soil in which it was planted to the lab that tested it to make sure it's okay, why they tested it the way they did, and what those tests found. Revealing these details will become commonplace because there is no reason why they should be hidden when companies do things right.

NBJ: What questions should brands be asking about contract manufacturer's in-house labs?

Sudberg: Are they accredited for all the relevant tests you need done? When can we schedule an in-person on-site audit? Do you subcontract any work to any others? We would like to share the lab results for each and every batch for each and every ingredient for our product. Do you have a problem with that? If so, why?

In Search of Goodness

Investors talk transparency and intuitional metrics

By Marc Brush

R xBar took its category by storm with a clean label that brought a short list of ingredients to front-of-pack—a tactic some companies, like **Blue-Print**, had successfully employed in the juice and cleanse market.

The declaration of ingredients in such a simple, primary expression of transparency is but one example of the trend manifesting itself in market, and it's a winning one. Blue-Print sold to **HainCelestial** back in 2012 for \$26 million. RxBar, less than five years after its founding, sold to **The Kellogg Company** in late 2017 for \$600 million.

To hear Peter Rahal, CEO and co-founder at Rx, speak of it, transparency

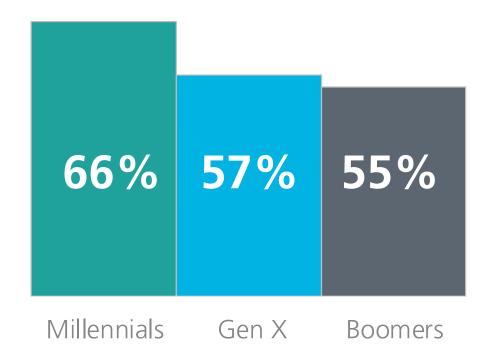
runs much deeper than packaging. There are no secrets in an investment of this size. All laundry, clean or dirty, is fully aired in the offing. "In a transaction like the Kellogg acquisition," says Rahal, "you're disclosing everything. Two months of diligence and auditing went into it."

Transparency is a bold enough concept to impact both sides of the investment equation now. Transparency in a company's operations can increase its attractiveness as an investment target, and the investment process itself is its own exercise in transparency. This begs the question: what is today's investor looking for with respect to transparency, and how do they measure it?

NBJ Takeaways

- » Transparency has become a fundamental brand positioning that attracts elite investors, and those investors will—and do walk if entrepreneurs aren't aligned on transparency
- » Transparency is not currently metricized, investors observe transparency via company culture and purpose and a dose of intuition
- » Increasing popularity and a lack of definition around the real meaning of transparency opens it up to abuse

CONSUMERS INCREASINGLY VALUE TRANSPARENCY: WHAT'S IN IT, HOW IT IS MADE & HOW IT IS SOURCED



Source: NEXT Data & Insights Values and Generational Health Survey (N=1,000)

"We have absolutely passed on investments that fell short on transparency. Some people care and get it, some don't, and we can tell pretty quick."

- Gregg Bagni, White Road Investments

Transparent portfolios

At S2G Ventures, Chuck Templeton serves as managing director and carries plenty of portfolio brands that bring transparency to life in all its manifold iterations. There's Kuli Kuli building an ethical, transparent supply chain in moringa. There's Ataraxis developing rapid testing for the presence of antibiotics and adulterants in meat. There's SafeTraces, Fishpeople, Shenandoah Growers, all squarely ahead of the trends with deep transparency in their respective fields. "Many of our brands work in the supply chain; we don't have that pure brand focus that some other firms do" says Templeton. "And I think surety of supply is only getting more important. Look at the lettuce recalls, the listeria outbreaks. Look at what happened to Chipotle or the hits that Fairlife is taking now."

At White Road Investments, the venture arm of Clif, the portfolio runs just as transparent with Honest Kitchen in pet food, Guayakí in energy drinks, and Wild Planet in pole- and line-caught seafood, all textbook-worthy examples of transparent brands leading with purpose and passion. "We have absolutely passed on investments that fell short on transparency," says Gregg Bagni, director at White Road. "Some people care and get it, some don't, and we can tell pretty quick."

Inside the investment community, transparency exists within mission and purpose. These are qualitative brand attributes that allow for some differentiation in market with social causes related to healthier people and a healthy planet. Brands that build themselves to serve their consumers

with trust and transparency are meeting consumers where they now want to be. Accordingly, they also seem to be better at raising money. "It's part of the DNA," says Templeton. "It's there or it isn't. A startup can't do everything, but it can develop that ethos of transparency internally, start somewhere with it, and improve year over year."

Metricizing transparency

There are no easy shortcuts or tempting loopholes to the transparency game. When pressed about how investors measure transparency, there's a lot of gut and intuition he explains.

Templeton would concur. "Transparency is hard to validate as a metric," he says. "In fact, it's hard to evaluate from a positive economic perspective. The negative perspective is what really matters. We want to limit the downside risk and avoid a blowup."

B Corp surfaces on occasion as a clue to transparent behavior, but that platform tends to stay inside the company with little relevance to consumer packaging and messaging. "There's really no shorthand for this," says Templeton. "I haven't seen any standard rise to the top as a good tool for transparency. It's all about diligence, deep diligence, to make us feel comfortable with a particular claim." While B Corp scores are showing up more often in board presentations by entrepreneurs to their investors, Templeton sees that simply as part of the business plan. The only true test of transparency remains a careful audit of the supply chain and pressure testing by savvy investors to validate a brand's claims.

"I like to say that the truth is all that matters. Honesty, candidness, transparency, that's everything.

Don't massage things, because it all comes out eventually."

– Peter Rahal, Litani

involved. "We do not have a formula that measures this," says Bagni. "There's no ratio of blank to blank, or you're at 8.9 versus these guys over here at 4.6. Clif and its five aspirations set the tone for us." Transparency emerges from those attitudes organically,

The lack of hard metrics around transparency does give rise to softer ones, however. "We do use some 'intuitional metrics' to evaluate an opportunity," says Bagni. "You hear us use 'goodness' a lot as shorthand for all of the mission and purpose

"I haven't seen any standard rise to the top as a good tool for transparency. It's all about diligence, deep diligence, to make us feel comfortable with a particular claim."

- Chuck Templeton, S2G Ventures

stuff, including transparency. We definitely look for businesses and people with a lot of goodness in them."

The other side of the table

From the entrepreneur's perspective, transparency can provide the direction and focus necessary for a brand to move forward. "I like to say that the truth is all that matters," says Rahal. "Honesty, candidness, transparency, that's everything. Don't massage things, because it all comes out eventually."

As an investor himself now, under Litani, his management company, Rahal knows what to ask. "One of the worst things an entrepreneur can tell me is that nothing's wrong, everything's all rosy," he says. "Come to me with the truth. A business is nothing but solving problems. The reality is often chaos, so those problems will ultimately surface in the P&L or revenue story if you try to hide them." This speaks to the importance of finding investment partners with operating experience, partners who want to stay involved after the check gets cashed. An operator will better empathize with that chaos and have some tricks at hand to tame it.

Brands that operate without secrets tend to rise to the top. **One Degree Organics**—another pioneer in transparency using QR codes on pack that link to full product profiles with source information for each ingre-

dient, including its farm and farmer—is one such brand. "We get very granular with our transparency," says Danny Houghton, one of the principals behind One Degree and its sister brands in Canada, Silver Hills Sprouted Bakery and Little Northern Bakehouse. "I think that's why we are regularly approached by investors wanting to invest in our brand, even though we're privately held and prefer to stay that way for now."

For all its allure, transparency does carry its own unique set of risks. "I equate a transparent supply chain to stripping off your clothes and running out the door for everyone to see," says Houghton. "The competition gets a peek too. I remember being at **Expo West** and hearing from one of our organic spelt farmers in Saskatchewan. He was getting all of these calls from competitors just clicking through our QR code. So that works to our detriment, but it's really a benefit to the farmer, to tell their story along with our own."

A transparent future

To speak of transparency's impact on the industry moving forward is to speak of blockchain, seed-to-shelf messaging, and traceability programs that offer greater degrees and specificities of provenance. It's also to speak of the increasingly vocal minority. "I see it as similar to **Reddit**," says Templeton. "Ten or 15% of the population pays attention, but that's

the noisiest segment. The rest consume the products, but that vocal minority sets the tone and calls out the companies not doing things the right way."

So, expect more fallout for conventional brands like Fairlife that have withered in the bright lights of transparency as well as their more nimble peers, and expect more brands to develop real transparency efforts for competitive advantage. "We'll see more brands showing how the sausage is made," says Rahal. "That's a way to differentiate and set the tone for everyone else."

There is also the problem of "transparency creep" to be managed industry-wide, as conventional brands look to co-opt more of the goodness halo afforded by real transparency. Think of that family farmer portrayed on a juice carton run nationally on three million cartons, when his farm might actually supply only a small fraction of that volume. "We did some focus group research where we ran into real jaundice and a lack of trust," says Houghton. "The big brands have abused transparency by bluffing a bit, and the consumer knows it. We had to do some tweaking with our messaging to disconnect from that."

Given the broad scope of transparency, and the increasing threat of abuse by wannabe contenders, should the market get more serious about definitions? "There's just no consensus out there for transparency, what that actually means," says Houghton. "We often see it get confused with local, which is great, but real transparency has a lot more depth to it."

According to Houghton, more industry dialogue and consensus might be in order before "transparency" suffers the fate of "all-natural" and becomes just another empty word.

The QR dilemma

Few consumers scan through on QR codes, but brands should still provide them

By Dan Marzullo

In the era of transparency, the relationship between the immediacy of information and the complexity of that information stands out among the many puzzles of digital marketing.

That information, and how it's provided, can create relationships with consumers, but no matter the message or the method, the effectiveness of the connections created rests on a single important foundation: trust. Without it, consumers will have a difficult time building brand loyalty or even taking product promises, certifications, and

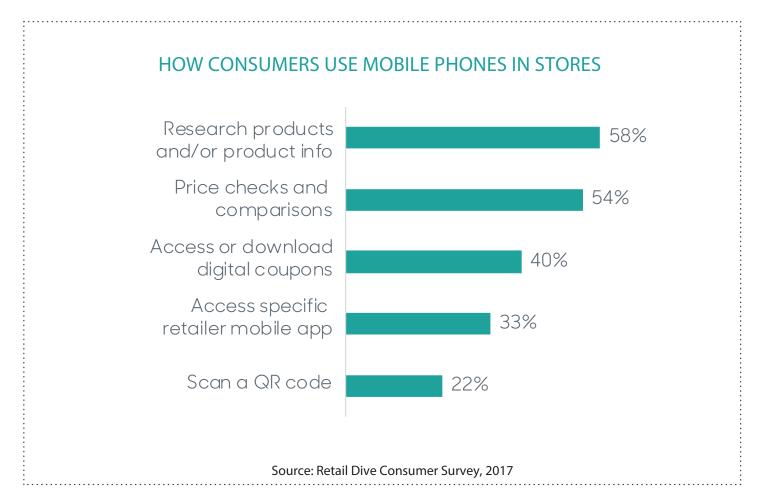
specifications at face value. But just how important is transparency to the market, and how can individual companies meet those growing expectations?

And how do those companies show transparency in the marketplace?

For many, the concept of transparency is closely linked to traceability, i.e., the trust-worthy documentation of the methods by which a single product is brought to market, from start to finish. While the need for proper documentation of supply chain practices is hardly a new concept, its usage

NBJ Takeaways

- Certification seals provide at-a-glance assurances to consumers, but are limited communicators of transparency
- » Many consumers don't bother to use QR scan codes, but accept that their presence implies traceability
- » QR codes should be backed up by content experiences that invite consumers into a relationship with a brand



"I wouldn't say the QR code is dead, but I think it is definitely on life support."

- Jeff Hilton, BrandHive

as a marketing strategy is. This has resulted in industry-wide shifts towards self-disclosure as a means of easy benchmarking and differentiation. From Non-GMO to Fair Trade and USDA Organic, there is a colorful spectrum of seals, certifications, and awards to communicate different production standards to consumers, all conveniently printed on the products themselves and on manufacturer's websites. Tom Mc-Fadden, President and Creative Director of Small Axe Communications describes seals as a kind of mutually accepted shorthand. "Seals, like 'Non-GMO' and others, have a very strong effect on consumer perception. In most cases, the consumer will already know what the seal means. It's the 'Intel Inside' effect," McFadden says. "And in the cases when they don't, the assumption is that the product must contain something important. There is real visual power in the use of seals. You are showing your differentiator, which is easier than telling

But shorthand has its limitations. Nobody tells stories in shorthand.

Tales by tech

QR codes printed on products have also been used as a marketing tool to foster added levels of disclosure and transparency on store shelves. By asking consumers to scan black and white codes with their mobile devices, companies and brands are able to communicate a wealth of important supplemental information via PDF files, specially-created websites, videos and augmented reality presentations that transcend the limitations of product packaging alone.

However, such information, no matter

how deep, means little if consumers aren't accessing it. Not only do companies need to incentivize consumers to use the codes through focused marketing and engaging content, they also need to actively track and capture user data in order to extend the transactional dialog.

For most brands, this is much easier said than done.

While seals and certifications have the advantage of visually communicating complex ideas to consumers instantly, QR codes

vices, but they tend to want it served up on their terms and QR codes don't always accommodate that need."

Consumer engagement with QR codes remains low. The friction balance between a consumer's curiosity and even the small effort it takes to satisfy that curiosity doesn't always equate to action, Hilton says. "Many would rather just do a quick Siri request or Google search to get the information they need. Also, there is an underlying suspicion with many consumers that a brand's QR code will lead to slanted or biased data on a product or service, and they would rather check out Amazon reviews or third-party

"The real purpose for transparency is to allow consumers to get closer to the brand. A QR code gets you the facts. The story makes the sourcing choices meaningful and memorable."

- Yadim Medore, Pure Branding

requre interaction, thus a higher level of operational intent that many consumers are simply not equipped or motivated enough to muster, says **BrandHive** co-founder Jeff Hilton. "QR codes have definitely suffered from exaggerated expectations on the part of marketers. Consumers do want additional information on products and ser-

sources for validation."

"I wouldn't say the QR code is dead," Hilton adds. "But I think it is definitely on life support."

Hilton is not alone in his assessment. McFadden also asserts that QR codes are viewed as seriously outdated in the marketing world. Nonetheless, he argues that

"The simple act of inviting a consumer to inspect the brand's claims can breed confidence in a product."

- Tom McFadden, Small Axe Communications

their current effectiveness (though limited) is still very tangible.

"QR codes, in my opinion, are a bit of a relic," McFadden says. "Are consumers really pulling out their phones, opening up a QR reader, scanning and then reading information? I doubt it." Even unscanned, though, they serve a purpose, he says. "The simple act of inviting a consumer to inspect the brand's claims can breed confidence in a product. Consumers don't have to actually use the QR code for it to have its intended effect."

Scanning ahead

Still, all is not lost for the humble QR code, far from it. The truth is that as effective as seals and badges are, there is only so much they can say. Ongoing market trends towards more assurance, trust, and traceability could be paving the way for the imminent resurgence of the QR code. That could depend on informed consumers demanding a more honest and less redacted version of their favorite companies' supply chains. The challenge is for companies to know how to utilize this existing resource to its full potential, and whether consumers will want to play along.

While the mere presence of on-label interaction can represent a win for food, beverage, and supplement companies, truly leveraging the power of these tools might offer still-untapped potential. As Yadim Medore, Founder & CEO of **Pure Branding** explains, "For many consumers, tracing a single product is often enough to provide the required level of assurance and trust in a brand to create continuous loyalty, so it's up to the brand holder to create a *sticky* enough

experience to motivate consumers to come back and want to trace additional products."

QR codes can be an invitation that draws consumers into a deeper brand experience that goes beyond ingredient-by-ingredient traceability and into the brands culture, which can and should be a part of true transparency. "The real purpose for transparency is to allow consumers to get closer to the brand. A QR code gets you the facts. The story makes the sourcing choices meaningful and memorable," Medore says. "The more personal or relatable the story, the more powerful the transparency."

Medore's agency spearheaded **Gaia Herbs**' robust "Meet Your Herbs" program. Among the first traceability programs created for the dietary supplement industry,

Meet Your Herbs allowed consumers to see proof of careful cultivation, meticulous harvesting, and the environmentally-responsible extraction methods for each of the herbs inside its products via a dedicated app. The initiative was a success, contributing to a tripling of Gaia Herbs' sales over a 4-year period.

QR codes, certifications, and quality badges are not just excellent methods to bridge the growing gap between supply chain transparency and market expectations, but they can also foster enhanced customer loyalty and engagement. If paired with matching communication methods, marketing materials, and a good dose of brand storytelling, substantial gains are possible for enterprising companies in the food, beverage, and supplement industries, and beyond.

Coaxing consumers through the QR doorway isn't easy, but the potential to create a relationship once they arrive is an opportunity impossible to ignore.

Transparent ROI

In the 2018 Pure Branding study titled *The ROI of Transparency:* A Consumer Market Research Study, the power of traceability apps and corporate videos was explored by interviewing various consumer groups to gauge their perceptions and the likelihood of buying related food and beverage products. In addition to finding strong positive correlations between company transparency, trustworthiness and intent to purchase, the study's discoveries included:

- » A QR code and traceability app are both strong indicators to consumers that a food or beverage company is acting transparently
- » More than half (58%) of consumers would buy products from a food and beverage company that provides an app that allows consumers to learn more about ingredients and manufacturing
- » 67% of users perceive companies with traceability apps as transparent, and 57% agree that the presence of an app made them appear "trustworthy"
- » Generation X is the most likely generation to purchase "added transparency" foods and beverages, with millennials and baby boomers following closely behind

Block and tackle

Blockchain can be a tool for transparency, but smart business process must come first

By Bill Giebler

B lockchain is cool. Emerging from the same distributed ledger technology as cryptocurrency, it has, for a couple of years now, been the shiny object of tech-oriented traceability and transparency discussions. But for ingredient suppliers and CPG brands, implementation has much more to do with internal systems and less to do with technology than many conversations allude. Is the industry ready for immutable compliance requirements up and down the chain? And are consumers, the endpoint of transparency, going to demand it—or even care?

The answers to these questions, per industry experts, is a series of yesses—some more tepid than others.

For savvy supplement brands and ingredient suppliers trying to get a grasp on

a complex web of producers, intermediaries, contract manufacturers and more, the technology begins rising to imperative status. Even beyond the rumble of "lacking regulation" and "active adulteration," it's a burden for any supply chain manager to understand and assimilate the origin and handling of multiple ingredients. Providing a permanent record of each supply chain touchpoint, blockchain brings visibility to all movements and transactions of ingredients, from seed to QR-coded box.

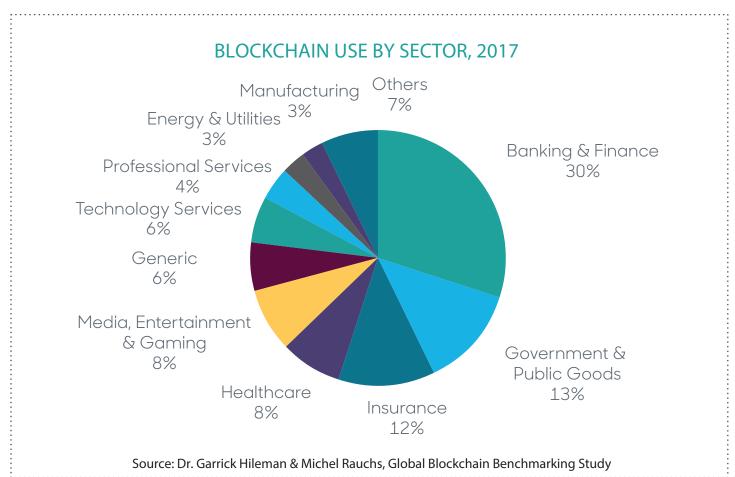
And now, with a handful of service providers building platforms around block-chain, the industry is approaching a point where the buzz becomes less about the shine of the technology and more about the realities of what it can deliver.

"It can be an extremely complex subject

NBJ Takeaways

- » Blockchain technology has arrived, and requires companies to tighten up their business processes
- » The expensive part of blockchain implementation is not the technology; in fact, the technology can be a money saver when applied on top of existing programs
- » Blockchain may usher in unique customer rewards programs and more effective tracking of sustainability initiatives

as you try to peel the onion layers off," says TJ Gupta, CEO and founder of **TagOne**, a blockchain interface platform that specializ-



es in dietary supplement supply chains. "But at a very high level, it's a very easy concept." In practical application for the companies adopting it, and the individuals up the chain tasked with interfacing with it, it's just like any other IT system, Gupta says. "Blockchain is going to be a tool, it is going to be run in the background, they don't even have to do anything with blockchain directly."

Executive understanding is on the rise, too. In an informal audience poll at **NBJ Summit** earlier this summer, 72.2% of respondents answered "yes" to whether they would be able to explain blockchain (29.6%) or explain it "a little" (42.6%). Further, more than half of the respondents considered blockchain either important (33.3%) or vitally important (22.9%) in enabling transparency in the supplement industry. Only 4% called it a fad.

As blockchain moves invisibly to the background of user interfaces, the challenge becomes implementation—not of blockchain itself, but of business processes that make its indelible tracking useful. But for organizations already skilled at documenting the movement of ingredients from source to receiving dock, blockchain will provide ease and even cost savings. Beyond that, the technology will give suppliers and brands sophisticated ways of presenting upstream activities to downstream customers. And do so transparently.

Implementation

At its core, blockchain is simply a ledger system. Platforms like Gupta's TagOne provide a cell phone-driven interface at any point along the chain. "They are not seeing the blockchain at all," Gupta says of the producers, exporters, importers and processors of ingredients. "They are entering data into an application with a link to the blockchain in the background. The only thing you are telling them is, 'you cannot make mistakes, or you can make very few mistakes.""

That data rigidity may be the biggest implementation challenge. One client expressing early interest in TagOne asked Gupta for a system that is fully secure and accurate but at

"You don't have to share what you don't need to share.

It's a private blockchain, so you can absolutely hide or filter based on what you want others to see."

- TJ Gupta, TagOne

the same time allows flexibility, at least in the early stages, because of a lack of confidence in the company's warehouse operators. Gupta laughs sympathetically. "That's the paradox, because we want to give you the flexibility, but then blockchain as a tool doesn't give you that kind of flexibility. The point of blockchain is to make you disciplined and not keep changing the data once you put it in."

Looking upstream, a new challenge emerges. "Because we're talking about traceability and transparency," Gupta says, "the difficult part is not about getting their suppliers to use blockchain. The difficult part is getting their suppliers to become more transparent and share the data. It's nothing to do with blockchain.

"Blockchain is a fantastic tool," Gupta continues. "It addresses a lot of transparency challenges plus many others. But it's just a means to the end. And the journey starts with the company changing its mindset on transparency."

Show and tell

"Once you have a system in place, block-chain is the least of your worries in terms of the cost," echoes Dan Jones, founder and CEO of **Bext360**, a full-service blockchain traceability and transparency platform that brings additional focus to social and ecological value-adds—which Jones describes as "the partnering effects." "The blockchain could be a really simple tool to enable some of those M&E, measurement and evaluation, or just certifications to be immutable," Jones says, which then allows suppliers to identify and demonstrate such efforts to

their customers, which could decrease the time to set up a transparent supply chain and the cost to operate it.

Asked if consumers are ready for—or even asking for-blockchain, Jones says no. And yes. "I don't think the consumers per se are asking for blockchain," he says. "I know what our brands are asking for is providing those customers with immutable data, providing them with the proof of origin and data to back that up." He paints a marketing scenario: "It's like showing a path backwards, a journey back to, let's say, an essential oil that was harvested in Peru, in a very sensitive area, but done correctly. That's kind of cool for that brand." Blockchain can provide that immutable record of the date, time and location, Jones says, "and as a management tool can ensure that that data is legit." As a result, Jones says, supply chain management budgets are being augmented by marketing budgets, "which we think is really exciting because it means that the marketers want more transparency for their consumers."

Jones thinks the value to consumers and brands is clear. But that value comes as a product of its efficacy in delivering what consumers are asking for, not necessarily because it's blockchain. "We'll see," he says. "I guess we'll have some data on whether the blockchain piece of it has an impact on the branding, on the message, on the storytelling."

Oversharing

With or without blockchain, the perennial question of reconciling transparency with

competitive secrecy arises. "You don't have to share what you don't need to share," says Gupta. "It's a private blockchain, so you can absolutely hide or filter based on what you want others to see." Brand owners have complete control over what they share, Gupta says, and he often recommends "traceability lite." "The primary model which we are offering to our brand owners is telling them that we share the farmer location only from a country-or at maximum, state-point of view, but don't give their name and address." This is not intended to shortcut internal traceability programs, just to limit the release of competitive secrets. Gupta argues that nothing is lost there, because consumers don't even care about that level of detail on most ingredients.

"I'm a firm believer that trade secrets are key," Jones says. "Even some of the most prestigious brands in the world, that want to be the leaders in transparency, don't want to cultivate their supply chain and then just tell everyone where the good suppliers are. They put a lot of time and money into those relationships."

Like TagOne customers, Bext360 brands have complete control. Consumers don't even have to know there's blockchain behind the claims, Jones adds. "Or, from a branding and storytelling perspective, you can anonymize it. You can say 'we have 18 suppliers of honey in the Yucatan, and we know every address; we know this data, and we can take those journeys back."

The journeys back

Pacha Soap Co. has a strong commitment to doing business ethically and providing transparency. The eight-year-old company is also an early adopter of blockchain technology. Andy Thornton, the company's director of sourcing and impact, describes Pacha's internal motto/pun to "raise the bar" as existing in three buckets: presale (which is all about the supply chain), how the product is made (which encompasses methods and ingredients and relevant certifications) and post-sale (which addresses philanthropic projects and "puts the data in the hands of the consumer"). "We think blockchain offers an answer to all three of those things,"Thornton says.

For Pacha, blockchain allows a move "beyond storytelling." By that, Thornton means beyond the exaggerative practices of cultivating and highlighting a single

ingredient supplier relationship when that ingredient represents only a small percentage of the product's makeup, or the company's sourcing. Certifications do a lot to limit that marketing hyperbole, Thornton believes, but he adds, "I think the interesting opportunity with blockchain is its ability to throw a supply chain wide, wide open, and a consumer can get to the actual data of what's happening. So, I think in terms of what consumers are looking for, in terms of increased transparency, I think blockchain offers a unique opportunity."

Even the efficacy of certification programs can be improved—or at least better seen and shared—through blockchain. In fact, the distributed ledger backdrop of blockchain can be used to log anything that can be logged. This includes third-party

vider Pacha is working with. Jones says several big brands have come to him recently with plans to track external (social and ecological, for instance) qualities of ingredients through something like a rewards program. "If you buy their brand, you get some kind of coupon back, which could be in a token form, which the blockchain is really good at, just to spur continual buying."

Beyond coupons, however, companies are asking Jones for programs to not only encourage repeat purchase but also give consumers a token they can use to support a specific ingredient supplier, or a related program. It's a way of getting information about customers and, more specifically, a way of connecting customers with specific sustainability projects and, says Jones, "engaging customers more in that sustainability story."

"Once you have a system in place, blockchain is the least of your worries in terms of the cost."

– Dan Jones, Bext360

testing, inclusion of branded ingredients and even service-level agreement details like the temperature of goods in storage and transportation.

Pacha is unveiling their blockchain transparency program later this year, and Thornton is not disclosing what that will entail. It's likely, though, that the company will use the technology to offer consumers visibility up each ingredient's chain, and to use the platform to activate customers in that journey with the brand.

"We see ourselves as standing on the shoulders of so many people doing some great work," says Thornton of Pacha's position in the natural products industry, "and our question as a younger company is, 'okay great, so what's next, how do we take this to the next level and how do we build on the work that was done before?"

"We're seeing a trend in engaging consumers in sustainability," says Jones from Bext360, the blockchain transparency pro-

This is beneficial for many reasons, Jones says. "From a marketing standpoint, it's just a great reason to do drip marketing to your customer, like, 'hey, the school you funded through buying this additive, or this extract, was actually built six months later; here's the first graduating class." Further, these are good opportunities to interact with customers, Jones says, and it's a good way of filtering down to see how much they care about sustainability initiatives—"especially for the brands that are spending money on those initiatives on the ground."

While creative brands will continue to expand the possibilities of utilizing block-chain to drive consumer engagement, suppliers throughout complex supply webs will likely lockdown and promote their tracking with the technology. And throughout, the term blockchain will become ever more parenthetical, and traceability will become ever more, proponents suggest, transparent.

Does transparency matter in the hemp CBD world?

Product quality questions abound as industry searches for standards

By Todd Runestad

he hemp CBD business has a lot to be thankful for. Mostly, it's the trailblazers. The pioneers. The disruptors. The risk-takers. The ones who saw an inch of daylight in the 2014 Farm Bill—"research purposes" was interpreted to include marketing research—and built a market. We are fast approaching a million acres planted and a billion dollars made.

Worth noting: not one of the hundreds of CBD brands even existed when the starting bell rang.

The hemp CBD business also must be thankful for the millions of Americans

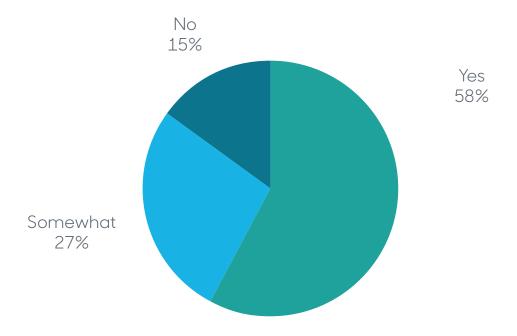
who have partaken in the plant's more notorious qualities, perhaps while staring at their navel as Pink Floyd flooded their consciousness, realizing that the reefer madness prohibitions were insane, that this little unadulterated flower was a fairly benign way to engage with—or ease the pains of—reality in a safe and pleasant way. Welcome to the machine, wish you were here.

All those people, when told that CBD came from the cannabis plant, wouldn't get you high, but could have some pretty positive health effects, were ready to say,

NBJ Takeaways

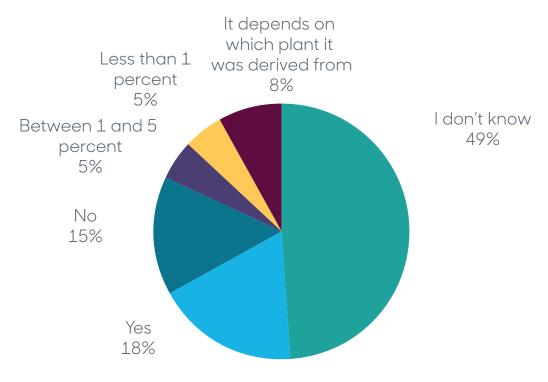
- » Hemp CBD's booming success owes a debt of gratitude to the decades-old marijuana trade
- » Now's the time to make commodity hemp inherently organic
- » New hemp-specific certifications are coming on board that could increase transparency, but each is limited in scope





Source: Nutrition Business Journal Consumer Survey, December 2018 (n=1,090)





Source: Nutrition Business Journal Consumer Survey, December 2018 (n=1,090)

"Yeah, I'll buy that."

No structure/function claims required.

Game on

When the going gets weird, the weird turn pro. And with the passage of the 2018 Farm Bill, we are now fast approaching mainstream legitimacy for hemp. In 2016, roughly 9,000 acres of hemp were grown across the country. In 2017, according to **Vote Hemp**, hemp acreage tripled, to 27,000 acres. In 2018, another triple: 75,000 acres. In 2019, after passage of the 2018 Farm Bill, we've got a ten-bagger on our hands, with an estimated 800,000 acres permitted.

And while the FDA was specifically charged with regulating CBD as part of the 2018 Farm Bill, the agency has largely sat on its hands and shrugged. Consider: medical marijuana is now available, with nary a peep from the FDA, in 33 states, Washington, D.C., and four out of five U.S. territories. What's more, adult-use, or recreational, marijuana, is available in 11 states

plus D.C., again with zero FDA oversight.

As for hemp CBD, 45 states have passed hemp legislation, according to Vote Hemp. In how many states is CBD actually legal? Let's just say it's complicated. At least four states seem to have an outright ban, according to Vote Hemp.

But here's the thing: Because none of those trailblazing hemp CBD companies came from the dietary supplements world, you might not be surprised to hear that many of them have gone about their business without the tenets of DSHEA top of mind. Tenets like rudimentary GMPs, label copy, and marketing language get short shrift, if they are acknowledged at all. We won't even address NDIs. (UNPA President Loren Israelsen believes the FDA would reject a new dietary ingredient application for CBD summarily because the agency does not consider CBD a legal dietary ingredient.)

If the FDA did consider CBD a legal dietary ingredient, precisely how much

constitutes a serving size or efficacious dose remains in question. While the pharmaceutical CBD isolate Epidiolex may come with dosage guidelines, up and coming CBD purveyors should be wary of drug comparisons when looking to pharma for dosage suggestions.

Add to the list: Do consumers really know what hemp is, that it means cannabis containing less than 0.3 percent of THC? An *NBJ* consumer survey found only 5% of consumers correctly identified the THC level of full-spectrum hemp oil at less than 1% (the survey generalized to 1%, not 0.3%).

Despite confusion and regulatory uncertainty, hemp CBD has arrived as the ingredient of the season—and it's not likely to go away.

The organic flag

At this stage in the game, interest—and capital—is flowing into all areas of the hemp CBD value chain, from seed purveyors to farmers, extractors to entrepreneurs.

Independent natural foods stores, for instance, report strong sales of CBD.

Although not all CBD products even bother to make a label claim, for those that do, the question arising for consumers is whether ingredient quality and dosage meet that claim. While that issue plagues the supplement industry at large, it likely casts a darker cloud over CBD. In 2015, when the FDA issued a slew of warning letters to 22 companies for violation of the DSHEA pro-

Gaining USDA Organic certifications, however, is a tricky subject. General concensus held that because the DEA and FDA considered hemp to be an illegal Schedule 1 drug, the USDA could not then validate its use by granting hemp as approved for anything—including organic certification. But legacy supplements company Barlean's went ahead and got its hemp CBD oils certified organic by third-party testing agency QAI, which reportedly looked only at the

"Once I looked into organic practices and non-GMO, regenerative agriculture as a topic kept coming up. We know our agricultural practices are not working any more.

How cool would it be to cure the soil?"

- Janel Ralph, Palmetto Harmony

vision against making drug-disease claims, the FDA took the additional step of testing products. Of 13 products that listed a specific amount of CBD content, only 2 passed.

One way to promote product consistency and quality is the USDA Organic certification seal—which matters for more reasons than might be expected.

In the U.S., farmers plant roughly 80 million acres of soybeans, and another 80 million acres of corn. In both cases, nearly all of it is GMO. A tiny fraction—roughly the width of a hair of corn silk—is grown according to certified USDA Organic processes.

With a hemp-consuming demographic often perceived as core natural products shoppers, the industry could conceivably garner support for more organic focus on the crop at these early states. Done right, hemp might grow to commodity status as a primarily organic crop.

paperwork and not the plant when considering the organic classification.

"You will see organic certifications in the marketplace," Duffy Mackay, senior vice president of scientific and regulatory affairs at leading CBD company CV Sciences, a position he previously held for a decade at the Council for Responsible Nutrition. "There's some concern with how valid they are because the USDA has not given guidelines. There are independent organic certifiers, in some of these states like Colorado, Washington and Oregon, where there are robust marijuana laws, and local agencies are giving the go-ahead. It's a gray area about whether that belongs on the label or not."

MacKay also noted that there are no approved pesticides for use with hemp. That means that, as of the 2019 planting season, hemp *should be* a de facto organic crop. When the EPA gives the go-ahead to go down the chemical-intensive American

way of farming, that will shift things. Now, some industry experts promote, is the time to establish commodity hemp as an inherently organic product.

The regenerative ag flag

John Roulac may be the Johnny Appleseed of the organic hemp movement and a pioneer of non-cannabidiol hemp as nutrition with his **Nutiva** brand. Despite lingering confusion in the larger market, his **RE Botanicals** line of hemp CBD is certified USDA Organic. Also, a seal on product labels denotes that 1% of product sales goes to promote regenerative agriculture, at this point largely through the **Soil for Climate** organization, which puts together educational conferences for hundreds of ag producers. RE Botanicals' hemp oil is already sold in 1,200 stores.

"John Roulac already knew how to make a reliable and trustworthy product," says Janel Ralph, president of **Palmetto Harmony**, a fellow hemp CBD company which in August 2019 merged with RE Botanicals. "When he moved into hemp he didn't change any of his values or commitments, and he put out there a product that everybody could get behind and buy. When he talks to a retailer to say, 'Hey, try our product,' they know he's done it reliably and predictably every step of the way."

Palmetto Harmony is also USDA Organic, proclaims itself non-GMO (though the landmark Non-GMO Project has not come on board yet to certify hemp), is third-party tested, and also has the Leaping Bunny seal that denotes no animal testing. The South Carolina company is also registered with the FDA as a cGMP facility, says Ralph.

"We really concentrated on compliance and making sure we do the right thing by consumer goods," says Ralph. "Some CBD companies don't think they fall under FDA regulations because they're hemp. You need to make sure you're following regulations."

Along with the opportunity to develop an all-organic, non-GMO crop, the nascent hemp industry could make strides in transforming U.S. farming practices to restore soil health and capture carbon. This

concept of restorative farming is gaining notice so quickly that two presidential candidates on the Democratic side, Rep. Tim Ryan and Sen. Corey Booker, have both been talking about regenerative ag on the campaign trail.

"Once I looked into organic practices and non-GMO," says Ralph, "regenerative agriculture as a topic kept coming up. We know our agricultural practices are not working any more. How cool would it be to cure the soil?"

Other metrics of quality

Organic and non-GMO are arguably the most consumer-resonant seals any food or beverage or supplements brand can have on its labels. But those are not the only ones a brand can use to tell its story.

The U.S. Hemp Authority is a relatively new organization. Its quality seal is meant to demonstrate high standards, best practices and self-regulation. It does not, however, ask about agricultural practices (including organic) or soil health, nor does it mention processing or whether the hemp has been tested for heavy metals or glyphosate. It's more of a check for THC and other baseline metrics.

In March 2019 it unveiled the first 13 companies it certified. That number now stands at 22.

"Seals are helpful," says Merril Gilbert, CEO of **Trace Trust**, which offers cannabis companies its A True Dose seal validating both traceability and dose accuracy. "When we look at full transparency, we don't want to know just where your hemp is derived from or [the level of] THC."

Gilbert says retailers, from **Safeway** to **CVS** and **Trader Joe's**, have a list of requirements before they will stock a product. The overarching concern is product recalls, which do tremendous damage to the brand on shelves as well as the retail outlet itself. "The biggest risks in the cannabis space [are the lack of] standardized testing and unreliable products," she says. "There are companies we've worked with for years; they are already good players. But for every one of them there are a hundred products that are not."

One of those good players is legacy supplements brand **Gaia Herbs**, a 32-year presence in the supplements space. The company in 2019 launched its own full-spectrum hemp extract, with no pronouncements about CBD on the bottle. Every herb is genetically tested, and every box of supplements contains the company's renowned Meet Your Herbs number, which consumers can input into the company's website and find where that batch

such elevated concern within regulatory bodies, Congress increasingly appears as though it will step in to provide some regulatory certainty to the market. People following the hemp market are hoping the fledgling industry can self-police itself to a soft landing.

But self-regulation as a guard against over-regulation sounds like an awfully familiar refrain because it is the same one market watchers and the trade organiza-

"The biggest risks in the cannabis space [are the lack of] standardized testing and unreliable products. There are companies we've worked with for years; they are already good players. But for every one of them there are a hundred products that are not."

- Merril Gilbert, TraceTrust

was grown, view the Certificate of Analysis and learn additional information specific to that singular supplement box.

"There's traceability and there's transparency," says Morgan Anderson, western regional sales manager for Gaia Herbs. "Transparency means it's clean. Traceability means we've genetically tested it. We know the terpene and cannabinoid profile, the levels upon packaging, and the levels it will have as it expires."

Gilbert says third-party certifiers—whether USDA Organic or non-GMO, NSF or Kosher—all provide credible seals that denote product quality.

"There's no regulatory body guiding this," she says. "People are willing to pay more for products they trust. That becomes a very valuable piece."

Transparency seals help differentiate products on the market. Because there is

tions have been making for years about the larger supplement industry.

"If we can't demonstrate competence on the basics, we hurt our chances to develop a lawful pathway," says Israelsen. "Standards, practices, lab validation, reference materials, GMPs, claims management, adverse events reporting systems, these are the things we have to get a grip on. That gives policy makers a chance to have a multi-channel market."

Getting hemp CBD products zipped up tight to follow those metrics might be a heavy lift, what with the same problems, to some degree, still existing with the larger supplement world. But that larger world at least provides a trail—or a well-paved path—for hemp CBD companies to follow. And for that, the countless new hemp CBD companies and their customers are likely thankful—if they're paying attention.

FSMA as a transparency tool

Food safety requirements produce the data, but access and aggregation remain an issue

By Melaina Juntti

hen the Food Safety Modernization Act (FSMA) was signed into law in January 2011, it marked the most sweeping overhaul of food safety requirements in decades, with key tenets speaking directly to the dietary supplement industry. Now fully in effect, thousands of companies have been forced to change their long-held business practices and supply-chain-management strategies.

In the process they produced a vast

trove of data to fuel a transparency tool that transforms the industry.

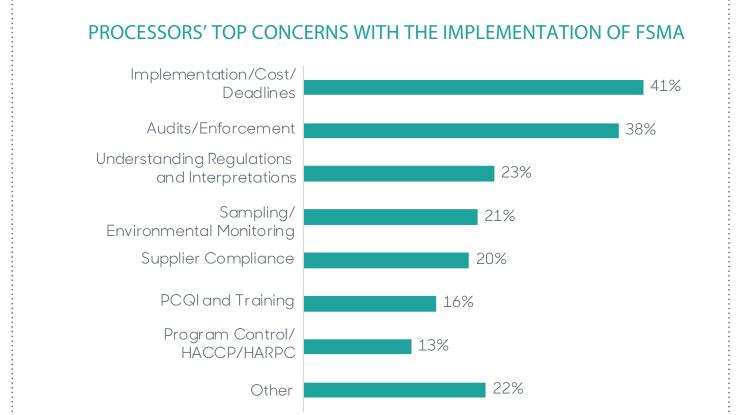
Except that it hasn't.

Supplement brands, manufacturers and ingredient suppliers who might have expected a rich crowdsourced pool of accessible data are still waiting for that tool to be developed. Consumers will wait even longer, if it happens at all.

Perhaps most notably in the FSMA requirements, finished-product manufac-

NBJ Takeaways

- » FSMA dictates detailed data collection but parlaying that info into shareable assets may be unrealistic
- » Companies often keep key transparency and traceability intel confidential
- Nonpublic network-based solutions plus publicly available data are useful tools



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Source: Food Safety Magazine Survey of 100 Processors, 2017

"All compliance dates have been reached by now, so everyone should be compliant, but [FSMA] has been such a humongous shift."

– Larisa Pavlick, UNPA

turers and finished-ingredient sellers are now required to verify all suppliers, including those from outside the U.S., as part of the Foreign Supplier Verification Program (FSVP). To do so, each company must create its own verification plan, implement preventative controls, conduct ongoing evaluations and—this is a big one—document every last detail.

Without a doubt, FSMA demands more intensive data collection and record-keeping than has been asked of the dietary supplement industry ever before. As many see it, FSMA stands to further strengthen federal regulations already in place and reinforce quality-control measures that leading manufacturers and ingredient companies had implemented long ago.

"From my perspective, having been in the industry since 1979, FSMA should've happened a long time ago," says Cheryl Dicks, managing director of CBD Compliance Simplified and former NPA executive board member. "At first, I saw supplements companies panic over this, but now progressive companies are looking at it as an opportunity. I tell clients that FSMA provides an opportunity to make their vendor qualification programs, which are now required, more robust."

A noble goal

In the end, the hoped-for by-product of FSMA and the rigorous documentation it requires is increased transparency and traceability across the board. That, in turn, should only help to improve the public's impression of this industry, which is still often regarded as unregulated, even as the Dietary Supplement Health and Education Act turns 25 this year.

In a perfect world, enhanced transparency and traceability would, in fact, be the result—and, since all FSMA compliance dates have now come and gone, evidence of this would be everywhere. After all, given the detailed data collection that companies have at least begun doing, one could expect some of them to use all their diligent work to their advantage, to make their efforts visible in some way. Perhaps they funnel this info into some sort of transparency or traceability tool, for example. Or maybe they market their precise quality-control measures loudly and proudly to potential customers.

These may sound like fantastic ideas, but, in reality, using FSMA-mandated data in these ways may not be as easy—or as strategically sound—as it might seem. In fact, for many companies, it would be impractical or ill-advised to share their trove of data with other industry players or to open it up to the public. For others, turning this information into marketable assets might be possible down the road, but for now, while FSMA is still in its infancy and many companies are still navigating compliance, doing so is just not feasible or realistic.

Growing pains

While the merits of FSMA may be viewed favorably, compliance is coming along slowly and, in some cases, bumpily. "All compliance dates have been reached by now, so everyone should be compliant, but this has been such a humongous shift," says Larisa Pavlick, vice president of global regulatory and compliance at UNPA. "Many companies we've talked to are still trying to understand and implement FSMA. The hard part is it [mandates] a different way of doing business than was ever required in the past."

As Pavlick points out, it can be challenging for supplement manufacturers to figure out who their suppliers are for every single ingredient they use. "By FSMA's definition, it is the one who grew the food or herb, raised the animal or is the primary processor that has impacted the food safety of that product," she says. And while this may sound straightforward, within dietary supplement supply chains, it's often anything but.

"You have a grower, then probably a consolidator, who probably has an exporter, who probably has an importer," Pavlick says. "Then once that ingredient comes into the U.S., the importer likely has a distributor. So, there may be five links in the chain from distributor to grower, and the distributor still needs to send the product on to the manufacturer."

But whether there are five links or 10, under FSMA, all parties throughout the chain should be transparent each time material changes hands, Pavlick notes. How quickly that transparency will be achieved is not clear.

Dana Johnson Downing, director of marketing and partnerships at **Trace-Gains**, a provider of cloud-based supply-chain-management solutions, says

that in the last couple of years as FSMA compliance dates neared, her company was shocked to learn how many dietary supplement companies didn't know they had to comply with FSMA and FSVP. "Now that FDA has started writing warning letters, I think supplement companies' focus on FSVP is going to ramp up, and many will realize 'oh crap, we are not meeting our commitments here."

Data for one, data for all?

As more and more manufacturers and ingredient suppliers come into compliance with FSMA and FSVP, what becomes of all the data they amass? Of course, it'll come in handy should FDA come knocking or while inspectors turn over every rock, that alone making it a priceless asset. But can a company's intensive process-development and documentation be utilized in other ways that can benefit that business or even the wider industry? Perhaps, but not necessarily by the means some envisioned.

One expected result of supplier verification was a sort of universal authentication process that would yield sharable results. For example, once one respected company verified a supplier, others wouldn't need to. "Everyone thought there would be all this overlap, like, 'oh, they've already been approved by Publix and Kroger," says Nancy Scharlach, president and chief technical director at FSMA International and a preventative control qualified individual (PCQI) who works with several major importers. "But no, that's not how it works. People ask me all the time, 'how do I find out if someone has been approved?' The answer is nobody knows. Each entity in the U.S. working with that supplier is going to directly approve it. There is no master database that shows which suppliers have been approved."

Why no master database? "Because it takes a lot of time, energy and effort for food safety professionals in the U.S. to approve foreign suppliers," Scharlach explains. "If a client hires us and we spent

hours doing this work, why would we share this confidential information with the public? Similarly, if you are with **Wegmans** and your job is to approve a supplier in Europe, you are not going to share all the information you collected with Kroger—you will keep your supplier management program internal."

recent years, the company and its flagship product, Supplier Management, have become a vital resource for thousands of dietary supplement-related businesses.

"We learned that everybody liked the idea of full traceability, but nobody wanted to pay for it," Johnson Downing says. "Our company realized it was necessary

"Everyone thought there would be all this overlap, like, 'oh, they've already been approved by Publix and Kroger.' But no, that's not how it works."

- Nancy Scharlach, FSMA International

Besides, one PQCI's criteria for verifying a supplier likely differs from that of another business. "FSMA International's criteria are very different than that of the guy down the street," Scharlach says. "We base ours on high-level food safety systems, so we ask for the right information versus those who cut corners. We go back and work with suppliers for corrective action if we don't like what we see. It could turn out to be a crappy supplier in China or even a fake company. We dig in and investigate."

A network emerges

While there is no master database of approved suppliers or a free, publicly available Wiki-type platform, there is an important network, somewhat akin to LinkedIn, that manufacturers, distributors, brokers and retailers can buy into. TraceGains, has been a leading software company for supply-chain data management for a long time, but in

to exchange supply chain information more efficiently."

To serve this need, TraceGains started with Supplier Compliance, software that reads incoming certificates of analysis, compares them against companies' specs and alerts users whenever a material doesn't match up. "As FSMA came online, we realized that companies were feeling the pain and there was all this other info to address—kosher, halal and organic certifications, etc.—so we created Supplier Management," Johnson Downing says.

"With this tool," she continues, "our software helps users say 'here are my 100 suppliers; here are the 500 items I order from them; I need these three documents for each item.' Our software collects all that information, extracts data off of the documents and presents it in reports and dashboards to help companies monitor their supplier management and risk." TraceGains customers can

use this intel to see, for instance, that they've received only 75 percent of the documents they asked for, or that a certain number of docs received aren't up to snuff.

While each client's dashboards and data are their own, TraceGains has more recently developed a product, TraceGains Network, that allows certain general,

and exchanging supply chain information, the more value each company will get."

There are other companies that offer supply chain- and risk-management software solutions, such as **SafetyChain** and **Repositrak**, both of which focus more on food and beverage, but TraceGains is the only resource offering a network. "Mostly

"As the marketplace becomes more crowded and competitive, companies have to figure out how to stand out quality-wise from their competitors—FSMA offers that opportunity."

- Cheryl Dicks, CBD Compliance Simplified

less-sensitive supplier intel to be shared among users. This can not only minimize some of the work supplement companies must do but also makes life a lot easier for suppliers—who use and access the network for free—by enabling them to upload standard information once and be done with it. "Then, once they connect with customers, those companies can see all the supplier's information and go in and vacuum up all the relevant documents," Downing Johnson says. "So rather than a one-to-one solution, this is a one-to-many solution."

To date, TraceGains is used by a large percentage of top-100 companies and hosts 10,000 suppliers and some 1.2 million documents, according to Johnson Downing, adding that the network is growing 30 percent annually. The ultimate goal, she says, is to get all industry players on board: "The more companies that are in our network

we compete against the status quo—people using Excel, PowerPoint and other low-tech tools," Johnson Downing says.

TraceGains' solutions may not foster complete, shareable-across-the-board transparency or a publicly viewable database (neither of which would be advantageous or fair to compliant companies anyway, since there are others' out there cutting corners). However, they do provide a way for FSMA-following firms to streamline and make better use of all the data collection that the law mandates.

Mining public data

As for useful FSMA-related intel that any interested company can access, there is always FDA's public information. Warning letters, 483s, import alerts, contamination reports and the like are posted for all to see—forced transparency in a sense. Keeping tabs on this info can assist industry

members in their FSMA compliance efforts. For example, Scharlach uses this data to help assess suppliers.

"FDA offers this information for free, but it's piecemeal—you have to sort through and compile the data yourself if you wanted to create some kind of transparency tool," she says. "I believe there are companies that compile and present this information, but for a hefty fee."

Johnson Downing is also aware of software that scrapes publicly available data, such as the FDA's, as well as some data that is not open-access, and then sets up a database and sends out alerts. TraceGains will be launching a similar service this fall.

Outlook and opportunities

In the absence of universally viewable, shared transparency tools, individual companies have certainly improved their transparency and traceability in FSMA's wake. "By forcing companies to prove their work, to show that suppliers are credible and that they are not using unsafe ingredients, FSMA has forced the industry to choose the right partners in business and not cut corners that could make the industry less safe," Scarlach says. "It has improved transparency between companies and suppliers, upped our industry's expectations and created a process for making continuous improvement."

Even without unveiling the nitty-gritty specifics of their supply chains, companies can use their compliance with FSMA and tightened-up processes as a competitive edge.

"As the marketplace becomes more crowded and competitive, companies have to figure out how to stand out quality-wise from their competitors," Dicks says. "I think FSMA offers that opportunity and is a chance for management, manufacturing and marketing to create a quality standard and market that. Smarter ingredient companies were doing this already, but it wasn't a mandate."

The door to transparency is open wider now, with FSMA as a key, Dicks says. "As an entire industry of ingredients supplied to food and supplements, we've raised the bar for quality, purity and identity."

QA Vertical farms and vertical transparency



Q&A with Square Roots CEO Tobias Peggs

"Local" has long been a cornerstone of transparency for the foodie culture in big cities, but big cities present an obvious obstacle to local sourcing: lack of farmland. Indoor vertical farming operations offer an option to overcome that obstacle and put local and transparent on the plates of urban consumers looking for "local farms, a subway ride away" as Square Roots frames it in its tag line. We reached out to CEO Tobias Peggs for his thoughts on how vertical farming fits in.

NBJ: Describe the Square Roots transparency timeline. How does it work and what is the goal?

Peggs: Consumers across the world are demanding greater transparency into where and how their food is grown. That's why we launched our Transparency Timeline which allows customers to scan the QR code on the back of any Square Roots packaging to trace the journey from seed-to-shelf. It's a super-simple way for consumers to see exactly where, when and how their food was grown, and also who grew it—bringing a totally new level of transparency into the food supply chain and getting consumers connected to their local farm and farmer.

NBJ: How important is "local" to transparency?

Peggs: Being a local farm in the middle of cities gives us the opportunity to connect with the local community. People are able to meet and get to know their local farmers, thus getting closer to their food. We host frequent farm tours where we invite the community to our farm campus to meet our Next-Gen Farmers and find out more about our farming practices. You can also find the Square Roots team popping up at events around NYC to engage with consumers. While it's possible to provide some levels of transparency from a distance, there's nothing that can replace in-person communication that comes from truly being local.

NBJ: You're in New York now, what kind of cities are you looking to move into next?

Peggs: We're in Brooklyn now, serving customers all across New York City. And our farm campus in Grand Rapids, Michigan, opens in September. Several more locations are planned for 2020, so keep an eye on our blog.

NBJ: Square Roots is focusing on cities, is there a plan for moving the platform and the transparency proposition to less urban locations?

Peggs: Our mission at Square Roots is to bring local, real food to people in cities by empowering next-gen leaders in urban farming. And, by 2050 we will have a global population of about 10 billion people, 70% of whom will live in urban areas. So, focusing on cities

is a priority for us right now. That being said, our new partnership with Gordon Food Service will allow us to grow local food for people in cities all across North America, while simultaneously training future generations of farmers.

Being a local farm in the middle of cities gives us the opportunity to connect with the local community.

NBJ: Describe the Square Roots farmer training program. How long is the program and what opportunities are there for alumni? Peggs: Our Next-Gen Farmer Training Program is a year-long program that puts farmers at the forefront of the indoor urban agriculture industry. No previous farming experience is necessary to apply—just the passion and entrepreneurial spirit to jump in and start learning. Our next-gen farmers are full-time employees of the Square Roots team. Similar to traditional farmer apprenticeships, farm skills are learned through both curriculum and handson training. Throughout the year, additional programmed lectures, workshops and more cover a wide range of topics—from integrated pest management practices to real food entrepreneurship frameworks. Our mission is to empower the next generation of leaders, so this is a diverse and full program that touches many aspects of the indoor farming industry and beyond. Square Roots program alumni have gone on to start their own urban farming businesses, take incredible jobs at other forward-thinking companies in urban ag, and moved into permanent positions on the Square Roots team. The program provides unique experience and insight into the many roles for leaders in the future of food.

QA Cross the T on transparency



Q&A with Robert Craven of Findaway Adventures

» As much as anybody in the supplement industry, Robert Craven has been the voice of transparency. As CEO at **Megafood** he championed transparency in forms as simple as 24/7 webcams in the manufacturing facility and as involved as giving consumers access to the product development process. Now leading a business accelerator/incubator program at Findaway Adventures, Craven is seeing how transparency can be built into business plans for earlier stage companies.

NBJ: After the New York Attorney General's investigation into herbal supplements in 2015, there was a lot of talk in the supplement industry about transparency. Do you think the industry has lived up to that talk?

Craven: I don't. I have not seen a lot of movement on transparency outside of a very small handful of companies that have baked that into their ethos. But that hasn't held back the industry. So you can make the case that transparency isn't all that important to growing a supplement brand or the supplement industry. I would argue that the right brand hasn't used transparency in the right way to separate enough from the bad players to really give us an indication of whether it would work or not.

NBJ: What do you think has changed between then and now? **Craven:** In the supplement space, I think what's changed is you've got more of what would be considered traditional premium supplement brands barreling into the mass market: club stores, mass players like Target and Walmart, CVS. So, I think the mass market has given even more credibility to some of the premium supplement brands that could have taken more of a stand on transparency. And now it feels like they don't have to because they're getting the growth they need by making that big move into mass. That brings more credibility without the need for transparency, if that makes sense.

NBJ: Do you worry that transparency has become more marketing than reality?

Craven: I don't think there's been enough marketing around transparency. I think you've got marketing around quality. I think you've got marketing around ingredient source to some degree, which is more marketed right now than transparency. I think the marketing is still around all the things that we've marketed around forever. I think there needs to be more marketing around real transparency. The brand that figures out their marketing around true transparency is the winner and will widen the gap between them and their competitors.

NBJ: Is it any different in the broader natural products industry for transparency?

Craven: In my new role, I'm starting to look more at food and beverage. I spoke at BevNET and NOSH in the past six months. I think there's a huge opportunity for food and beverage to market transparency in a much deeper way. Many of the brands are thinking of "little t transparency," but what I mean by marketing transparency is kind of "big T transparency," which is what we were trying to do at Megafood. The big T stands for trust. We were trying to do things broader than just listing the source of ingredients. It was the cameras on the facilities and the open source, new product development, and sharing even failures. We were marketing our failures, you know, when we didn't launch a product. I still think that even in food and beverage in the broader natural space, the brands that do that well can create a gap [between the brand and competitors]. What's changed now versus five years ago is that you've got to put a lot of money and marketing behind it because so many brands you're competing with are at mass. It's harder to carve out that niche like we did at Megafood eight, nine years ago. You're up against much bigger competitors and much bigger spaces.

NBJ: You started talking about big T transparency in 2014. Do you think you would you define it differently now?

Craven: No, I think transparency means open kimono, like nothing's off the table. I'd guess the vast majority of brands in the natural space are still doing work with co-manufacturers, and I haven't met a co-manufacturer yet that allows for cameras in the facility. Most brands won't even talk about their co-manufacturers out loud. True transparency back to the co-manufacturer and then from the co-manufacturer back to the ingredient supplier, whether it's a farmer or Chinese factory: that's what I mean by true big T transparency. I'm not trying to denigrate anybody, but it can't be just a non-GMO project label or a USDA Organic seal. That's not what I mean by big T transparency.



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- Market Overview
- · Condition Specific
- Awards
- Sports Nutrition and Weight Management

- · Supply Chain
- Transparency
- · Global
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- · Sales Channel Report
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- Sports Nutrition and Weight Management Report
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