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NUTRITION BUSINESS JOURNAL

Essential business

NBJ honors an industry for overcoming challenge with integrity and service

By Bill Giebler

Throughout each year, *NBJ* reports on and talks to emerging and established leaders in dietary supplements, food and beverage, identifying challenges, opportunities, trends and threats across the industry. We hear about the intersections of diet and health and broader cultural happenings, whether political or social. We hear about issues of trust and opportunities for transparency, about how brands are guiding consumers and how consumers and suppliers are guiding brands.

At the top of the year, we take these understandings, overlaid with the values *NBJ* and New Hope Network promote as critical to industry success, and look back over the prior year. Beginning with general nominations and moving out to those recognized by our staff and advisory board, we determine the winners of the NBJ Awards.

Thus, each year the awards are heavily influenced by industry headlines, as we honor companies that made those headlines with integrity or responded to them with aplomb. But rarely—probably never have the awards been so heavily influenced by general headlines as they were in 2020. Those intersections—of health and global happenings—were profound in 2020, and the industry was hit with particularly large challenges, including, for many companies, the challenge of meeting record sales with heightened manufacturing safety protocols and ingredient supply challenges.

Well before NIH's Anthony Fauci, M.D., recommended taking vitamins C and D, consumers old and new had already flocked to vitamin aisles—and Amazon for those vitamins, plus multis, elderberry, zinc and more. *NBJ* surveys over the last twelve months show that as much as 54% of shoppers increased supplement usage due to COVID-19—and many from "none" to "some."

But not all populations were treated equally, by COVID-19 or by access to information and nutrition. So, as the virus affected populations of color disproportionately, race and equity came into play, not just in headlines sparked by the murder of George Floyd but by the pandemic, too. As we look back on 2020, then, we're looking at a year deeply influenced by a pandemic and deeply rattled by still-lacking racial equality in most strata of our lives.

These are the headlines that have informed the 2020 NBJ Awards.

This March, we had twice as many nominees as in prior years, which led to vibrant discussions with our advisory board and, ultimately, to the following 10 awardees.

For starters, we're honoring the **entire industry** with the Management Achievement Award for the work so many companies did to keep employees working and safe during a record year.

NBJ Award winners

- » Large Company Leadership & Growth Puris
- » Medium Company Leadership & Growth Your Super
- » Small Company Leadership & Growth Apothékary
- » Management Achievement The entire supplement industry
- » Efforts on Behalf of Industry *Now Health Group*
- » Science and Innovation Brightseed
- » Supply Chain Transparency Cepham
- » Mission and Philanthropy Naturade
- » Stewardship and Sustainability HowGood
- » Education Brian Terry and Ken Redcross, M.D.

We're honoring the work of both Brian Terry of Nordic Naturals and Ken Redcross, M.D., with a shared Education Award for their parallel efforts to increase awareness of the importance of vitamin D for populations of color during COVID and beyond.

We're also honoring nearly-centenar-



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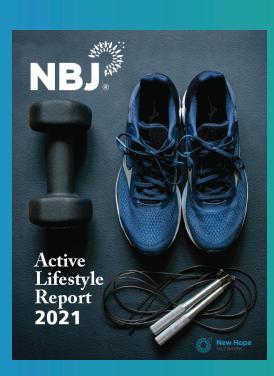
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NBJ Award: Stewardship and Sustainability

HowGood aligns an entire industry on sustainability standards By Bill Giebler



Get in on the action Learn how consumer mindset shifts are driving this \$40.5B category.



The new Active Lifestyle Report at nutritionbusinessjournal.com

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COVER STORY CONTINUED

LETTER FROM NBJ: LOOKING TO EXAMPLES AND THEN LOOKING AT OURSELVES

Maybe stepping outside the comfort zone is not supposed to feel comfortable.

For this year's Awards Issue, we chose winners in two categories based on what they did for nutritional equity. Naturade focuses on making quality nutrition more available to communities of color (see page 21). Nordic Naturals' Brian Terry helped the brand build its Health Equity and Advocacy Project, and Dr. Ken Redcross helped the Organic and Natural Health Association design its Get on My Level campaign, both efforts aimed at raising awareness of vitamin D deficiencies in dark-skinned populations (see page 15).

Naturade is receiving the Mission and Philanthropy Award. Terry and Redcross will share the Education Award. Terry and Redcross are Black. Naturade is co-owned and run by Claude Tellis and Kareem Cook, both Black men.

This is what diversity looks like. Sadly, it's not what *NBJ* has historically looked like.

This could be the uncomfortable moment when we question whether our awards this year are merely a reaction to the events of 2020, the year that the deaths of George Floyd and other Black Americans at the hand of the police thrust race into the conversation for every industry and institution. Are we guilty of choosing the winners we did because race and inequity are a hot topic? Is there a self-righteous opportunism in these choices? We'd say, no, that the work of Naturade, Redcross and Terry is important and would not have happened without their perspectives and passions. They earned these awards.

But those questions aren't the hard part. That *NBJ* looked past the subject of race for much of its history may be the more important matter at hand. We did not choose these winners to apologize for a monocultural viewpoint or wave a flag that says, "look at us, we're the good guys." For too long we weren't looking hard enough for diversity. But this year, diversity found us. Recent events forced us to take a hard look at what we cover and how we cover it. We hope this more diverse slate of nominees is a sign that our cultural perspective is recalibrating.

We needed to try harder, and we have. Look at the last year of *NBJ* issues and you will see a chorus of voices that is not as white and male as the industry we cover. We've examined racial health disparities, and we've called the industry to task for not supporting entrepreneurs of color, not doing enough to bring diversity into its leadership ranks. Each month now, *NBJ* and other Informa media brands meet with a council of voices with diverse backgrounds and diverse viewpoints. We talk about what stories we are working on, and we ask how we can be more conscious of what those stories might mean to people who don't look like us.

We're not there yet. We look forward to a time when it doesn't feel awkward, uncomfortable.

But right now, maybe it should. It means we're trying.



Rick Polito NBJ Editor in Chief

ian supplement brand **Naturade** with the Mission and Philanthropy Award, for shattering the privileged exclusivity seen across the supplement industry by filling a substantial gap in marketing reach and taking nutrition to BIPOC communities.

For Leadership and Growth, we've chosen three companies of very different sizes and ages. Those are pea-protein supplier **Puris**, for its pioneering role in plant-based protein market, and herbal products startup **Apothékary** and whole food supplement brand **Your Super**, for marching into a crowded space with quality and exemplary transparency.

Proving that legacy brands can be market-leading innovators, Supply Chain Transparency Award goes to forty-year-old ingredient supplier **Cepham**, for its longtime commitment to transparency that includes a recent full-scale adoption of blockchain technology.

Technology plays a key role, too, for two companies providing sophisticated tools to the product formulation process. **Brightseed** takes the Science and Innovation Award for its computational biology tool that helps to unlock the potential of plant medicines, and **HowGood** grabs the Stewardship and Sustainability Award for its robust sharable database that improves sustainability efforts for formulators.

Lastly, **NOW Health Group** is this year's recipient of the Efforts on Behalf of the Industry award for taking Amazon to task for lacking quality standards, likely prompting the behemoth e-tailer to implement dietary supplement standards in December.

The task of selecting so few winners is difficult every year, and especially hard this year with so many nominations for us to review, and so many challenging headlines for everyone to contend with.

Please join us in honoring the 2020 NBJ Awards recipients. Thank you for taking a moment to read these headlines.

NBJ Award: Leadership and Growth

Three companies built on health and integrity

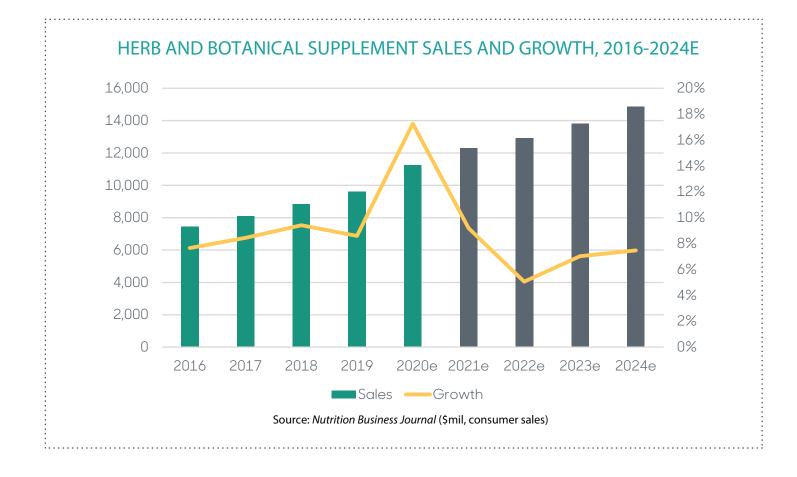
By Melaina Juntti

Given the explosive sales of dietary supplements and natural and organic foods in 2020, plenty of companies recorded a banner year. But there's a big difference between enjoying the windfall from a red-hot market during a global pandemic and laying the groundwork for prolonged prosperity. Establishing sustainable markets that engender continued growth—not only for that company but throughout the supply chain—requires true leadership, marked by integrity, ingenuity, resilience and vision. These three NBJ Award winners exemplify exactly that.

The 2020 Large Company Leadership and Growth Award, reserved for entities valued at \$75 million and up, goes to **PURIS**. For 35 years, the innovative seed genetics and plant-based protein enterprise has been building the infrastructure to transform non-GMO crops into ingredients destined for plant-based foods that consumers want to eat. Through its joint venture with **Cargill**, PURIS has become the largest pea protein producer in North America, claiming revolutionary meat mimic Beyond Meat among key customers. *NBJ* isn't the only outlet to take notice. *Fast Company* recently

NBJ Takeaways

- Puris's pea protein expertise was well timed for rapid expansion in plant-based foods, most notably its position as a supplier to Beyond Meat
- Your Super is moving into retail, but intends to keep its focus on direct to consumer
- » Apothekary is seeing great results from its subscription program



named PURIS among the 10 most innovative food companies in 2021.

Your Super takes home the Midsize Company Leadership and Growth Award (\$15 million to \$75 million). Launched in 2015, the direct-to-consumer brand is on a mission to help people take charge of their health through its organic, non-GMO, additive-free superfood and plant-based protein powders. A Certified B Corp, Your Super has developed a transparent supply chain, working directly with values-aligned producers around the world and uplifting their communities.

Finally, *NBJ* hands **Apothékary** the Small Company Leadership and Growth Award (under \$15 million). The online herbal apothecary champions "food as medicine" for modern-day woes such as stress, low energy and gut discord. Like the other two winners, Apothékary has built its supply chain from the ground up—diligently, ethically, transparently. "From our work with farmers and ag tech to new product innovation continuing to elevate eating experience, a lot is coming down the pike. Keep your eye out for us—we have a lot cooking."

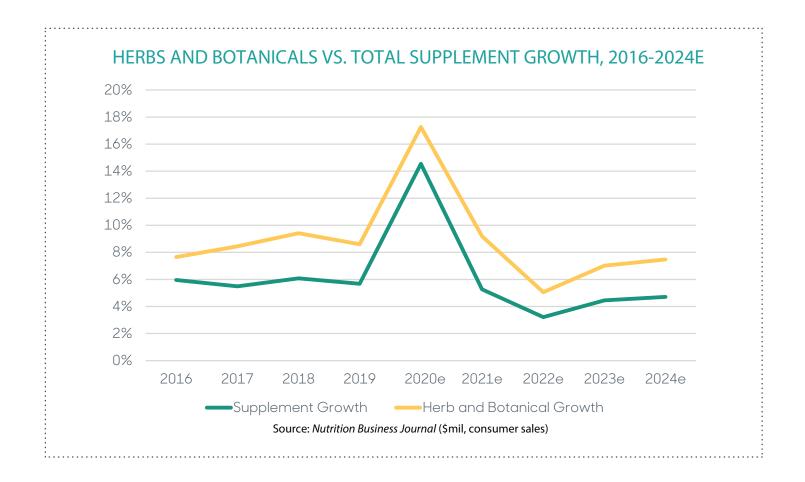
-Nicole Atchsion, Puris

All three of these companies logged stellar growth in 2020 and, more importantly, demonstrated the type of leadership that leads to long-term success.

Large Company Leadership and Growth: PURIS

Launched as World Food Processing in 1985, PURIS has bloomed from an Iowa seed geneticist's vision for a closed-loop food production system to a vertically integrated company worth north of \$100 million—and growing at a double-digit clip. Sustainability-minded founder Jerry Lorenzen believed people needed to eat more plants, which meant plant-based foods had to taste good. So he set about developing seeds for non-GMO pea, soybean and other protein-dense, sustainable crops while also building up the infrastructure for clean food-ingredient processing.

Now based in Minneapolis, PURIS is helmed by Lorenzen's kids, co-CEOs Tyler Lorenzen and Nicole Atchison, Ph.D. The



younger Lorenzen runs PURIS Proteins, which includes the Cargill joint venture, while Atchison oversees PURIS Holdings, the seed and ag tech side of the business.

Lorenzen came onboard in 2011, shortly after his NFL career ended, when he helped his dad purchase an old dairy facility and convert it to the first pea protein plant in the U.S. "We invested the money and scaled our organization from 30 people to over 300 people and six manufacturing locations," he says. "Our success was largely due to my mom and dad taking the risk to grow the business—and do it for farmers and customers." A few years later, Lorenzen convinced his sister to leave her career in medical devices to help him lead PURIS.

The company now works with hundreds of growers across the U.S., accounting for a few hundred thousand acres—and expanding. "What's great about an integrated system is that when one part grows, all other parts must scale, which is also the complexity and challenge of vertical integration," Atchison says. "We are very thoughtful about building scale into the business system so that we can scale in the right way, be a good partner for farmers and our customers, and meet demand."

Teaming up with Cargill on its climate-change-resilient yellow pea protein in 2018 has proved transformational. "Today, through PURIS and our joint venture with Cargill, we operate the largest pea protein processing in North America—and we're the first with a two-plant model," Atchison says. "We have a new plant opening this year in Dawson, Minnesota, that will more than double our capacity. When we can make more protein, we can work with more farmers, sequester more carbon and put more plant-based products on the market."

Keeping all its operations domestic is a conscious decision based on environmental footprint. "In terms of solutions for plantbased nutrition, we are trying to build products that do not compromise on taste, texture, functionality—or sustainability," Lorenzen says. "If you look at our system versus some other non-GMO and organic plant-based supply systems, ours is efficient and localized, which is very impactful in terms of sustainability, whereas others ship back and forth, generating a lot of greenhouse gas."

Though pea protein has become PURIS's calling card, the company plans to do other joint ventures around other products in the future. "What's new and next for us is constantly evolving because there is so much to do in the plant-based market," Atchison says. "From our work with farmers and ag tech to new product innovation continuing to elevate eating experience, a lot is coming down the pike. Keep your eye out for us—we have a lot cooking."

Adds Lorenzen: "What we accomplish in 2020 and 2021 will pale compared to what we will accomplish in 2022 and beyond."

Midsize Company Leadership and Growth: Your Super

Your Super was born out of a shocking diagnosis. Co-founders Michael Kuech and Kristel de Groot had met while on tennis scholarships at Valdosta State University in Georgia. The two fell in love and traveled the world together after grad school. While traveling, they were stopped in their tracks upon learning that Kuech, then just 24, had cancer.

"I was on a path to become a business consultant, and then I got this diagnosis," he says. "When I started researching why people get sick, I was shocked to learn that a big risk factor for chronic diseases is the way you eat. I thought, wow, I can't control everything, but I can control that. Kristel immediately put me on very healthy diet."

Having grown up with eczema and an orthomolecular nutritionist aunt, de Groot had long known that food directly impacts health. "I directed him to whole foods and told him he needed spirulina, wheatgrass and other greens," she recalls. "He said it was expensive and complicated, so I grabbed a jar, filled it with a bunch of superfood ingredients and told him to take it every day. Then I realized there were a lot more Michaels in the world, as nine out of 10 people don't eat enough fruits and vegetables."

The couple launched Your Super in Amsterdam in 2015, selling Kristel's hand-formulated line of über-clean, organic, non-GMO superfood and plant protein powders directly to consumers. They relocated the business to Germany in 2016 to be closer to its largest market. But by early 2017, they realized 10% of orders were from the U.S.

"We wondered why Americans were ordering from a tiny startup in Berlin, especially when they had to pay \$30 in shipping and wait four weeks to receive their products," Kuech says. "We learned that they were looking for cleaner options, without stevia, flavors, fillers or cheap stuff. We offer the perfect blend of both worlds: the convenience of supplements and the benefits of a whole-foods diet."

Since relaunching in Venice, California, in 2018, Your Super has exploded, receiving their one millionth order in December 2020. Impressively, about 95% of sales come from the brand's website. "This is strategic because we want to be close to our customer," Kuech says. About half of all revenue stems from subscriptions. Last year, Your Super expanded beyond powder mixes into the bar category.

"But we're not just selling products our mission is to help customers improve their health," de Groot says. "We have customers all across the country, and 60% have never used superfoods before. They see us as the health buddy they never had. By holding their hand and teaching them that healthy eating doesn't have to be complicated, we can give them the energy they need to love life."

Your Super also stands out for its direct sourcing. "We've always felt that, being in the superfoods category, a transparent supply chain is very important," Kuech says. "We know our farmers and know exactly where each ingredient is produced."

Establishing relationships with suppliers is a long process. "We source 100% organic and only work with suppliers willing to show us their fields, which disqualifies about 90% of them," Kuech explains. "We require every supplier to present a third-party test from an accredited lab, then we test the sample again in-house. After a few weeks, if the supplier has the same values as us, we'll slowly get into business together."

Values alignment throughout the supply chain is especially important to Your Super, which became a B Corp in 2018. "We believe if an ingredient is sourced the right way, it can have a positive impact on producers' lives," says de Groot, noting that company has impact initiatives with its partner producer co-ops. Furthering its do-good mission, Your Super partners with Action Against Hunger to donate a bar for every mix sold.

Next up, the company is planning new superfood mixes for new functions. "We want to reach millions and millions of people and can do that by expanding into different categories," Kuech says. "We'll build out our bars business and our European business further, and we're launching at target.com this spring. We also have plans to move into retail, but our DNA will always be direct-to-consumer so that we can be very close to our customers."

Small Company Leadership and Growth: Apothékary

It's safe to assume not many Goldman Sachs and World Bank alumna launch online herbal pharmacies. But Apothékary founder Shizu Okusa grew up with traditional Japanese herbs and medicinal mushrooms and understood their value. "Botanicals and plant-based healing are a family tradition," she says. "My parents never gave me Tylenol; it was always reishi drink, always prevention over reaction." "I came to the realization that fruits and vegetables alone wouldn't solve all of my health problems."

- Shizu Okusa, Apothékary

other healthy foods direct to consumers.

Several years into that business, Okusa got the idea for Apothékary. "I was so busy running JRINK, which is an all-inclusive, all-encompassing life, that I was having hormonal issues, skin problems and stress," she says. "I came to the realization that fruits and vegetables alone wouldn't solve all of my health problems. I remember walking through **Walgreens** and thinking, 'I didn't want to take a pill or buy something where I have no idea where the ingredients are from."

Tapping into her Ayurvedic knowledge while still working full-time on JRINK, Okusa began seeking out organic herb producers and formulating herbal blends for various need states—the products that

"We know our farmers and know exactly where each ingredient is produced."

- Michael Kuech, Your Super

After leaving Goldman Sachs, Okusa moved to a banana plantation in Mozambique to help small farmers raise capital for agricultural projects. Next, she ventured to Bali to train in yoga and Ayurveda. These two experiences fueled her passion for wellness. In 2012, not long after moving to Washington, D.C., Okusa launched her first company, **JRINK**, which delivers fresh, clean juices and would eventually bear Apothékary labels. Setting up the organic, non-GMO supply chain for Apothékary took her a year and a half. "Going from local fruit and vegetable sourcing with JRINK was night and day from the vendors we use now, who are from India, Korea, Japan, Russia and China," says Okusa, who meticulously vetted each source to ensure quality and ethical harvesting. JRINK was acquired in December 2020, allowing her to exit the company and devote full attention—and money from the sale—into Apothékary. Her "pharmacy of the future" launched officially in January 2020, "so basically the same as COVID—the best time ever to start a new business!" Okusa jokes.

Originally, Okusa based the business around brick-and-mortar storefronts, but the pandemic had other ideas. She quickly pivoted to direct-to-consumer, which has proven fortuitous. "We did an intentional move to digital—we just didn't expect it to go so quickly to the literal hockey-stick growth we've experienced," Okusa says. After just over a year in business, sales are poised to reach eight digits.

As 2020 rolled on, Apothékary ramped up its subscription services—also not something it had intended initially. "We naturally converted customers to subscriptions because it's kind of like getting a refill of a prescription every 30 days," Okusa says. "Organically, about 30% of our revenue is from subscriptions."

Okusa credits her amazing—and growing—team for believing in her mission and being willing to pivot from a retail-focused company to one that "mirrors the personal shopping experience digitally."

That said, storefronts are still part of the plan going forward, as is an expansion of Apothékary's wholesale and international businesses. In May, the brand is moving into skin care, starting with a hibiscus rose anti-aging mask. Also next month, Apothékary will launch on **Amazon** in the U.S., followed by amazon.ca this fall. By seizing these opportunities, Okusa expects the company to triple its business in 2021.

NBJ Award: Management Achievement

Supplement brands highlight worker safety during challenging year, earning the first-ever award given to the whole industry

By Rick Polito

L's easy to believe that the success of 2020 for the supplement industry is going to be remembered longer than the challenges of 2020—it was, after all, a historic year for sales growth—but the challenge that should not be forgotten was among the most important the industry has ever faced.

The industry kept its workers safe.

In a year when demand skyrocketed and manufacturers were forced to chase ingredients while ramping up production, the workforce that supports all that growth was largely kept safe. *NBJ* knows of no major outbreaks at supplement manufacturing sites, despite workers often employed at tasks that require close physical proximity, from encapsulation to shipping.

That's why, for the first time, *NBJ* has chosen to give the Management Achievement Award to the entire supplement industry. From small brands making herbal extracts to contract manufacturers with sprawling facilities, the industry stepped up when supplements were declared "essential" and made it essential that the workers remain healthy.

Shifts were staggered and segregated. Temperatures were checked. Rapid tests deployed. Plexiglass shields went up. Processes designed to speed production were tweaked to highlight safety.

And all of this happened on a learning curve that companies had to chart on the fly, just as hordes of new consumers began to turn to supplements and SKUs began to sell out. "The first 60 days were very fluid," says **KD Nutra** CEO Scott Woodruff, describing how his company built up procedures and practices on the spot. "We built a foundation, and we managed around that," he says. "We did what was important to put our employees first."

CRN President and CEO Steve Mister called *NBJ*'s decision to bestow an award on the entire industry a worthy break from tradition. "Everybody in the industry had a stake in this, and the demand was ris-

"We did what was important to put our employees first."

- Scott Woodruff, KD Nutra

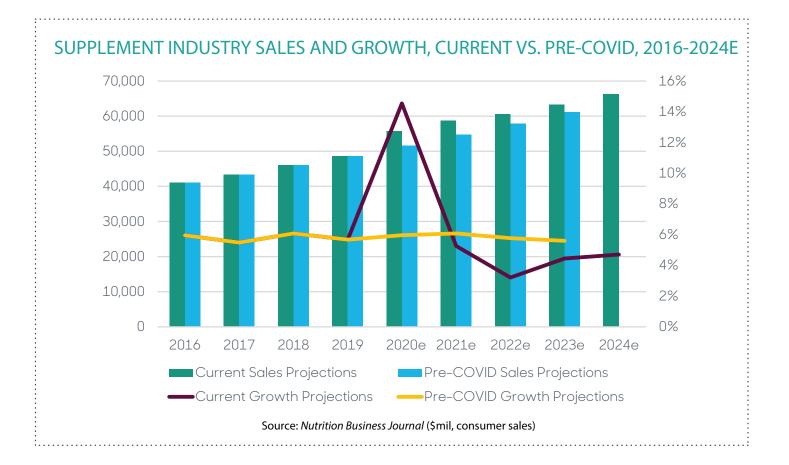
NBJ Takeaways

- » The supplement industry saw huge demand spikes while also learning to counter employees' risk of infection with new procedures
- » Line workers in supplement manufacturers face some of the same risks as those in industries where infections were more widespread
- » Development of best practices across the industry were often collaborative

ing across all products, all categories. So, *everybody* had to step up."

Mister says companies were contacting CRN for direction and executives were sharing best practices with each other from the start. Companies were mandating masks long before local authorities even issued guidelines. He also points to the risks inevitable to any kind of linework and compared supplements to other linework industries like meat processing where outbreaks were widespread. "With GMPs, we had a good base to start from. So, we understood the importance of good hygiene and good sanitation," Mister says, "but there was so much more companies needed to add."

Companies that did have sick employees traced the workers' contacts in and outside of the facilities and sent every worker who'd had contact with them home. Facilities that were already being sterilized got sterilized



even more thoroughly. "They contained it very quickly," Mister says.

Carlson Laboratories President Carilyn Anderson was one of the company heads who had to learn, and act, quickly. In the first weeks of the pandemic, when the situation was evolving rapidly and with little certainty, Anderson shut the facility down. Carlson, she says, is "a small family company" that's run like a family, and when employees were worried about taking care of their own families, especially their children as area schools shut down, the decision was obvious. "The best thing we could do was close. Everybody thought it was really odd, but you've got to support your team. You've got to support your employees. You have to support the people that work with you and for you," Anderson says. "If you don't, you don't have a company."

A skeleton crew kept pieces of the operation going, with deliveries and other operational matters, but the bulk of the Carlson team sat it out for two weeks until proper safety protocols became clear. "We set up a "You've got to support your employees. You have to support the people that work with you and for you. If you don't, you don't have a company."

- Carilyn Anderson, Carlson Laboratories

lot of things in those two weeks," Anderson recalls. "When we came back in April, we were ready to go."

Moving on

For Woodruff, the COVID pandemic was a test his company didn't want to take but managed to pass and come out stronger. "We really had to come together as a team," he says, explaining how the virus taxed every component in the operation.

He remembers workers scrambling to meet demand while simultaneously learning new practices, and he remembers driving his management team to get those practices right. He saw the same thing happening across the industry. Asked to grade the industry's response, he doesn't hesitate.

"I'd give us an A," Woodruff says. We agree.

NBJ Award: Efforts on Behalf of Industry

NOW Health Group pushes Amazon to take up the gatekeeper role quality retailers play

By Melaina Juntti

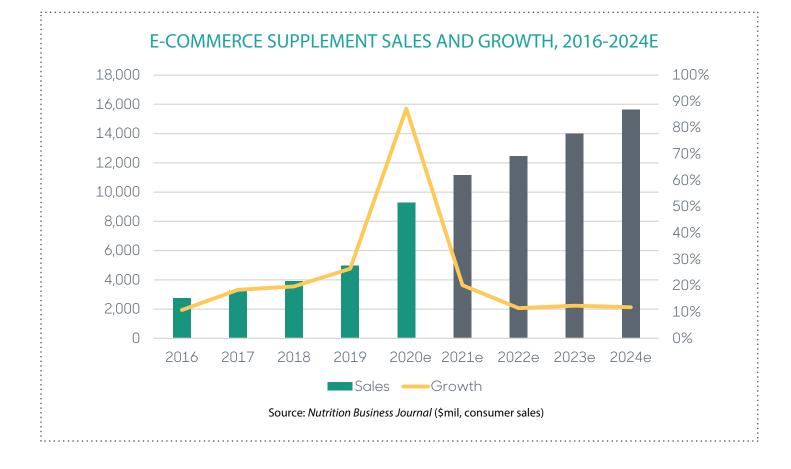
For a long time, natural products retailers were the primary gatekeepers for dietary supplements. They vetted brands meticulously and stocked only those they deemed legitimate and high quality, thereby shielding consumers from the bunk products that give this industry a bad name. The system worked well for decades.

Then along came the internet and, specifically, **Amazon**. By sheer size and algorithmic wizardry, the e-commerce giant oopened up and enormous gate—maybe one of the biggest ever—with no real keeper guarding it. Without quality standards in place for its supplement vendors, Amazon had been more like an open floodgate, allowing unscrupulous actors to peddle sketchy products.

For years, upstanding dietary supplement brands and naturals products retailers alike were frustrated by Amazon's laxness. Along with the online marketplace stealing business from the latter, both groups worry about the proliferation of bad products, which, besides not providing the health benefits they purport to, could

NBJ Takeaways

- NOW purity-tested dozens of suspiciously cheap supplements sold on Amazon, confirming they were bogus
- » Frustrated by Amazon's anemic response, NOW made its data public
- Presumably triggered by NOW, Amazon enacted sweeping new requirements for its supplement vendors



even harm consumers.

But aside from grumbling about it in industry circles, what could a single supplement company or retailer actually do about the problem? This was the almighty Amazon after all, a behemoth that conquered nearly every CPG market it entered and almost singlehandedly changed the way America shops.

NOW Health Group, a quality stalwart and industry leader for more than a half-century, knew exactly what to do. In an effort spearheaded by Dan Richard, vice president of global sales and marketing and son of founder Elwood Richard, along with Aaron Secrist, executive vice president of quality, R&D and operations, NOW tested popular supplements sold on Amazon, proved they were bogus and made its findings public.

These efforts very likely played a part in forcing Amazon's hand. In early December 2020, the e-tailer unveiled sweeping new requirements for its supplement vendors, marking its first real attempt at being a gatekeeper for quality. Under the new rules, sellers must back each supplement with a certificate of analysis from an ISO/IEC 17025-accredited lab, detailed product images and a manufacturer's guarantee that it abided by 21 CFR Part 111.

These requirements may not be perfect, but they are pivotal and should help level the playing field for honest industry players and help keep consumers from being duped.

"Industry self-policing is an important part of making sure consumers are getting the benefits they expect from the products our industry offers," says Beth Lambert, CEO of **Herbalist & Alchemist**. "Given the very large numbers of herbs and supplements sold on Amazon, this was a problem that needed addressing—especially during the pandemic, when people are shopping online more. NOW deserves a lot of credit for doing the work that apparently moved the quality needle for Amazon."

By taking the risk, investing time and money into testing and being the catalyst for massive change, NOW made it easy for *NBJ* to decide the winner of this year's Efforts on Behalf of the Industry Award. "Speaking truth to power is courageous and risky, and NOW's decision to test and publish results of product label/ content discrepancies was speaking truth to power," says Loren Israelsen, founder and president of the **United Natural Products Alliance**. "NOW showed why they are an industry leader, and their efforts to address and improve product quality will have lasting and positive effects. I salute and thank NOW for this exceptional action on behalf of our industry."

Exposing wrong

Initially, NOW didn't intend to publicize its findings. "But after trying other options, we felt this was the only card left to play," Richard says. "We did contact Amazon directly multiple times over several years and escalated the problem directly to [Jeff Bezos's email], but we were unable to get any attention or action. It was only after we added independent third-party testing to that done by our respected in-house labs and made the results public that Amazon

"NOW deserves a lot of credit for doing the work that apparently moved the quality needle for Amazon."

- Beth Lambert, Herbalist & Alchemist

Proving fraud

NOW started suspecting foul play several years back. "Many unknown brands began appearing on Amazon with prices that seemed too good to be true," Richard explains. "Specifically, we suspected CoQ-10 400 mg, which was being sold in dry gelatin capsules. We knew this would be impossible to fill on normal capsule machines, due to stickiness."

To find out whether these products met label claims, NOW purchased 10 coenzyme Q-10 products from Amazon sellers and tested product potency in-house. All 10 failed to match label claims, most missing the mark by a longshot. Some products contained no Co-Q10 whatsoever.

The maddening data led NOW to test other categories to determine whether the problem was isolated or widespread. Unsurprisingly, they discovered that some of the most expensive supplements were targets for cheating, namely SAMe, alpha-lipoic acid and phosphatidylserine.

"Given the very low prices, unknown name brands, unknown contact info and unusually high potencies, the results were not a surprise," Richard says. seemed to take notice."

Going public with this matter was not without risk. "Though NOW is a large leader in the industry, some of our own family owners thought this was crazy and too much of an invitation to be sued," Richard says. "We are, thankfully, surprised that no legal action came from this, but we were absolutely 100% confident that we had the correct data and that some people were cheating intentionally. We are also large enough to defend ourselves and were ready to defend our data legally if needed."

Impacts for industry

There has been plenty of talk about Amazon's requirements since December, and no shortage of hot takes. The prevailing opinion, however, is that their issuance is a solid first step.

"Amazon is coming at the problem from a good place," says Jim Emme, CEO of NOW Health Group. "The initial rollout of their draft standards needed some polishing up. The laboratory requirements were a little clunky, yet we've heard that Amazon is considering all reasonable concerns, to bring more clarity to their expectations. We've also been told that Amazon is listening to the feedback from the trade groups and will reissue the expectations with more reasonable standards."

Indeed, in early April, Amazon updated the standards to accept results from inhouse laboratories compliant with current good manufacturing practices. Earlier incarnations of the policy had mandated results come from ISO/IEC 17025 accredited labs.

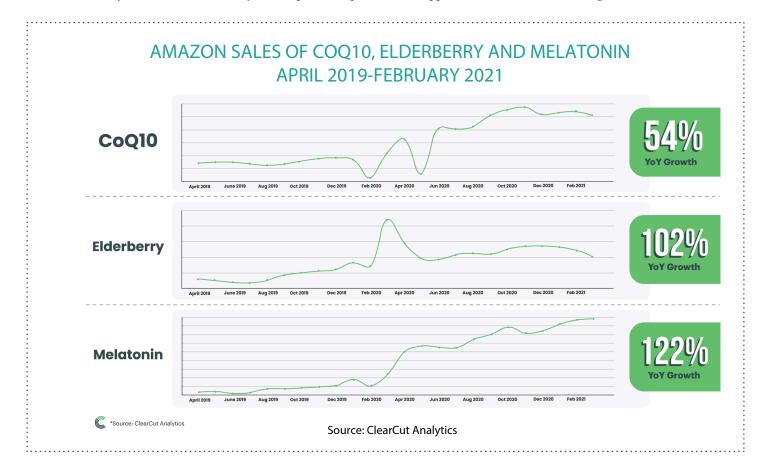
Regardless, because Amazon's rules align with the cGMP requirements already listed in the DSHEA standards, Emme believes all dietary supplement companies should be able to comply. Of course, rules are only effective if enforced. Will Amazon actually put teeth behind its requirements?

"We'll have to wait and see," Richard says. "The task is monumental, so we're glad Amazon is even trying to enforce high quality standards. Given that the cat-andmouse game of cheating has high financial rewards, it's likely that cheaters will always "Speaking truth to power is courageous and risky, and NOW's decision to test and publish results of product label/content discrepancies was speaking truth to power."

- Loren Israelsen, United Natural Products Alliance

try to beat the system and gain an unfair advantage. So far, cheating has prospered on Amazon, but we hope Amazon will enforce real quality standards—and not just by paper documents, which can easily be doctored."

For now, industry is pleased to see movement toward rooting out fraud and grateful to NOW for lighting a fire under Amazon. "NOW has always been willing to take uncompromised positions in support of consumers' health and health care choices," says Michael McGuffin, president of the **American Herbal Products Association**. "From its ingredient sourcing to it manufacturing operations to its honest and transparent communications with its customers, NOW continues to carry out the founder's mission of 'empowering people to lead healthier lives.' Elwood Richard would be proud of the current management's ongoing commitment to his original vision."



NBJ Award: Science and Innovation

Brightseed uses AI to explore the power of plant compounds

By Peter Rejcek

hile the topic of Lee Chae's Ph.D.—computational biology and genomics—may be unrecognizable to the average person, the specialty allows him to recognize the qualities and capabilities of plants and connect the genetic dots that trace a path to new uses, new ideas and new products.

And it's very much the specialty that made the company he founded, **Brightseed**, this year's recipient of *NBf*'s Science and Innovation Award, an award Chae will share with the company's other cofounders, CEO Jim Flatt, Ph.D., and COO Sofia Elizondo.

Computational biology is the discipline Chae and Brightseed use to apply artificial intelligence technologies, mathematical models and other techniques to understanding the molecular underpinnings of the natural world. For Chae, it's not so much about researching new uses for plants The challenge is unlocking the millions of potentially beneficial compounds from more than 400,000 plant species estimated to exist on the planet

"That's why we built a technology that allows us to find these nutrients from amongst that whole universe of plant chemicals," he says. "We want to understand how they impact human health at the molecular level and then develop these into phytonutrient solutions for consumers to live a longer and healthier life."

AI forages ahead

That technology is called Forager, which uses computational biology and machine learning to uncover how plant small molecules interact with human biology. Machine learning is a subset of AI that uses statistics to identify patterns in massive amounts of data, with results improving over time as the algorithms learn

"Innovative platforms using artificial intelligence and machine learning can help us begin to capture the potential of food as medicine."

– Dariush Mozaffarian, M.D., Tufts University

but allowing the plants to guide the researchers to those new uses.

"The foundational hypothesis is that plants are nature's foremost chemists," says Chae, who serves as chief technology officer at Brightseed. It's these small molecules that interact with the body at the molecular level that drive human health, he explains. automatically through experience.

The ability of these systems to derive insights from large, complex data is driving adoption in the pharmaceutical industry for drug discovery. Brightseed, however, is one of the very few companies leveraging its technology, which can establish ingredient functionality across more than a doz-

NBJ Takeaways

- » Artificial intelligence and machine learning could unlock uses for plant compounds by scanning large amounts of data
- The technology has focused on pharmaceutical development, but the same principals can be applied to supplements
- » The government, through the NIH, is backing development of AI for health-focused projects

en areas of human health, for the natural products industry. In a sense, Forager is creating a digital map of the natural world that connects plants and people through validated molecular roadways.

"Once you validate how it's working, then those phytonutrients themselves become a marker of quality. So, growers can grow for it and procurement people can screen for it in terms of quality. And then product development and production can also use that as a marker for what they're delivering," Chae says. "That validation can be used to develop products around, develop an ingredient around, to drive a message to consumers around the efficacy of a product."

This AI-generated atlas for plant phytonutrients is growing rapidly. The company expects Forager will have analyzed the health properties of more than one million compounds in the edible and medicinal plant kingdom by the end of 2021, with a goal to surpass 10 million by 2025. The company announced its first major breakthrough with Forager earlier this year. The platform discovered two plant compounds found in more than 80 edible plant sources that may benefit metabolic health by helping clear fat from the liver.

"We're seeing tons of signals in our dayto-day research activities that we think can lead to a pipeline of phytonutrients that we can deliver to customers and consumers," Chae says.

Collaboration and momentum

Brightseed has raised \$52 million in disclosed funding to date and has established partnerships with several well-known natural food and wellness companies, including **Pharmavite** and **Danone North America**. The manufacturer of **Nature Made** vitamins, Pharmavite will clinically validate and test phytonutrients identified by Forager as having the highest potential for future products.

The partnership with Danone is focused on identifying potential novel compounds in the food giant's plant-based ingredients that could be linked to undiscovered health benefits. For instance, analyses by Forager revealed five times the phytonutrients than previously known in Danone's supply chain.

"This first collaboration confirms the power of the platform, which we believe to be a key enabler of our joined vision of food as a force for good," says Taisa Hansen, senior vice president of research and innovation at Danone. "Brightseed's ambition to unlock the power of the plant kingdom and "Brightseed's ambition to unlock the power of the plant kingdom and break the artificial divide between health care and nutrition is a key unlock to our mission to bring health through food to as many people as possible."

- Taisa Hansen, Danone

demia, government and industry—that AI could prove instrumental in accelerating the knowledge of health benefits the plant kingdom has to offer.

"We are just scratching the surface of cataloging and understanding the health effects of these phytonutrients," says Dariush Mozaffarian, M.D. Dr.PH., a professor of nutrition in the Friedman School of Nutrition Science & Policy at Tufts University. He serves as a scientific advisor for several companies, including Brightseed, **DayTwo** and **Elysium Health**, among others.

"Innovative platforms using artificial intelligence and machine learning can help us begin to capture the potential of food as

"The foundational hypothesis is that plants are nature's foremost chemists."

- Lee Chae, Brightseed

break the artificial divide between health care and nutrition is a key unlock to our mission to bring health through food to as many people as possible."

A growing ecosystem

Recognition is growing-across aca-

medicine—[the] use of natural plant foods and compounds for preventing and treating disease,"Mozaffarian says.

In April of this year, the NIH Common Fund announced a new multidisciplinary initiative called the Bridge to Artificial Intelligence (Bridge2AI). The fund functions as a sort of venture capital accelerator to support "high-risk, innovative endeavors with the potential for extraordinary impact." That includes projects to speed up the application of AI and machine learning in health research.

The National Center for Complementary and Integrative Health (NCCIH) is one of the agencies leading the effort at NIH.

"There is definite interest in applying state-of-the-art computational methods, including artificial intelligence, to understanding how compounds from nature may help solve some of today's most pressing health problems," said NCCIH Director Helene Langevin, MD, via email.

"A question of particular interest to NCCIH, which we hope to address in the Bridge2AI program, is how a less healthy person becomes healthier—a process called salutogenesis," Langevin said. "The salutogenesis process is likely to involve multiple systems in the body (such as the cardiovascular, nervous, and digestive systems), multiple domains (biological, psychological, social), and multiple time scales. Thus, big data and machine learning may be needed to answer questions about it."

The true measures of success for these technologies will be reductions in both healthcare costs and chronic disease, according to Chae. "It will be a whole movement of companies and people and healthcare systems and supply chains that need to be united. We'll know it's happening once we start seeing those numbers change."

NBJ Award: Education

Ken Redcross and Brian Terry boost awareness of vitamin D deficiency for people of color

By Rick Polito

In the nutrition industry, social issues don't end with skin color. Yet, for the two men chosen for this year's *NBJ* Education Award, skin color is paramount and it's something the nutrition industry can do something about.

Ken Redcross, a concierge physician who advises patients on supplement use, and **Nordic Naturals** National Sales Manager Brian Terry took on parallel projects to raise consciousness of Black American's chronically low vitamin D levels, a state, driven in part by skin color, that can be a prelude to conditions that include heart disease, asthma and COVID.

It's also one that can be corrected.

Terry helped develop Nordic Natural's Health Equity & Advocacy Project (HEAP). Redcross helped the Organic and Natural Health Association create the Get On My Level program. As Black men, they understand the risks to the community. As professionals, they understand the industry has the power to change the situation.

We talked to both men about the proportions of the problem and what the industry can do.

NBJ: How much awareness is there that people with darker skin are prone to being vitamin D deficient?

Terry: What we've found is that so many people were just unaware of the deficiency as a whole. But what we also found out was that 82% of the Black population is deficient in vitamin D. So, that was something that really struck a chord with me. Black people's skin functions like a barrier gradient for sunlight. So, we're not optimizing the vitamin D and synthesizing it in the same way that other people are because our skin functions as almost an SPF 30 sunblock. I didn't know that. It's been a global health concern for many years. It's just been under the radar.

Redcross: When you talk about how many people who have brown skin or tan skin recognize that they're at risk for vitamin D deficiency, it's like nobody knows. When I was able to educate them why it's like that, when I can get to the granular level and talk about melanin production and say, "Look, there's a scientific reason why our vitamin D level can be lower," you get a lot of buy in from that. So, it was something that definitely wasn't so well known in the beginning. But, you know, hopefully now and people have been doing research on for years. It's not something that we just created out of thin air. We have a lot of the studies and information to really drive home the statistics and make this project move forward. But the industry has never really pushed it at all, or I am unaware if they have.

Redcross: The supplement industry is at a very special place right now. Because this pandemic has really made vitamin D so important, it really opens up a lot of other opportunities within the minority space to really make a difference. The message is very important, especially in minority groups where there's been different challenges over the years with the healthcare system. So, I think the nutrition industry has always

"When you talk about how many people who have brown skin or tan skin recognize that they're at risk for vitamin D deficiency, it's like nobody knows."

– Ken Redcross, M.D.

that word is out there, people are starting to put two and two together.

NBJ: Do you think the supplement industry has done enough to raise awareness about this? **Terry:** I am not aware that it has. This has been something that a lot of scientists

been open to those things, but I don't know if there was the same amount of thought as to say "maybe we have to market differently, or maybe we have to talk about things in a in a different way."

NBJ: What are some of the challenges for

the supplement industry to reach communities of color?

Redcross: To reach communities of color, the first and foremost thing that you have to do is understand that there needs to be empathy. I wrote a book called Bond: The 4 Cornerstones of a Lasting and Caring Relationship with Your Doctor because this relationship between the patient and doctor is my passion. And it's all about trust, respect, empathy, and communication. The empathy is the important part to understand. Why is the mistrust so deep-seated in the African American communities and the Latino communities? It's kind of hard to get that buy in from a group if they don't believe you've been able to understand their path or the shoes that they walk in and some of the challenges that they have to stay well. And not just financial challenges. Look at how low the ability for minorities to be able to telework was versus other groups. That impacts your health. That puts you in COVID's way if you have to keep

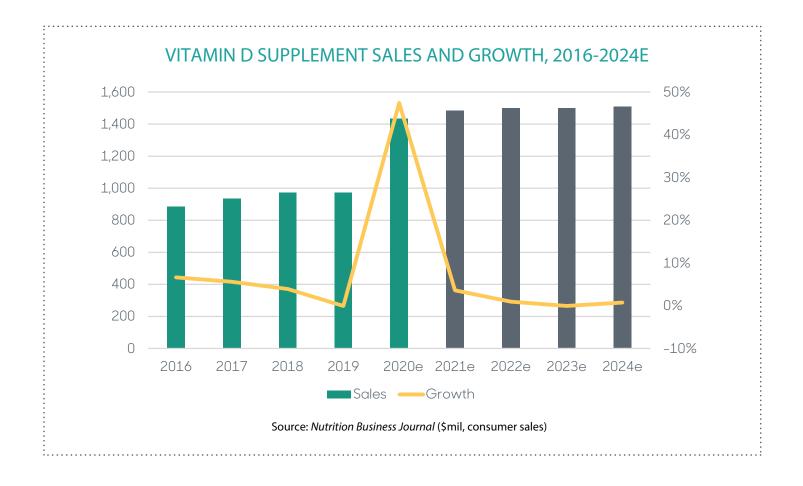
working. In other words, the messenger is important, making sure that you let this group know that you understand and you acknowledge that, "Hey, there's some challenges out there, but I care. And I want to know how I can come in and make a difference in your family." Having those candid talks is very important?

Terry: I think it's about awareness and authentic marketing and making people aware of the benefits. I think the natural products industry has helped lead the charge on so many social issues over the years, but within this population, I don't think the dots have always been connected. And I don't always understand the reason why. I just think that, overall, brands can be better in regards to having an authentic message to reach people of color. That starts with diversification within the organizations as well.

NBJ: What went into designing the outreach for your programs (Get On My Level and HEAP)?

Terry: We wanted to have something that was authentic, and that's where we really started: with our hearts there. And then we brought in different people within our team that had passion and were willing to do additional work on this as a project. We had everyone from project management, to education, to marketing help bring all of these different areas together to be able to really start this project. We had men, women, different ethnicities, different genders, different backgrounds as a whole and people that were passionate about it as an overall objective.

Redcross: One of the important things was finding the spaces that were most valuable to get to the masses that we wanted to get to. Community groups, churches, those things are very important in the minority group and the African American group in particular. So, we had to think, "Where can we get the most bang for our buck to make a difference in the communities?" We had to educate on the fact that vitamin D



is so important, and what vitamin D can do for you, especially in these COVID times when we're seeing what COVID is doing to that community in particular. Vitamin D contributed to the almost two- to three-fold increase in death and mortality for African Americans. It was getting that information out there of how important it was to understand what vitamin D is, and what it can do for our community. Then we had to talk about the number. I can tell you where you can get your vitamin D testing kit or whether you go to your doctor's office and get your blood test, but what does that matter if you don't know what you're targeting? The actual goal is "I want you to get on my level." "My level" is between 40 and 60. That's the key. The big clincher is, "Guess what? If you don't know your levels, you're walking in the dark." When you put all three of those together, you can impact change, you can almost move mountains. That's what we can do with a nice centralized message.

NBJ: What have you learned that you think could be used in future efforts and campaigns in the supplement industry?

Redcross: One of the best strengths of this industry is that we're all here because we not only love what we do, but we love helping people. That's why we're here. The important thing is to recognize that there is another whole subset of a population out there that we can tap into in a different way and be able to impact change in a way that maybe we didn't think about before. Those healthcare disparities are very real in those communities. I look at it as almost a brand-new opportunity to get into the communities and to educate and let them know: why is omega-3 important? What is black seed oil? What is astaxanthin? I would love those words to become part of their vocabulary in those different communities. I'd say that there is kind of a brave new world out there where we really can get in and impact change.

Terry: The biggest thing that I've learned is that it takes a team. Because you're not always going to agree on how everything should be done, but if you have a collaborative, you can build something together. There are people who have volunteered to be a part of this, based upon just hearing about it within the organization. They asked how they could lend their background, their expertise to this. This is just the first social cause that we started with, but it's not the only one that we're looking at it.

NBJ: COVID gave urgency to vitamin D, how do you think you can sustain the attention and impact of this?

Redcross: COVID was able to really allow us to put a big, bright light on the importance of a vitamin D, but it's not

to different programs to draw attention to vitamin D deficiency.

NBJ: What other conditions and concerns around healthcare disparity do you think the supplement industry should be getting involved in?

Redcross: You have to all recognize that what is the number one cause of death for both men and women is heart disease. Diabetes is another. There is also asthma. All of those hit communities of color harder. So, it's bigger than just the vitamin D. It's a relationship building. Once we build a relationship—in my case with

"For us, this wasn't really about COVID, this was strictly about awareness. It wasn't anything other than just having a social cause that we were passionate about."

- Brian Terry, Nordic Naturals

only about COVID. As COVID starts to dissipate, we still have our immune system, which we want as robust as possible. And that's where vitamin D does a lot of the magic as well. And there are so many other ways that vitamin D plays a role in health. There are even vitamin D receptors in the brain. Life has changed, but the vitamin D story really doesn't.

Terry: We have a plan to draw awareness through different social platforms, PR, different areas that we can track metrics about who is talking about it to really target the right audience for the messaging. But for us, this wasn't really about COVID, this was strictly about awareness. It wasn't anything other than just having a social cause that we were passionate about, and one in which Nordic Naturals had a lot of support in regards the patient and maybe with a lot of the business owners with the consumers you have someone that trusts you for life, and that's what we want.

Terry: For me, it's about optimal nutrition as a whole. Right? You have so many different areas that people can have troubles with. There's the food deserts problem. Not being able to find healthy food can contribute to high blood pressures, or high cholesterol, or cardiac issues, and so on. So, the key is really optimal health. In our project, the number one thing is to make sure that people are going to visit their doctors, and make sure that they're getting that vitamin D workup. At the end of the day, that's about optimal wellness. We can't control everything, but we can try to make high-quality products available to people nationwide. 🦉

NBJ Award: Supply Chain Transparency

Cepham breaking down the silos

By Marc Brush

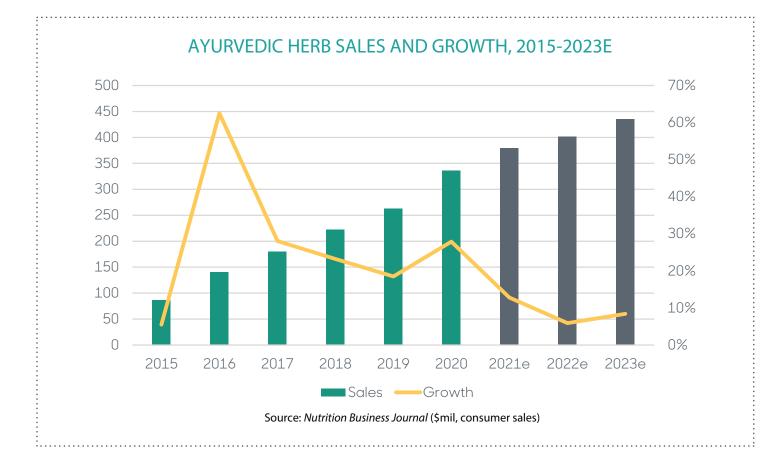
B ack in a more questionable era of the supplement industry, before transparency caught hold as even a mere buzzword, there were quality concerns, there was adulteration, there were bad actors abusing the rules of the game.

Of course, these problems remain, but now there are antidotes. Among them are ingredient suppliers committed to supporting the value proposition of transparency. "Transparency holds a clear value now for supplement companies," says Dr. Anand Swaroop, President of **Cepham**, one such supplier with a long, rich history and a bright, bold future, thanks to its commitment to transparency. "You sell in this industry based on a bond of trust," says Swaroop. "When we create transparency that's visible to all of us, that creates faith in our products; we give those bad actors less air."

Cepham does transparency right, which is to say that transparency is part of the culture and evident throughout the operations of the company, and Dr. Swaroop is deeply committed to blockchain as a tool to deliver on the promise of transparency. It's this pledge to transparency

NBJ Takeaways

- » Before transparency was a trend, it was a primary value for this 43-year-old ingredient supplier
- » Blockchain across the industry could provide volume checks and adulteration controls
- Pharmaceutical and supplement companies share some of the same needs that can be satifised with block chain traceability



and a vision to create it that has earned Cepham the NBJ Supply Chain Transparency Award.

From India to New Jersey

Cepham hit the scene in 1978 as part of India's science and technology boom. It's early focus on Ayurvedic ingredients proved prescient, as that approach to health and wellness continues to gain favor in the West. Cepham's early work to identify the actives in Ayurvedic plants and deliver concentrated extracts was pioneering then and remains so today.

Over the years, Cepham would launch research initiatives across the globe—from sub-Saharan Africa to South America and focus on popular categories of supplement innovation—from active nutrition to cognitive health. U.S. operations were launched in 2004 with a QA facility, QC lab, and pilot plant in Piscataway, New Jersey. Between the U.S. and India, the company has grown into more than 200,000 square feet of production floor and lab space. "I was looking for a tool for a long time, some way to tell the whole story in a more precise manner. We wanted something that would give clarity to all our stakeholders and get them on the same plane, on the same platform with the same visibility."

- Dr. Anand Swaroop

Cepham promotes sustainable and fairtrade growing practices, and this is where things get really interesting. By making the ethical choice and doing the work to monitor quality at every link in the chain of custody, the company was ready and waiting for a trend like transparency to take hold. It was also hungry for a way to differentiate from its peers and authentically demonstrate its true level of commitment to the cause.

"If we go this way, toward transparency for everyone along the chain, we'll open eyes. We'll treat the people doing the hard work more fairly. People want to do good things. We just need to show them how."

- Dr. Anand Swaroop

Cepham's roots in medicine pre-DSHEA informed its approach to the new markets opened up by a regulated market for nutraceuticals. All Cepham facilities are certified to NSF, GMP, and ISO standards. The company is that rare breed of ingredient supplier that can do it all, from research to clinical study to manufacture to distribution.

Believing in blockchain

"I was looking for a tool for a long time," says Swaroop, "some way to tell the whole story in a more precise manner. We wanted something that would give clarity to all our stakeholders and get them on the same plane, on the same platform with the same visibility." This would prove to be a tough task.

Cepham test drove a number of transparency platforms before Swaroop would place his bet on blockchain and a company called **TagOne**. That was almost three years ago, and now blockchain is everywhere inside the company. "We use it on everything," says Swaroop. "It's in the warehouse, in the QA lab, with processors, in the factory back in India. We upload everything to TagOne and it simplifies the work. We can see what is moving where in real time."

For the uninitiated, blockchain technology provides a distributed, immutable ledger for data capture, data sharing, and data analysis, and TagOne had an established track record for delivering blockchain solutions in the pharma industry. Supplements can carry an even more complicated supply chain, of course, but there were models to build off after TagOne set the stage with **Johnson & Johnson** and **Bristol Meyers Squibb**.

With a tool like TagOne, Swaroop's vision for transparency-made-real began to take shape. A full snapshot of seed-to-shelf with the click of a button? Entirely possible.

Making blockchain work

The supplement supply chain is a stepwise affair, but transparency works against that grain. A tool like blockchain gets suppliers, manufacturers, contract manufacturers, and brands all staring at the same screen. "We love to work in silos in this industry," says Swaroop. "We manufacture and sell raw materials to brands and contract manufacturers. That's what we do, but sometimes I have no idea where our ingredients end up."

Joe Witte is the VP of Ecosystems & Partnerships at TagOne. "Our team had worked on track and traceability from the pharma side, and we knew about the ongoing challenges in supplements with verifying quality, but Dr. Swaroop really opened our eyes here. It's such an important relationship for us. His expertise and feedback, his intention for doing things the right way, it's impressive."

The secret to success for this relationship is rolling up some sleeves and digging into the nuances of how things really operate in supplements. "Dr. Swaroop's totally in the weeds," says Witte. Those weeds can be thick in the supplement supply chain, with streamlining and quality verification reliant on document management, auditing requirements, and a host of data capture points that need special attention on the chain.

If Cepham has a lesson to share with industry about transparency, it might be to believe in the effort, commit, and then dig in. "Before you get to blockchain, you have to take a step back," says Witte. "First you see the value in software for streamlining data and sharing documents. If you share those documents externally, then you're interested in transparency. We talk about working backwards from blockchain to software to process to procedures to culture and values, so it all starts with culture and values. That's what's most impressive about working with Cepham."

The future of blockchain

The technology powering blockchain is cloud- and transaction-based, which makes cryptocurrency ledgering an option on the near horizon. When speaking of this future for a technology like blockchain, Swaroop begins thinking about COAs as NFTs (non-fungible tokens). "It's multiple companies going to each destination," he says, explaining how COAs could be held and safely guarded from tampering and falsification, "but no one can change it. The quality stays there."

Amazon's new standards around COAs

"As we start to scale this in natural products, we can get into predictive analytics. We can see trends, like an increase in heavy metals from a certain source. We can reduce risk, which affects insurance and class-action lawsuits and product recalls. Once we centralize the data and get it off paper, spreadsheets, and pdf's, then we can look holistically, at a macro level."

– Joe Witte, TagOne

make this even more relevant, but there's still more to come as a technology like blockchain captures share in the marketplace. "It's an extremely smart tool," says Swaroop, "and our industry is taking baby steps."

As strong COVID-related sales persist, Cepham is starting work with TagOne to mine its data for greater insights. Witte sees the potential, too. "As we start to scale this in natural products," he says, "we can get into predictive analytics. We can see trends, like an increase in heavy metals from a certain source. We can reduce risk, which affects insurance and class-action lawsuits and product recalls. Once we centralize the data and get it off paper, spreadsheets, and pdf's, then we can look holistically, at a macro level."

A real world scenario might be that three of the top four ashwagandha suppliers feed a blockchain ledger, and collectively they can't explain how so much more of the ingredient than they produce ends up on store shelves. Voila, a predictive tool to surface adulteration. That's the kind of self-policing of the bad actors that many in the supplement industry long for.

Why this matters

Natural products are different than other manufactured goods, says Swaroop. "These are not petrochemicals. A pill in a consumer's hand today started a journey a year back in the field somewhere." For that pill to build trust in its consumer, transparency—and the careful stewardship of resources it promotes—is essential.

"We ultimately need to create a very clear communication," says Swaroop. "The old lady who cleans fenugreek seeds in a small village in India, she doesn't know what I'm going to do with those seeds. If we get everyone on the same page, that creates a fair and equitable trade."

Swaroop knows this lady, and many like her. He has asked her why she cleans the seeds so meticulously. Is it to get paid more? No, she told him. She cleans the seeds well because someone will be eating them. "I heard that and thought, 'Wow, she gets it,'' says Swaroop. "If we go this way, toward transparency for everyone along the chain, we'll open eyes. We'll treat the people doing the hard work more fairly. People want to do good things. We just need to show them how."

NBJ Award: Mission & Philanthropy

Naturade brings nutrition to communities in need

By Marc Brush

The company tagline says it all: "We believe everyone should have access to quality food regardless of income, location, and race." It puts mission directly into the brand identity.

Ask the brain trust at **Naturade** about that mission, and it's clear that it's part of their identity too.

"We want to reverse prediabetes," says CEO Claude Tellis. "Diabetes affects 86 million Americans—that's almost 1 in 4—and it really hits people of color in a major way." Tellis recently lost two uncles to the disease, both after leg amputations and one from the additional complications

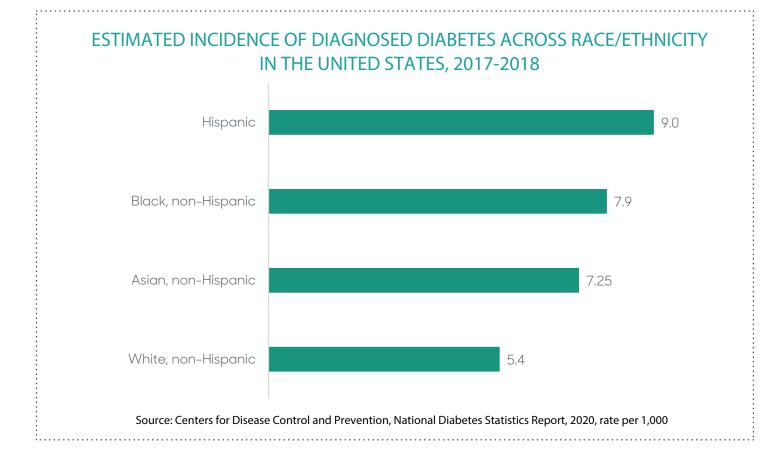
of COVID-19.

It's a similar story for Kareem Cook, Naturade's chief marketing officer and a co-owner of the business with Tellis. "I've lost two aunts and two cousins," he says. "This is a major issue for us. The failure of this industry to reach these communities is real and tragic. It's time to seize this moment."

According to Tellis, COVID exposed the underbelly of diabetes in America. The pandemic itself, and the silent pandemic of lifestyle co-morbidities that worsen outcomes, is a clarion call to not only change the way Americans eat but to change the

NBJ Takeaways

- The supplement industry has not done a consistently good job reaching minority populations
- » BIPOC-owned brands need better support from equity investors
- » The COVID pandemic has highlighted the problem of diabetes, a disease prevalent in communities of color



way the nutrition industry approaches communities of color.

Those changes could start where they are needed most, not in the healthier, already converted cadres of natural food shoppers. "It's hard to ignore," says Cook. "We've been touched directly by this. Most Black people I know have suffered loss during COVID, and that's not necessarily true for the white people I know. All of this is a perfect storm for a company like us to be there, to receive the message and do something about it."

The journey so far

Naturade is a company approaching its 100-year anniversary, but its modern incarnation is a vision set by Tellis and Cook. The two met as undergraduates at Duke University, then joined forces to launch a healthy vending machine company in Los Angeles. Within two years, they'd changed the law to kick soda and junk food out of the schools and won the contract to supply every one of those public schools in the district.

This kind of success at the local level got the pair national attention when President Bill Clinton and Governor Mike Huckabee invited them to the table to discuss childhood obesity at the launch of the **Alliance for a Healthier Generation**. From there, Tellis and Cook set their sights on Naturade, acquiring the brand in 2012. They got to work resetting the company's focus on prediabetes and retargeting the message for communities often left out of the nutrition discussion.

"In the last three years, we've found our inspiration around that vision and mission," says Tellis. "People have stopped looking for a magic pill. If we lose 10% of our bodyweight and shift to a plant-based diet, we can see 60% reversals in type 2 diabetes. That's the kind of clear understanding between food choices and health outcomes we need to drive home."

In case it's not clear already, the secret to recent success at Naturade falls squarely at the feet of Tellis and Cook, but that's hardly a secret across the industry. "I've known these two for over five years, and the dedication to the growth of their business is incredibly impressive," says Heather Smith Thorne, Partner at **TPG**, where she leads consumer investing for two major funds, TPG Growth and The Rise Fund. "They've made business model, product, and brand pivots, while still remaining true to the mission and core ideals of the business. I think their potential is incredible."

Cracking the code

It's common in the natural products community to highlight the philanthropic efforts of a brand that's reached enough scale to give back. It's common to applaud demic industries like sports and music that know how to reach his consumer. He wants to see retailers throw more of their marketing muscle behind BIPOC-owned brands, and more bankers investing in their growth. Cook wants to protect his clarity of vision and the spirit of disruption that got them this far. "We got into **Whole Foods** early, but didn't know the repercussions of that," says Cook. "We don't know the rules of this industry, and we don't particularly care to."

This February, Naturade landed in 40 **Costcos** across the U.S., the first Blackowned company to ever be sold in the

"I think it's time to take a big step forward in the wake of George Floyd and this cultural moment. These are big problems that require big solutions, and you need equity capital to make this sustainable."

- Claude Tellis, Naturade

corporate mission statements that support the earth or personal health, or advocate for alternative paths to health. What's entirely uncommon is a story like Naturade's, the story of a Black-owned business targeting Black consumers with the same quality of nutrition products typically marketed to very different demographics.

"Naturade is targeting a mission that isn't commonly approached by other brands," says Smith Thorne. "Yet that mission has a massive total addressable market, and this creates a mismatch of supply and demand. Simply by focusing on this space, I think Naturade has covered a lot of new ground." Add to that Tellis and Cook's knowledge of and connection with their core consumer, and Smith Thorne thinks they can crack the code.

To do it, Tellis talks about approaching business in a different way, and Cook talks about breaking the rules of convention. Tellis wants to see supplement companies hiring from Black colleges and from non-enplant-based nutrition aisle. "Naturade is special, first and foremost, because it's a great product, period," says Smith Thorne. "One thing investors know about this space is that products can have amazing claims, but if they don't taste good, consumers won't buy repeatedly."

Making it cool

So, how to deliver on such a bold mission? Think differently and create a movement around healthy eating in underserved communities. Naturade partnered with fitness expert John Lewis, also known as **Badass Vegan**, to launch its popular VeganSmart line. As the company has grown in reach and sales, it's also attracted some heavy hitters as investors, including former NBA stars Magic Johnson and Grant Hill.

"Magic Johnson brought corporate America to urban America," says Tellis. "He's a sterling example of speaking to that urban consumer, and Grant was the oldest player ever in the NBA when he retired at 40. He attributes a lot of that longevity to diet and nutrition." These partnerships are already bearing fruit, with Magic's smiling face front and center on pack in the Costco SKUs.

These are more familiar tactics for supplement brands—partnering with spokespeople that connect to a target demographic—but Cook and Tellis are aiming their messages in directions the industry has ignored. Naturade uses media channels and event marketing in ways unheard of for nutrition brands. Take the **Essence Festival** in New Orleans, an event that attracts more than 500,000 attendees and marks a cultural mecca for many Black women. The idea is to put the product in front of the people who need it but might not otherwise see it.

"We want to bring Whole Foods quality to a **Walmart** consumer," says Cook. "To do that, you have to disrupt. Everyone's going to the same place in this industry, selling to the same consumer. That's "I've lost two aunts and two cousins. The failure of this industry to reach these communities is real and tragic. It's time to seize this moment."

- Kareem Cook, Naturade

needs to be too, Tellis and Cook say.

"My dad's a doctor, and he's got prediabetes too," says Tellis. "This is not just about food insecurity. It's cultural, it's habits passed down. That's why ball players are an opportunity. You have to make this the cool thing to do. The athletes and entertainers spread this message to the younger generation."

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- Heather Smith Thorne, TPG

why that 86 million number of prediabetics hasn't gone down. At **Natural Products Expo**, we're one of 15-20 companies doing what we do. At Essence, we're the only company there."

The problem is pervasive in communities of color, and the messaging and brand

A brighter future

"We're focused on the urban consumer, but we've found support and allies from the industry already," says Tellis. The missing link is fundraising, and Naturade is working hard these days to bring the lens of impact investing into their world. "I think it's time to take a big step forward in the wake of George Floyd and this cultural moment," says Tellis. "These are big problems that require big solutions, and you need equity capital to make this sustainable."

Funds with stated mandates around ESG (environmental, social, and corporate governance) would seem like a perfect fit for companies like Naturade, but that's not yet the case, according to Tellis. "It's missing companies like us," he says. "If these firms are looking for companies that do well by doing good, that money should find us."

When asked about the company's future, Cook is most energized by seizing that cultural moment. He speaks of the upcoming documentary from Keegan Kuhn, the producer behind *Cowspiracy* and *What the Health*, that explores the intersections of diet and disease with poverty, racism, and includes some powerful voices from hip hop. The film is called *They're Trying to Kill Us*, and Tellis and Cook were interviewed. In fact, their business partner John Lewis is a principal filmmaker and narrator. "These documentaries force conversations," says Cook. "It's going to be powerful."

Chalk it up as another milestone in the steady march toward health, regardless of income, location, or race. It's a march that might just be further along than the industry recognizes. "Grant [Hill] came through for the NBA All-Star Game in LA," says Cook, "and he asked me to dinner. Where'd we go? **Gracias Madre** in West Hollywood. That's a happening place, and it's all vegan."

NBJ Award: Stewardship and Sustainability

HowGood aligns an entire industry on science-backed sustainability standards

By Bill Giebler

Product formulation is problem solving, where the problems are story problems ranging from new ingredient introduction to matching a competitive mandate or reformulating existing goods to align with corporate sustainability objectives. A recipe emerges, moves to sourcing, works its way toward marketing and, if all goes well, the market.

From a sustainability standpoint, there are two flaws with that system, suggests Merijn Dols, global director of open innovation and circular economy at **Danone**. First, he says, the sustainability team is usually brought in at the tail end of the process, at a point when they have little-tono design freedom. Second, as these teams identify and research ecological and social sustainability indicators, they are siloed from others tasked with parallel challenges in other companies. This is especially true among the large CPGs.

"Danone could define its own indicators, just like **Nestlé** could, just like **Unilever** and **General Mills** could," Dols says. "But then we're starting to compete over something that should not be competitive."

What if these companies, and smaller startups, too, could work together to develop sustainability standards, and what if those standards could land at the front of the R&D process, not the end?

These are among the questions that **How-Good**, recipient of this year's Stewardship & Sustainability award, are answering. But not necessarily on purpose. The organization started by compiling science and data into a single database, a value proposition co-founder Alexander Gillett today sees as

providing "the ease of decision making and a known quantifiable understanding." Initially for one client at a time.

Compilation

HowGood was founded by Gillett and his brother Arthur 15 years ago. The latter Gillett was living in London at the time, working in the heart of the city's financial world creating systems to evaluate financial impacts. The former was working in the New York business world. Both shared a passion for understanding social and environmental impacts throughout human systems. Initial conversations sparked an idea that began to focus on food systems and the company was born.

"Environmental goals are typically lofty and amorphous while financial goals tend to be concrete," Gillett says. HowGood, he believes, is moving the system towards concrete understandings and goal setting. "It's a platform that allows CPGs to do that, too."

The two began compiling data, pulling together existing life-cycle analyses (LCAs) and other scientific data into a single database. "We wanted to centralize not just the data but the understandings out of that and make it simple for people to make decisions that positively impact the system as a whole," Gillett says.

But it goes way beyond LCAs, says HowGood Chief Innovation Officer Ethan Soloviev, because those miss things like animal welfare, biodiversity and labor risk. "It's a small, useful part of the whole input," Soloviev says, "and we usually look at the whole lifecycle. But in terms of the specific data, we're pulling from 550 differ-

NBJ Takeaways

- » As the definition of sustainability grows increasingly diverse and complicated, brands need tools to support sincere efforts
- » HowGood's SAAS tool brings sustainability and innovation into alignment from the beginning of the product development process
- » With a centralized database, CPGs are no longer compiling same or similar data in parallel; rather, the learnings from one participating company benefit all the others

ent data sources, 200-plus experts, thousands of research and journal articles ... and harmonizing it into one database: the world's largest product and ingredient sustainability database."

Since its conceptual beginnings, the HowGood database has grown into a sizeable and subscription-deployable SAAS used by brands including Applegate and corporations like Danone and Walmart in many cases bringing data with them and making the tool more robust. "The product that you're seeing now is based on 14 years of working with industry experts and bringing in these different sources," says Gillett.

Collaboration

In basic terms, the HowGood tool allows design teams to plug in various ingredient combinations, in strokes broad or fine, and watch as a sustainability score shifts and changes. With that in place, formulators can understand the difference, for instance, not just between pea protein and soy but between different pea proteins based on growing region, farming practice and more. As the tool sharpens, the already useful generalities fall away, and an increasing volume of science-backed specifics, all the way down to the producer, come into play.

"This gives designers a very simple understanding of where they are now, what their options for change are and what the impacts of those changes would be," says Gillett. Some of these big CPGs have upwards of 1,000 people reformulating products, he adds, and almost none of them can simultaneously have expertise in water impact and labor impact and greenhouse gas and biodiversity. "You can't train them all on all those things. Goals get set at the corporate level, and how do they do it?"

And even knowledge in some of those areas can be detrimental to the others, says Dols. "The thing with these complex systems is that you can have reverse effects if "I don't think we need to teach or tell our people to design for a positive impact. I think we need to give them permission to do so and the tools to do so."

– Merijn Dols, Danone

tool connects all the dots, balancing them along the way, and gives designers the creative freedom to knowledgeably include sustainability in the story problem right up front. "I don't think we need to teach or tell our people to design for a positive impact. I think we need to give them permission to do so and the tools to do so," says Dols.

Furthermore, adds Dols, now the vision

"We wanted to centralize not just the data but the understandings out of that and make it simple for people to make decisions that positively impact the system as a whole."

- Alexander Gillett, HowGood

you try to optimize based on a subset of indicators," he says. For instance, designing with water usage, child labor and carbon footprint in mind is great, "but if I'm not looking at the local economic multiplier on the social side or I'm not looking at biodiversity, with the best of intentions I might be creating reverse effects on those indicators that I'm not looking at."

At Danone, Dols says, the HowGood

can move from the end of the development cycle to the very beginning. "What this does is it puts impact at the heart of the design brief. It has changed the conversations and education of internal teams," he says.

There are millions of people designing food on a day-to-day basis," Dols says. "If we can put that power into their hands, then we can really unlock that system transition. Not by a small group of elite thinkers in a room. No, it's by giving the tools to the people that actually create the food."

Ever evolving

As more organizations utilize How-Good's tool, it continues to get sharper, and as the HowGood team grows, it can bring more elements into the database. Elements like diversity. "We've been starting to design metrics with input from indigenous and BIPOC leaders on what metrics would look like that would actually uplift and support the empowerment of what we would call the global majority," Soloviev says.

These nascent metrics would help people inside client companies make decisions about who they're sourcing from. Not just to buy from a Black-owned businesses, he says, ("that's a good thing," he says, "we should definitely do that") but, for instance, support African smallholder farmers across West Africa. "When you do that, there's a multiplier effect in the empowerment of the global majority, that channels resources back to those communities."

It's easy to imagine areas of inclusion and the metrics therein continuing to grow overtime, along with the HowGood client list. In fact, Gillett names "growing as fast as we can" among the chief challenges for the organization.

"There's so much to do in this space," says Gillett. "We're happy to be a part of it, and we're happy to partner." And about those who are equally excited, whether to come work with HowGood or to use the data, he adds, "We want to talk to them."



2021 Editorial Calendar

2021 ISSUES (11 issues per year)

- The Guest Editor Issue
- Active Lifestyle
- Market Overview
- Awards
- Condition Specific
- Changing Consumer

- Finance
- Global Market Overview
- Branding & Marketing
- Supply Chain Innovation
- Digital Issue

2021 REPORTS

- Hemp Report 2021
- Personalized Nutrition Report 2.0
- Active Lifestyle Report
- Supplement Business Report
- Condition Specific Report

- Herbs & Botanicals Report
- Global Supplement Business Report
- Special Report on a 2021 hot topic

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