By Rick Polito

Journalism, at its best, should be a conversation—writers and editors listening to a community and sharing what it hears in a dialogue of sorts. For a trade journal like the Nutrition Business Journal, that’s even more true. We hope to create a space where ideas are shared and issues are debated.

But it is all too common to be distracted from that mission. The blinders come on, and the tunnel vision closes in. We brainstorm issues as a team, but we don’t often reach far enough beyond the masthead for ideas.

For this first-ever Guest Editors Issue, we wanted to reach beyond our editorial bubble. Indeed, we popped it.

We recruited eight people from across the natural products industry to help us shape an issue around the stories they thought needed telling. We looked for people with experiences and per-
TABLE OF CONTENTS

01  Be our guest
04  The moment and how it matters
08  The market impact of COVID-19 vaccines
15  Hindsight 2020
18  Normalizing the COVID Bump
21  Ag agenda
24  The science and the law
27  Living in syn
31  Mission regeneration

Guest editors:
Marc Washington, UR Labs
Loren Israelsen, United Natural Products Association
Emerald-Jane Hunter, myWHY Agency
Mike Burgmaier, Whipstitch Capital
Tera Johnson, Food Finance Institute
Rend Al-Mondhiry, Amin Talati Wasserman
Karen Howard, Organic & Natural Health Association
Mission regeneration

NBJ 2021 Guest Editors Issue Strategic Information for the Nutrition Industry

See what you’re missing in a channel poised for post-pandemic growth

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LETTER FROM NBJ: CONVERSATIONS AND CONFRONTATIONS

I’ve worked for so many editors for so many years that it’s instinctive for me to navigate a course between satisfying the parameters of the assignment and satisfying my own beliefs about how the story should be told, and what it should say. Sometimes I’d chart that course with subtlety. Other times I’d draw the line in newsroom confrontations and no small amount of profanity.

Among my last words on my last day in my last newspaper job were “Writers, fight for your words.” I still believe that.

But for this Guest Editor Issue, I was confronted with something new. The whole point of the issue was for the guest editors to guide the stories, to shake things up and nudge NBJ’s editorial focus toward new perspectives and viewpoints. I knew before I started that I might need to listen to my temporary bosses in ways the angry young reporter from my early days as a reporter would have resisted with a snarl.

It was a new experience for me.

I hope it will be a new experience for readers.

In this issue, readers will find a set of stories that we hope reflect that conversation—important ideas explored from new perspectives. It’s not a radically different issue, but it’s a new approach.

It’s certainly an incarnation of what I’ve long wanted for NBJ. The best role for this publication is to be a forum where some of the tougher challenges get hashed out, where ideas are debated and new trends are evaluated. We can’t do that without our readers, or at least we can’t do that well.

The Guest Editor Issue gave us an opportunity to formalize that model, but our hope is that it could open the doors to a more engaged conversation. In short, we want to hear from you.

We don’t just want to hear your story ideas. We want to hear how we can make the stories better. The NBJ issue format is due for a reboot and we want to know from readers what features to keep and what features to add. That was our goal in seeking feedback two years ago when we revamped the NBJ reports, and we’re open and eager to gather ideas and input for our issues.

For many of my years as a newspaper reporter, the readers I heard from were mainly the ones who were angry. The relationship I have with readers now is different. It’s that conversation.

My relationship with editors is also very different, at least in this issue. But I promise to go back to fighting for my words. I’m looking forward to it.

Rick Polito
NBJ Editor in Chief

COVER STORY CONTINUED

perspectives that would disrupt our standard editorial mix and bring in not only their ideas but also voices we might not otherwise hear. We also sought out guest editors representing a more diverse sounding board than NBJ has historically assembled.

Our new—albeit fleeting—editorial staff:

UNPA President Loren Israelsen wanted us to explore how the industry can best take a position on the COVID vaccine after the pandemic fueled historic sales growth.

UR Labs founder Marc Washington tasked us to find out how the industry can better serve people of color and address their health challenges highlighted by the pandemic.

Lawyer Rend Al-Mondhiry thought we should ask what supplement brands can do to prepare for a wave of immunity research that will wash over the industry in coming months.

As a marketing consultant, Emerald-Jane Hunter guided a writer to learn how brands can make the tumult of 2020 an impactful part of their story.

Whipstitch Capital co-founder Mike Burgmaier thought startup brands and investors needed a dialogue about irrational exuberance after a year when pandemic-warped channel dynamics added a windfall boost.

The appearance of tests to detect ingredients created via synthetic biology makes it time for the supplement industry to fully confront the technology, according to Organic and Natural Health Association CEO Karen Howard.

Supplement industry veteran and outspoken environmental advocate Tom Newmark wanted a story detailing not just why brands should be sourcing from regenerative agriculture but also how that can be accomplished.

The incoming Biden administration could provide new opportunities for the natural products industry to get involved in agricultural policy, and Tera’s Whey and Food Finance Institute founder Tera Johnson wanted to see a story exploring what that involvement could mean.
The moment and how it matters

How nutrition brands can better serve communities of color in an era of urgent need

Guest editor Mark Washington, UR Labs
Story by Rick Polito

Following a year in which Black Lives Matter raised consciousness of racism and COVID raised awareness of the health disparities so calamitously tied to race, the question of whether the industry has an obligation to do more to serve people of color shouldn’t need to be asked.

The question of how it can do a better job in that mission, however, is perhaps the most pressing challenge the industry faces in 2021.

Tracy Brown knows she doesn’t have the answer, or at least not enough of the answers, but she wants to keep asking the questions, and she wants to hear what the supplement industry has to say. Brown is CEO at the American Diabetes Association and says that conversation needs to be about “disruption” if health and nutrition disparities are going to be addressed. Every option and every idea should be on the table. “If this were an easy problem to solve, this problem would be solved,” she says.

“You can’t talk about improving the wellbeing of Americans without talking about diabetes,” she explains. “You can’t really have that conversation without talking about nutrition.”

And diabetes is just one of a number of chronic diseases impacting minority communities at higher rates than whites.

So far, Brown says, brands have not joined the conversation the way she’d like.

NBJ Takeaways

» COVID and Black Lives Matter have raised awareness of systemic racism and nutrition and healthcare disparities faced by minority communities, challenging the nutrition brands to respond

» Blacks and Latinos suffer diabetes, heart disease and other COVID comorbidities at higher rates than whites

» Marketing to minority consumers appears to be an afterthought for many nutrition brands, but more diverse hiring and contracting with minority-led marketing agencies can help

FREQUENCY OF IDENTIFYING SELF-SIMILAR PEOPLE IN ADVERTISEMENTS

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Source: Morning Consult
Polls conducted June 18-21, 2020, among 2,200 White adults and June 18-26, 2020, among 2,000 Black adults
to see. She wants brands to come to the table with ideas and be ready to brainstorm new projects and new products and collaborate on new educational and messaging campaigns. She doesn’t know what those projects, products and campaigns are yet, but she knows a better synergy with the nutrition industry is essential for change to happen. The ADA has expertise to share, she says, but that expertise does not include putting products on shelves. Collaboration is an urgent mission. “We have the resources that we have, but we’re not brands.”

Brown is not alone in asking the supplement industry to do more. The challenge facing the country is enormous, but the challenge for the supplement industry could be for brands to rethink how they distribute, how they market, how they hire and how they innovate.

Naturade CEO Claude Tellis is an African American entrepreneur, and he has been looking at each of those tasks, for his own company and others, and deploying new ideas and new alliances to get to new customers.

“It’s an all-of-the-above moment, Tellis says. “The first step is awareness. The second step is action.”

Issues and obstacles
Healthcare disparities and lack of access to healthy food are nothing new in America, but the COVID-19 pandemic has highlighted those issues in stark ways. According to the CDC, African Americans and Latinos are 4 and 4.1 times more likely than whites to be hospitalized with COVID-19 and 2.8 times more likely to die from it.

Diabetes, obesity and high blood pressure, which have emerged as high-prevalence comorbidities to COVID, afflict African Americans and Latinos at substantially higher rates in the United States than is observed among whites. African Americans die at twice the rate as whites from diabetes and are 50% more likely to suffer from high blood pressure. Latinos are twice as likely to suffer from hypertension.

Lifestyle is a major component of these conditions, and the pandemic seemingly presents an opportunity for the supplement industry to play a bigger role in addressing lifestyle, but an array of factors have long hampered market penetration. Among those factors are income and access. Supplements are widely seen as luxury goods, and in poorer communities of color, where grocery stores are rare and health food stores rarer still, can be rare, supplements may not be available at all.

Brown sees that scenario as key to the challenge of healthy eating. “When you start to look at the numbers, you will start to see that the poorer you are in this country, the more likely you are to have diabetes, the less likely you are to even have a grocery store within walking distance.”

Poverty is only part of the story. Health disparities can be “income agnostic,” where lifestyle challenges and disparities persist across income brackets. Other barriers to healthy lifestyles can include food cultures that encourage unhealthy diets, and marketing to people of color remains an afterthought for many supplement brands. But Brown says education is not the issue some believe it is. “Often it’s not an educational issue,” she says. “It’s an affordability issue and an access issue.”

Without a better understanding of the needs and challenges of communities of color, nutrition brands are unlikely to create the kinds of products and marketing that will appeal to minority consumers. Unmet needs become lost opportunities.

Market and message
Many industry observers agree that the messaging for supplement brands needs to be rethought and revamped if it’s going to reach people of color and underserved communities, but Marissa Nance says that, for most brands, the most important step comes before re-designing the marketing materials. The marketing expert and founder of Native Tongue Communications says a company needs to look at its identity, its “DNA,” before it can integrate authenticity into the marketing and advertising.
“Be yourself first,” Nance says. “Because if you are true to your own brand, DNA and personality, then your outreach and your conversation is authentic and empathetic with these audiences. You’re going to connect on your own.”

Nance says a brand can “borrow equity” from an organization, a personality or even another brand to appeal to a people of color, but that match isn’t going to work if the fundamental identity does not ring true. “You can get to the audience you need to get to, but again, do it in a way that the audience says, ‘I trust you. I believe in you,’” Nance says. “If you have your own sense of people they have learned could apply to other health issues and messages. The Association has researched how audiences respond to initiatives—what sticks and what can change behavior. Like Nance, she says that much of it has to do with trust. “We know how to reach into these communities and when to reach into these communities, and if you actually want to get behavior change, that behavior change starts with trust.”

Marketing agencies with a diverse executive staff, like Nance’s Native Tongue, can help brands create more race-conscious messaging. Indeed, marketing stands out as a profession where diversity is prized. That brands can partner with larger brands in the supplement space on cooperative marketing. “We’ll share our email addresses if you share your email addresses.”

Beyond the digital, Naturade makes sure they are represented at African American cultural events, like the Essence Festival, and thinks the supplement industry needs to a better job of meeting people of color where they are. “Let’s go and get into these communities, and let’s touch the churches, let’s touch the sporting events, let’s touch the places where the people are.”

Some of that marketing needs to happen in cooperation with retailers too, Tellis who you are and what your voice is, and another entity has the same, then together you’re unstoppable.”

For health-oriented messages like the ones supplement companies want to deliver, a different challenge emerges, Nance says. While she cautions that nobody should see African Americans, Latinos or any ethnic group as “monolithic,” they also have to accept that food traditions can’t be discounted or disparaged, or the message has little chance of being heard. “The message has to be, ‘We understand what you’re doing and why you do it. We’re asking you to make some subtle shifts. And think of this as something to add. We’re not telling you what you’re doing is wrong. We’re telling you about it to help increase your health, to help place you on a better path.”

Brown says the ADA is ready to help brands tailor their messages around diabetes, but that some of the same principles and talent is readily available to nutrition brands that may lack diversity in their own ranks.

When Tellis thinks about how the supplement industry can learn to reach people of color, he points to industries that already have. He talks about hip-hop labels that deploy “street teams.” “People who would go out to all the parties and hand out the music and make it the hot thing to do.” He talks about Nike making sure young amateur athletes were wearing Nike shoes. “They are trying to catch a kid at 8 or 11 to wear their stuff, the next Lebron James.”

Naturade has NBA stars Magic Johnson and Grant Hill as investors and spokesmen. Naturade is also in partnerships with two African American-focused radio networks and working with influencers to make digital outreach a primary goal. That digital realm, he says, is a place where he hopes Naturade and other minority-owned says. More investors and more support for minority-owned business will be essential, but some of the money for marketing needs to come from retailers before the brands can scale up. “Retailers need to onboard minority-owned companies differently,” he says. “Everybody expects you to have all the marketing money.”

Companies that need help tuning their messages to resonate with minority consumers can find people who are eager to help.

When Pitch Publicity President Amy Summers was building out a campaign to help the Organic and Natural Health Association reach out to people of color about vitamin D deficiency, she knew she couldn’t do it on her own. Drawing on the expertise and experience of a diverse staff and client list became essential in creating the “Get On My Level” campaign that’s been well received. Get On My Level references a rap

“We go out of our way to have staff and management who look like our neighborhoods. Most minorities, especially the poor, do not feel honored or welcomed or acknowledged by the typical independent grocery store or natural product retail.”

– Alan Lewis, Natural Grocers
song, a connection Summers confesses she would not have made.

All it took was as simple request for help, something she thinks more nutrition brands should do.

“We tend to create things that we’re comfortable with or that look like us. I was like, ‘I’m a white woman. I need your help. We’re trying to do something here.’”

Shelf space

The last mile challenge for supplement brands in many communities of color is that the last mile is especially long when there are no grocers or health food stores. Tellis says Naturade doesn’t have a grab-and-go product that might work in a bodega—“Right now we are too small a company to make those minimum runs that the manufacturers require”—and his team is focusing on Amazon and other online outlets to reach communities where brick and mortar is not an option.

Naturade is already in Costco, where they are supported as minority-owned brand, and in Target, where there is a tie-in to Black History Month. The company will have SKUs in Whole Foods in the spring.

That doesn’t solve the brick-and-mortar problem in poorer communities, but growing the brand could give them more reach in the future. “Costco is higher end, but there’s 100 million people walking through Costco,” Tellis says.

For natural retailers, reaching people of color has long been a challenge. Natural Grocers’ Alan Lewis says the stores make sure the in-store workforce is diverse—“we go out of our way to have staff and management who look like our neighborhoods”—because the company knows “most minorities, especially the poor, do not feel honored or welcomed or acknowledged by the typical independent grocery store or natural product retail.”

A diverse staff makes a difference, he says, “We have had a lot of people say ‘It’s a place I know I can go into and not get the evil eye or be ignored or not be told what I need.’”

But entering poorer neighborhoods isn’t always simple, and the issue of gentrification is often raised. Lewis worked with the community for two years when Natural Grocers moved into Denver’s Globeville district. He says the message that resonated with community activists was that selling cheap food simply passes the exploitation on. “Asking for cheap food is asking us to abuse and exploit a different poor community somewhere else.”

Team building

Few observers are confident the supplement industry can reach a diverse marketplace without tackling diversity up and down the organizational chart. According to a survey by the JEDI (Justice Equity Diversity and Inclusion) Collaborative, only 2% of leadership positions in the natural product industry are held by African Americans. People who don’t know the community won’t know how to reach them. Tellis wants to see supplement companies not only recruiting from historically Black colleges and universities but also looking for diverse executives in other industries. Sports and music are industries that got it right, and that expertise is urgently needed in the supplement industry. “You’ve got to look outside the industry,” Tellis says.

“The ability to bring in diversity does not end at hiring. Minority executives and experts are also eager to be recruited to sit on boards of directors and advisory councils.”

A diverse staff and board greatly increases the chances that brands will not only create more effective and targeted marketing but also tune product development to meet the needs of minority populations. Opportunities for new product lines that match the markets, and the needs, could easily be missed by companies that lack diversity at a decision-making level.

Market and moment

Between the pandemic and social unrest that’s triggered a national conversation around race, the past year has brought more attention to the supplement and natural product industry’s failure to reach minority consumers. Although systemic racism has been an underlying issue for many years, the series of tragic injustices against Black Americans this past year brought the Black Lives Matter movement into the global spotlight and created unprecedented awareness around the critical need to address social inequities. For Nance, the combination of events has made it impossible, or at least unwise, for brands to ignore the challenges. Brands have long taken minority consumers “for granted,” she says, and the last year makes it clear that these consumers’ needs can’t be ignored. “Looking at 2020, and what’s what happened with COVID and the virus, whether you accept it, or whether you care about it, I think you’d be foolish not to say ‘I see it. I acknowledge it’s there.’”

Tellis believes COVID has opened more consumers to issues around nutrition, particularly diabetes. That openness can’t be wasted. “At this point, everybody is ready to have that conversation.”

Across the industry, the combination of events in the last 12 months has called out the urgency not just for impact but for creating new business opportunities. When whole segments of the population are left out of the marketing and product development, whole markets are ignored.

For Brown, it’s a matter of “the greatest outcomes come from the greatest crises.” The supplement industry has a role to play right now, she says. The ADA and other organizations are ready to work with brands. The brands need to work together, too. That collaboration could be coordinated messaging campaigns, teaming with community organizations and working to increase access to quality healthcare in Black and Brown communities.

“There is a different type of awareness and a new sense of urgency,” Brown says. “Shame on us if we miss this moment.”

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**The first step is awareness. The second step is action.**

– Claude Tellis, Naturade

FEBRUARY 2021
What a moment. Despite the significant logistical hurdles, COVID-19 vaccinations have begun in earnest across the globe. For the supplement industry, after a year of searching for footing in the shifting terrain of pandemic—replete with conspiracy theories and eager consumers seeking any help to stay healthy—COVID-19 vaccines add a new navigational hazard. How does an industry that has long presented itself as an alternative—or even in opposition to—mainstream medicine respond to these new vaccines?

The vaccine rollout stands as a moment imbued with consequence. Industry experts recognize that economic and philosophical motives are at play and poised to clash in unpredictable ways in the marketplace, where natural health consumers have long-held suspicions about vaccines.

A tradition of oppositional thinking

The natural products industry is no stranger to strong opinions that run counter to conventional wisdom. Food as medicine, nutritional ingredients as drug alternatives: even these are still disruptive concepts to many. Suspicion of vaccines is another item on this list, and it echoes other long-standing concerns about modern public health policy, including mercury in dental fillings and fluoride in the water supply. The core natural products community holds a constellation of these beliefs, so many of which fall into buckets of “us versus them” or “health freedom versus government mandate.” Is it any surprise that COVID, including vaccines, fall easily into these buckets as well?

But in the current climate, some health freedom advocates’ beliefs about COVID risk drawing the same critical scrutiny—and online frenzy—as every other conspiracy theory. Psychologists and security experts alike specifically point to misinformation around COVID vaccines as the number-two sinkhole for truth, right after claims of election fraud. Supplement makers are just beginning to understand the ways that the vaccines can both fuel and hamstring their futures, and healthcare practitioners are now confronting ever-louder voices around vaccinations, both for and against.

It’s messy. The COVID vaccines will both illuminate and complicate the supplement message. What better time to parse some data and try to make sense of this unique moment, a moment with murky, but serious, ramifications for both supplement sales and the future credibility of the industry.

Capturing the moment with data

To repeat—current research is a snapshot. Time, and opinion, moves fast these days, and sentiments are sure to be scrambled yet again. At the very front end of this vaccination process, where does America stand?

The Kaiser Family Foundation launched a vaccine monitor to track public acceptance of COVID vaccines longitudinally over time. In September, 63% of respondents were likely to take a COVID-19 vaccine, but that number dropped to 53% in December. The percentage of those undecided—neither likely nor unlikely to take a vaccine—rose from 19% in September to 27% in December. The vaccine monitor will continue to track public acceptance of COVID vaccines as the vaccination campaign progresses.

“We are seeing more and more pandemics because our population’s immune system is fundamentally damaged by environmental toxins and lifestyle decisions that make us less healthy. If we took better care of ourselves, we could get our immune systems as resilient as possible.”

—Dr. Joe Pizzorno, Institute for Functional Medicine
vaccine. In December, that number bumped up to 71%. The increase holds across racial and ethnic groups, and even across political affiliation. The takeaway? Most of the mainstream wants the vaccine, in numbers that grow with each week of forced isolation and fear of contagion.

*NBJ* ran its own microsurvey of 1,000 U.S. consumers, of which 473 self-identified as natural shoppers. This gives the natural products industry insight into potential discrepancies between “mainstream” and “core” perspectives in some rudimentary fashion.

*NBJ* data shows that, if the vaccine were available to everyone today, 62% of the general population would take it, compared to 70% of natural shoppers. This runs counter to the theory that the natural consumer is disinclined to vaccinations, a theory further challenged by the “never” responses to taking the vaccine. That response lands at 11% in the general population versus only 5% for natural shoppers. A more expected data point: natural shoppers have greater concerns about the long-term safety of the vaccines (65% vs. 55% in the general population), with a full 35% “very concerned” about that safety.

*NBJ* also asked about changes in supplement usage during the pandemic, and here the natural shopper did deliver—70% increased their intake during the pandemic, compared to 54% in the general population. If natural shoppers are more likely to have upped their ante due to COVID, this raises questions about how best to attribute the sales increases of 2020. New consumers or a flight to premium products? All of the above, of course, but to what degrees?

Jim Emme is the CEO at NOW Health Group, a company well informed about both the natural and mass market. “Our industry has been presented with a huge new group of consumers,” he says, “a group so large that no single marketing campaign would have likely gained at the levels COVID-19 brought forward to all of us.”

But will they stick around? “There’s a lot of talk about what the ‘new normal’ will look like,” says Emme. “Our view is that many consumers will use their newfound knowledge of supplements to prepare for the next novel virus, even though none of us can predict how or when that may occur.”

Here’s the real kicker. *NBJ* asked: “If you got the vaccine today, would you alter your supplement usage?” More than half of natural shoppers plan to increase their supplement usage after vaccination, compared to only 33% in the general population. Is this a strategy to boost health during the vaccination process? Or early signs of a true new normal with a higher baseline post-pandemic? Either way, almost no one—just 5% of respondents—plans to decrease their supplement usage. Few, it seems, are viewing the COVID vaccines as panacea.

Within the industry, UNPA ran its own survey of members. Collectively, this in-the-know group expresses more resistance to vaccination than *NBJ* found among consumers: only 56% expressed immediate interest in the vaccine, with 28% taking a wait-and-see approach and 16% opting out. This is another surprising result, given the practical benefit of inoc-
ulating the workforce: reduced risk and volatility, plus operations at a level that fully seize the production opportunities presented by COVID.

Or maybe they know too much. Allergic-reaction concerns around the novel mRNA technology of the Pfizer and Moderna vaccines is causing some to delay. Given the checkered history of mRNA drug development, other concerns center around the technology’s genetic mechanism of action. While the molecules introduced by the mRNA vaccines prime immune response in ways that the body’s own enzymes eliminate within days, it’s still a novel approach with a vague ring of genetic manipulation.

It’s safe to say two things in parsing this data. First, COVID complicates the traditional market drivers associated with supplements, as fatigue builds and the hunger to return to some semblance of public life infects all manner of consumers, including the natural-first consumers. Second, consumers new to the supplement market may place greater faith in conventional medicine and grant less philosophical weight to vaccine suspicions. Said plainly, philosophy and history (historic assumptions about consumers, anyway) are weaker drivers in the new consumer equation.

**Capturing the moment with sentiment**

Experts across the many constitencies that connect into supplements—brands, suppliers, practitioners, consumer advocates—have a lot to say about the COVID vaccines.

“There are many people who would choose not to get vaccinated, even well before the COVID-19 virus struck last year,” says Emme. “Others do not trust the rapid rollout of the FDA approvals for the various versions of the vaccines. We believe there are a significant number of consumers who will choose not to get the vaccine, for a variety of reasons, many of whom will turn to dietary supplements to support their desire to stay healthy.”

UNPA received a healthy dose of feedback from its member survey, and opinions differ. Some see COVID as the first

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**WILLINGNESS TO RECEIVE COVID-19 VACCINE DETERMINED SAFE AND AVAILABLE FREE OF COST**

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Source: KFF COVID-19 Vaccine Monitor (KFF Health Tracking Poll; Nov. 30-Dec. 8, 2020); KFF/The Undefeated Survey on Race and Health (conducted Aug. 20-Sept. 14, 2020).

Note: Totals may not add up to 100% due to rounding from original data source.
of many pandemics to come, with vaccines (and the protections of the vaccine courts) as another iteration of the pharma treadmill to chase profits. Some see COVID as the natural expression of a planet in disharmony, with a biosphere whose immune system is so far out of whack that zoonotic diseases arise as a likely new norm. Still others see no problem with the AstraZeneca vaccine, which is still on the horizon but presents a more traditional approach and a longer track record of safety.

“A lot of people are fatigued by this,” says Dr. Mark Pedersen, director of customer innovation at Capstone Nutrition, a leading contract manufacturer in the industry. “They’ve increased their levels of all the usual suspects, like vitamins C and D, but the vaccine presents a more permanent solution. They’d rather spend their money on leisure and plane tickets than immune products.”

Experts predict that air travel will ultimately require proof of vaccination, with Quantas leading the charge in Australia. This is a natural evolution of the vaccination certifications required by school systems, but the extension of such strict requirements to by most businesses is unlikely, especially in the natural products marketplace.

Scott Steinfeld, CEO at Health Wright Products, another leading contract manufacturer, says COVID and the vaccines force employers to look for balance between meeting high demand and offering employees choice. “There was concern among my staff that we would require vaccination, but we won’t. It’s voluntary but advised, and we won’t ask them either way.”

No one understands the nuances of patient persuasion like a health practitioner. Dr. Joe Pizzorno, Chairman of the Board at the Institute for Functional Medicine (IFM), calls the chatter around vaccines “loud on both sides.” Patients are looking for guidance, and doctors are looking for data. “The big challenge here is the extremes,” says Pizzorno. “The anti-vaccine group is opposed for everybody, and the medical apologists think vaccines are great for everybody. The in-between is not that simple. There are populations where vaccines are contraindicated, and other populations where it’s a good idea.” IFM has a special committee diving into the issue now, with official recommendations expected in February.

Of course, sentiment around the COVID vaccines lives squarely inside the larger story around vaccinations, where +/- 40 shots before adulthood is a common protocol. Stacking vaccines for efficiency continues to raise suspicion as a cause of fast-onset autism, and consumers are increasingly confused about all the surrounding noise online.

Gretchen DuBeau is the executive and legal director at the Alliance for Natural Health USA (ANH-USA), a politically active nonprofit that represents consumers and practitioners in the natural health community. ANH-USA played a key role in the GMO labeling movement. “My membership is more vocal than usual about these vaccines,” says DuBeau. “We advocate for free access to information, and there’s not enough information to make informed decisions here. The end points for safety and efficacy aren’t complete. The vaccines haven’t been tested on immuno-deficient

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**LIKELY CHANGE OF SUPPLEMENT USAGE IF VACCINATED**

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Source: New Hope Network NEXT Data and Insights survey of n~1,000 collected week of January 4, 2021, using a convenience sample directionally representative of U.S. consumers ages 18-73, weighted by age, gender, and region.
patients and pregnant women. It’s an enormous experiment."

ANH-USA collects its vaccine content at vaxinsider.com, where recent posts have focused on syncytin-1, a protein used to form the placenta that some fear is triggered by COVID vaccines, and PEGs, polyethylene glycols used as excipients in drug applications that some believe trigger allergic response and anaphylaxis. “We’ve worked in this area for 25 years,” says DuBeau. “I’ve witnessed the vaccine injuries, the unnecessary deaths and autoimmune disease. The biggest problem with the new vaccines is that we don’t know what we don’t know, and we likely won’t know for a long time.”

**Market impact of vaccines**

One question for the supplement industry goes beyond efficacy and into economics. If COVID spurred supplements to record sales levels, are vaccines poised to pierce that bubble? Said another way, if the pandemic goes away, do the sales go too?

“It’s clear that the impact of dietary supplements on COVID, and vice versa, is significant,” says Steinford. “More folks are taking supplements now than ever before in our industry’s history.” In fact, *NBJ* estimates a record year of sales in 2020, with growth spiking to 12.1% and sales passing $54 billion. A consumer survey from Trust Transparency Center, where Steinford serves as founder, pegs the big three winners from COVID as vitamin D (+10%), multis (+5%), and omegas (almost 5%). Insiders would add botanicals to that list, including essential oils and elderberry as such a particularly big winner that adulteration concerns are on the rise.

“I believe there will be a difference in the 2021 marketplace,” says Steinford. “Sales will slow, but not reset. We’ve earned a degree of respect, and it’s our responsibility now to build upon that. I would argue that supplements are playing a bigger role in this environment than drugs.” This speaks to the industry’s effort to assess the “COVID bump”—sales attributable to the pandemic alone. It’s a challenge that’s top-of-mind for investors in the space. (See Normalizing the COVID bump on page 18.)

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**PERCENTAGE OF RESPONDENTS WILLING TO RECEIVE A COVID-19 VACCINE TODAY, IF AVAILABLE**

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Natural Shoppers</td>
<td>70%</td>
</tr>
<tr>
<td>Total Respondents</td>
<td>62%</td>
</tr>
</tbody>
</table>

Source: New Hope Network NEXT Data and Insights survey of n~1,000 collected week of January 4, 2021, using a convenience sample directionally representative of U.S. consumers ages 18-73, weighted by age, gender, and region.
“Customers are just starting to push their orders out,” says Pedersen. “The industry built up so much inventory in the supply chain, with purchases up to a year in advance. There are warehouses full of product, so I see companies hedging their bets a little bit.” If pressed, Pedersen believes the vaccines could tamp down demand but still leave sales dramatically escalated after a year that saw 30-50% growth in some categories. “It’s inventory management now,” says Pedersen. “Before, it was sky’s the limit.”

“The subject of vaccines has been a factor in our operational planning for 2021,” says Emme, “and although the views are mixed within our team, the forecast from our customers is that they see no significant slowdown in demand for most of this year.” The new normal has legs. “We believe there will be a slowing down at some point, but not anytime soon since the distribution of the vaccines is currently falling behind the original schedule communicated by the White House and the CDC.”

Emme speaks of March and April 2020 as levels of demand that the industry might never see again, but the heady climate of consumers hungry for health products shows few signs of abating much in 2021. “We are making major investments in manufacturing capacity to meet these supply challenges, not just for this year, but for many years to come,” he says. Both Steinford and Pedersen speak of significant capital investments made in 2020 as well.

The COVID bump’s longevity remains unclear, and likely will remain that way for another 12-18 months. What’s also unclear, but worthy of a survey, is a timeline on a possible return to some normalized public life. NBJ asked those 1,000 consumers when that day might come, and consensus opinion says it’ll be awhile. A full 69% expect another six months of restrictions and uncertainty, 43% stretch it to nine months, and 22% kick it past a year.

During this transitional phase, confusion is likely to grow, both inside and outside the industry, around the true power of these vaccines. Studies are ongoing to assess infectivity after vaccination, so public health officials want the population wearing masks and distancing even after their shots. The vaccines appear effective and safe at keeping people alive and out of hospitals, but the big question remains—will enough people comply to create that purposeful, manageable bridge to herd immunity?

**India and China rising**

While the geopolitics around China are growing more volatile and adversarial, with many supplement experts quietly pleased to see some righting of the trade imbalances and predatory behaviors that have festered for decades, COVID works in the opposite direction. China and India are likely to come out of the pandemic playing an even more dominant role in the dietary supplement supply chain.

“Except for packaging, they managed this crisis perfectly,” says Pedersen. China moved much of its plastics industry into hand sanitizers during the height of the pandemic, which created six-month delays in the supply chain for bottles and lids. Anything petroleum-based that’s not stock white can still require up to a year lead time.

“China cleaned up,” says Pedersen. “They knew this was coming early, and just

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**WILLINGNESS TO RECEIVE A COVID-19 VACCINE TODAY**

- Yes, Immediately: 56%
- Wait and see: 28%
- No, I’ll take my chances: 16%

Source: United Natural Products Alliance
waited for us to place orders. It will be hard to take that supply chain back domestically, because they’re so good at it.” China and India kept Americans in drugs and supplement ingredients largely without interruption, and they did it with very little price volatility, something that stands out as an underreported story for COVID.

“China ramped up quickly,” says Steinford. “I didn’t even hear of severe price fluctuations. China acted fairly responsibly here.” The unstated subtext here, of course, is “this time.”

Seizing the real opportunity

One last question, and perhaps the most important one. As an industry, did supplements seize the moment to educate these new consumers and add credibility to the category on the world stage?

“While the industry did move to educate consumers in the best way possible,” says Emme, “our view is that we, as an industry, have fallen short of successfully getting our message across. Things were moving way faster than we could respond to at the beginning of the pandemic. We just didn’t know which products would be in high demand in support of immunity.”

It’s to be expected that consumer education loses some emphasis during a global emergency, so how about now, with the emergency slowly fading in the rearview mirror? “This is the opportunity for the industry to proactively assist in the healthcare marketplace,” says Steinford. “It’s in our best interest to continue to support the science and show the positive impact of what we provide. We’ve always known the benefit here, but now some of those questions and challenges are being put aside.” Anecdotal evidence of doctors—even the nation’s favorite, Dr. Anthony Fauci—recommending supplements, in the absence of any viable therapy to fight against COVID, abounds.

Which brings this story to long-haul post–COVID-19, perhaps the last opportunity that arises from the frenzy of 2020. There is a growing body of evidence that problems can linger for months after acute infection—China reports symptoms in 76% of patients six months after hospitalization, including sleep difficulty and chronic fatigue. These are patients with-out a clear protocol of care in conventional medical settings, and conventional modes of caregiving are struggling to find the disease names and drug solutions that might apply. Would it come as any surprise if this group grows dramatically in number, and ends up in practitioners’ offices looking for alternatives? Naturopaths and practitioners of eastern medicines, particularly TCM and Ayurveda, are already fielding the calls.

The industry has an opportunity to speak to—and speak for—this constituency. Perhaps the wave of new consumer interest in 2020 come from within the industry itself, and not from prominent public figures with big megaphones, like Donald Trump. “More scientific information has come out indicating that supplements, such as zinc and vitamin D, can help support immune health in regard to COVID-19,” says Emme, “yet most of it didn’t come from our industry. As an industry, we can build on this science and take the opportunity to lead in educating consumers and medical personnel about the benefits of supplements in supporting the health goals of consumers.”

As the pandemic dug itself in for the long haul, FDA and FTC dug their heels in too, with dozens of warning letters around immunity claims and COVID treatments perceived to threaten public safety. A new administration and new leadership at FTC raise questions about an even more vigorous enforcement posture to come. The frustration around communicating what is known to be true about immunity and supplements is real. It has also likely held back an even more rapid adoption of supplements, with even higher levels of sales.

“We’ve worked in this area for 25 years. I’ve witnessed the vaccine injuries, the unnecessary deaths and autoimmune disease. The biggest problem with the new vaccines is that we don’t know what we don’t know, and we likely won’t know for a long time.”

– Gretchen DuBeau, Alliance for Natural Health USA

COVID vaccines can help with this, but they just didn’t know what we don’t know, and we likely won’t know for a long time.”

“One of our biggest challenges is sharing good information with the public,” says DuBeau. “FDA and FTC are going after supplement companies, but also doctors. We’re forced to pull natural medicine information off websites. We’re banned from talking about andrographis here, and Thailand just approved it to prevent and treat COVID.” Many would argue that the regulatory structure showed its age yet again, as credible science was effectively de-fanged at the very moment it was most needed.

At press time, the nightly news is chock full of headlines about a healthcare system on the brink, hospitals at capacity, front-liners exhausted and exasperated by the wave of illness they see every day. The
Hindsight 2020
How marketers and brands are integrating the lessons of 2020

Guest editor Emerald-Jane Hunter, myWHY Agency
Story by Ilene Lelchuk

Who wouldn’t want to forget the nightmare that was 2020? Nutrition industry marketing strategists, as it turns out.

In 2020, marketers and brands found themselves forced to pivot—more like summersault—their way through a tumultuous year fraught with a pandemic, economic upheaval and a reckoning with racial inequity. Now, in 2021, instead of writing off the previous year, they are incorporating its crucial lessons into their DNA. As one agency head told NBJ, 2020 was the most important year of the decade.

Business models, resilience and corporate social responsibility were all tested. For the U.S. marketers and brand executives interviewed for this article, it was a crash course in agility, authenticity and inclusion.

Here are the top five lessons they are carrying into 2021.

Marketing lesson 1:
Commit to Justice, Equity, Diversity and Inclusion (JEDI)

The death of George Floyd during a police arrest, and the Black Lives Matter protests that followed last summer, shook the country and shined an intense spotlight on the horrors of police brutality,

CONSUMER RESPONSE TO LACK OF DIVERSITY IN ADVERTISING
Percentage of consumers who have stopped supporting a brand that didn’t represent their identity (race, gender, religion, etc.) in its advertising

Source: Adobe survey of 1,012 U.S. adults over 18 years old
racial injustice and inequity unlike any event since the 1960s. “The first thing that comes to my mind when I see this question about the lessons of 2020 is, if you don’t have a diversity strategy, you don’t have a growth strategy,” says Bonnie Smith, CEO of Studio B Entertainment, a diversity-driven brand experience agency in Chicago whose clients include Proctor & Gamble.

For the natural products market, a diversity strategy includes figuring out how to move beyond a primarily white and affluent audience, how to support Black-owned businesses, and how to embrace diversity within its own corporate teams. According to a Morning Consult poll taken in June 2020, 32% of Black respondents said they rarely or never see people who look like themselves in advertising (see chart, page 4).

Another survey taken by Adobe in 2019 found that 62% of U.S. respondents showed diversity in a brand’s advertising had at least some impact on how they perceived that brand’s products and services. It also found that 53% of Black respondents said they stopped using a brand because it didn’t represent their identity.

“I hope every marketer has learned that you need to see the world through other people’s eyes to understand them and help them feel valued, understood, seen and heard,” Smith says.

Simply putting more people of color in ads or partnering with more Black influencers won’t cut it, she added. As the adage says, change starts at home. In natural product brands’ boardrooms, only 2% of leadership positions are occupied by Black professionals, according to a Natural and Organic Industry Benchmarking Survey conducted in late 2019 by New Hope Network and JEDI Collaborative, a natural products organization of industry peers and experts.

The JEDI Collaborative (created in 2019 with founding donors such as Nuvita, KeHE Foods, Clover Sonoma and Traditional Medicinals) seeks to “embed justice, equity, diversity and inclusion into the entire food ecosystem.” In late 2020, the Collaborative was busy hosting several community gatherings to discuss how to engage and serve a broader consumer audience. More companies committed to taking internal audits and creating plans to incorporate JEDI’s principals.

Another commitment is being sought from major retailers in various industries: the 15 Percent Pledge. Because Black people make up nearly 15% of the U.S. population, the campaign, created by fashion designer Aurora James, calls on major retailers to commit at least 15% of their shelf space to products by Black-owned businesses. Participants so far include Sephora, West Elm and Macy’s. Grocery and health food chains have yet to officially sign on, according to a campaign representative.

Some chains are taking individual action, however. For example, Fresh Market pledged to increase product offerings from Black-owned brands at its nearly 159 locations. Costco has established a Supplier Diversity Program and Target is highlighting Black-owned brands in its Black Beyond Measure campaign.

Marketing lesson 2: Be authentic

Marketers also learned that lip service won’t cut it with savvy consumers.

“Brands really do have to be authentic. Your consumers know when you are not,” says public relations strategist Kendra Cole, who works with several clients in the CPG space.

Authenticity means doing more than posting solidarity messages or a black square on Instagram on #BlackOutTuesday (a corporate solidarity campaign in June that was seen by some critics as lazy allyship). Strategist Samantha Flynn of JuniPR says Gen Z is especially interested in social justice and equity and holds brands to a higher social standard.

“They believe in the power of their

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— Andrea Schwenk, Egglife Foods

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“They believe in the power of their
stop talking about themselves and start listening to their target audience—and then putting themselves in their shoes. MadeGood, the Canadian granola snack brand, packs its social media feed with empathetic messages and tips for parents dealing with childcare, virtual learning, and working from home during COVID-19. It also launched the MadeGood Moments campaign, providing easy recipes and stay at home activities for the entire family and a chance to win $500 every day last May.

MadeGood, produced by Riverside Natural Foods, additionally donated over $250,000 in food and funds to U.S. and Canadian food banks and family services since the start of COVID-19.

Today’s consumers increasingly respond to the underlying message that “our product isn’t only good for you; it gives back, too.”

“Not everything is lemons,” Hoffman says. “We're going to take them and make lemonade.”

Marketing lesson 4: Dive into digital

As brands were forced to do business in a socially distant world, they had to dive into digital marketing and brand activation like never before.

To reach consumers and court new business partners, they embraced virtual events, Zoom conferences, podcasts, webinars, social media marketing, and social media influencers. They created more content, blogged more, emailed more. Emerging brands fast-forwarded their e-commerce launches. Marketers created sophisticated sales presentations for the online viewer and hosted industry education webinars.

Many of these changes will stick in 2021 and beyond, predicts Steve Hoffman, founder of the Compass Natural marketing agency.

Hoffman himself jumped right into virtual informational marketing in April 2020, with a monthly live webinar called Compass Coffee Talk, featuring industry leaders such as Whole Foods CEO John Mackey, this February’s guest.

Digital activation may not have been an easy lesson, but it was a crucial one—especially for emerging brands, Hoffman says.

Consider the challenges for Egglife Foods, which was founded in 2019 and makes wraps for the keto crowd, using eggs instead of flour.

“Given the change in consumer behavior this year with fewer shoppers discovering products in-store and the ability to sample our product, we had to adapt to new ways of introducing our innovative food product to consumers,” says Andrea Schwenk, vice president of marketing at Egglife.

The company created recipe videos that showed product versatility and developed a registered dietitian program to reach and educate consumers at home through brand channels. “We also leaned heavily on our brand ambassadors to help us tell the Egglife story and provide credible product recommendations to their followers,” Schwenk explains.

Evolving with the challenges of 2020, the brand reported 600% growth in the number of retail partners and more than 740% growth in the number of retail locations. Egglife launched on AmazonFresh this year.

Some brands still managed to get free samples out there, such as by mailing samples of new products to existing customers. Tâche pistachio milk, for its debut in November, creatively connected with specialty coffee shops to jumpstart brand awareness.

Marketing lesson 5: Be prepared

Although few could have predicted the challenges of 2020, marketers came away from the year with a deeper appreciation for public relations crisis planning.

“Before last year, people didn’t really feel the need for PR plans until the crisis happened,” says Flynn, whose work includes crisis communications. “We saw that with both the onslaught of COVID and Black Lives Matter. A lot of companies were caught completely flat-footed.”

She says public relations is often the smallest part of the marketing budget and first to get cut. But it’s essential. “The importance of investing in a crisis communications plan and looking at how to build brand reputation before a crisis hits is something a lot of companies learned this year,” Flynn says.

Evaluate vulnerabilities and potential crises, she recommended. Product recall? Credit card data breach? An employee’s decade-old racially insensitive social media post goes viral? A pandemic interrupts your supply chain? Who would respond? What would be the response? Be ready to adapt to a range of potential challenges.

Making the lessons stick

Among the experts interviewed, the consensus is that future marketing strategies will be rooted in the lessons of 2020.

They weren’t easy to learn, but they are going to count in 2021.

“Not everything is lemons,” Hoffman says. “We’re going to take them and make lemonade.”
Normalizing the COVID Bump

Investors reckon with the spoils of 2020, reset for 2021

Guest Editor Mike Burgmaier, Whipstitch Capital

Story by Marc Brush

The past is the past. This is the common refrain among investment professionals looking to put money into a heady market for health and wellness products. The smartest of the bunch are looking forward, not backward, and asking the hard questions about how best to normalize the sales bump attributed to COVID. These are questions that then lead to more questions about the reinvestments made by brands during the windfall to create lasting value in 2021 and beyond.

When the final numbers are tabulated, 2020 will deliver double-digit annual growth for the supplement industry (NBJ currently estimates 12%), with specific categories (immunity estimated at 52%) and sales channels (e-commerce estimated at 65%) sure to break records. But that’s old news. “We don’t give a shit about the past,” said one investor on background. “If you’re looking to sell or raise money based on year-over-year performance, that’s already baked into the math. What about the next five years?”

“I think there are a lot of lessons about to get learned,” says Robert Craven, managing partner at Findaway Adventures and former CEO at MegaFood. Findaway works at the lower end of the market with startups raising seed rounds and series A investments. It’s noisy in there. “There’s so much new money in the space,” says Craven, “with new types of investors from Silicon Valley and newly-minted angels from successful exits over the past few years. I think we’re all about to learn that it’s easy to start a business—especially with a toe-hold in digital—but then it gets real hard real fast.”

Digesting the best year ever

“There’s so much activity,” says Mike Bush, co-founder at GrowthWays Partners and former CEO at Ganeden. “When you’re at your highest revenue and EBITDA ever, that’s a pretty good time to sell.” As the full impact of 2020 hits financial statements, experts are seeing—and expect to see even more—interest from brands to capitalize on the good news.

William Hood, managing director and founding partner at William Hood & Company, puts the fervor in context.

“Investment and M&A interest in dietary supplements is as high as I’ve ever seen it in my 23-year banking career. I would argue that it’s the highest in history.”

– William Hood, William Hood & Company

The numbers will certainly bear this out, with industry sales reaching record highs in absolute dollars and annual growth rates not seen since the late 1990s, when that growth was tracked from a much smaller base. During various stages of the pandemic and its quarantines, businesses grappled with supply chain shortages, but also saw new customer acquisition costs drop almost to zero as ad rates cratered. Contribution margin earned per sale shot up. Brands shifted from negative EBITDA to full profitability in a matter of weeks.

Courtney Nichols Gould, co-founder and co-CEO at SmartyPants Vitamins, saw it all firsthand, including the recently announced acquisition of her company by Unilever in late November. She also sees continued prosperity ahead. “When I reflect on 2020, we did see more consumer demand and younger consumers coming into the category, but we don’t view COVID as a bump,” she says. “This was an accelerant for trends already occurring...
in the market, like a drive to quality and a drive to e-commerce.”

In a certain light, she says, the COVID bump could actually work as a deterrent to future deals. “That acceleration of sales with COVID can work for you,” says Gould, “but also against you. Maybe those new sales get discounted by COVID. It’s still so fresh that [investors] don’t know yet how to differentiate your brand attributes from the COVID effect.”

Assessing the year ahead

A quick, somewhat obvious, consensus opinion: lots of brands will look to sell in 2021, drafting off the spoils of a COVID bump. But how big was the bump? And how can an investor normalize effectively against it?

“The smart money in private equity has started to roll into the industry more,” says Bush. “They know there’s a bubble, to some degree, so I’m seeing a slowdown coming out of all this.” Say a hypothetical supplement startup had $5 million in sales going into the pandemic, and that number jumped to $15 million in 2020. Say that company wanted to raise money at 8x EBITDA. What’s the normalization logic that corrects for the anomaly, such that an investor can write a check with confidence that the numbers will prove accurate for the next year or two, in a market not fueled by a raging pandemic? That question hasn’t been answered yet.

Hood has not seen any discounting from COVID, and pricing has remained strong, but strategies, especially, are beginning to normalize for a COVID bump. “If you think of Nestlé or Unilever, these are huge businesses with sophisticated analytics happening every day,” he says. “If they believe a COVID year needs a discount, they’ll bake that into their valuation models. I’m not hearing any talk of discounts, but the strategies are attempting to normalize a COVID bump. Nobody will know how best to do that until we’re 12-18 months out.”

NBJ has heard from contract manufacturers, further up the supply chain from finished brands, that orders are beginning to get pushed as a measure to right-size inventories that ballooned during the early months of the pandemic. If a contract manufacturer saw a hypothetical customer increase its order by 50% in 2020, expectations for 2021 now run toward a 10-15% retraction from last year’s high.

Hood sees the next wave of acquisitions in 2021 and the first half of 2022 landing with the younger companies now reaching scale—say $50 million to $100 million in sales—on the heels of the pandemic. That first wave of disruptors in supplements from the prior decade are effectively sold out. Think of Olly, Liquid IV, and SmartyPants going to Unilever; Vital Proteins and Persona to Nestlé; Care/of to Bayer.

“There’s another wave coming,” says Hood. “The number of startups chasing venture capital or private equity is at an historical high.”

Craven knows this all too well. “I’d say that 10-20% of the decks I see now carry outrageous valuations,” he says. “Sometimes they get the valuation, but primarily from investors outside the space who don’t understand the CPG world. This is why 2021 is a year to focus. Wellness is hot. Supplements carry high margins with good e-commerce metrics. And there’s so much dry powder. A lot of dumb decisions will be made in 2021, as brands try to compete out of the gate.”

Gould also sees 2021 as a critical year for supplement brands in a volatile world. “With this level of unpredictability, flight to quality is always the move,” she says. “That means repurchase. With so many new brands launching, that’s the fuel to grow your marketing. How does the saying go—great companies are bought, not sold? You prove that out with customers who buy again and again and again.”

How to create lasting value

One way for the market to reset after the heady, wild ride of 2020 is to follow the money. How did brands reinvest their...
profits? What happened last year to create lasting value? Here’s a quick hit on the best ways to answer these questions from sources interviewed for this article.

**Ducks in a row**

“2020 was a good year to improve processes, to get the right staff in place, and to prep for volatility,” says Bush. “With so much staff sitting around and not on planes, you can do more of the intellectual work and planning that takes time and often gets sidetracked.”

With a successful exit now under her belt, Gould shares similar advice. “When we’re not meeting in person,” she says, “you have to do a good job of organizing to foster that healthy due diligence process. The more buttoned up you are, the better and faster it all goes. We got lots of positive feedback about our data room and how we’d already asked ourselves all the hard questions.”

**Science and IP**

“This was the year to set up recruitment for clinical studies,” says Bush. “Science should be king in our industry, and with extra revenue and profits, there’s more opportunity to prove out that concept. I’d look at spending money on IP and clinical work as much as I’d look at ways to market directly to consumers.”

**Get digital fast**

“There are so many supplement companies with a million SKUs,” says Bush. “Look at a subscription model like Persona or Tespo, where personalized supplements show up on your doorstep every month. That’s a better way to add convenience and compliance. I’ll always stick with convenience, as long as it’s not outrageously expensive.”

With that initial COVID bump in sales, most brands jumped into the fray to meet consumer demand. Now’s the time for some reflection and analysis to parse the bump. “Who bought during the bump?” asks Hood. “Just because you’re in supplements does not mean you will automatically sell for a big price to a large strategic,” he says. They’re called “strategics” for outpace category growth.”

**The luxury of excess cash**

For larger brands with COVID sales to reinvest, Craven suggests an acquisition strategy. “If you’ve got an extra $10 million, you could leverage some debt and buy two or three little brands,” he says. “There are lots of steals coming as some of these startups run out of money.”

Another way to boost innovation for lasting value? Fund it internally. “The bigger supplement brands should look at creating a skunkworks,” says Craven. “Hire someone who understands agile practices, rent them some office space away from your team, and let them build MVPs (minimum viable products). Turn them loose to study the data and get creative.”

COOs may offer a different perspective. “Anything you can do to make your products higher quality will create value,” says Gould, “but if it were me, I think dry powder is not the worst thing right now. If you’re an independent brand, sock away some cash. The next 18 months is going to be a highly unpredictable environment.”

**What’s the new normal?**

In defining the COVID bump and re-

“**That acceleration of sales with COVID can work for you, but also against you. Maybe those new sales get discounted by COVID. It’s still so fresh that [investors] don’t know yet how to differentiate your brand attributes from the COVID effect.**”

— Courtney Nichols Gould, SmartyPants Vitamins
While a focus on agricultural policy and opportunity is relatively new for the natural products industry, it’s coming on with vigor, and the next four years will be a crucial time for building agricultural policies that help the industry, the planet, and the consumer.

The industry just might be ready, too.

“Until we got together to get hemp legalized, we never focused on agricultural policy,” admits Loren Israelsen, founder and president of United Natural Products Alliance (UNPA). “Now that we know we can work together, along with the global supply chain and economic issues highlighted by COVID-19, and with an administration committed to addressing climate change, we hope to make some headway during the next four years.”

NBJ spoke with Israelsen and others for their thoughts on how the industry can get more involved in agricultural policy—particularly around creating markets and opportunities for farmers growing non-commodity crops that could be used in supplements.

The state of agricultural affairs as it relates to the natural products and supplement industries, it turns out, can be complex.

The current (2018) farm bill
Most federal agricultural policies and programs are contained in the federal farm bill. The original goals of the first farm bill, created as part of President Franklin Delano Roosevelt’s New Deal legislation, are...
still the same today: to provide fair food prices to farmers and consumers, a sufficient food supply, and safeguard and preserve America’s natural resources.

It may be surprising to learn that of the $428 billion in farm bill funding over the 2019-to-2023 period, more than 76% is expected to go toward nutrition programs, primarily the Supplemental Nutrition Assistance Program (SNAP), which includes free school lunches and the food stamp program. The remaining $102 billion goes toward agricultural policies and programs, including:

- **USDA Crop Insurance** and related subsidies offer financial benefits for non-organic and organic traditional field crops (such as wheat, corn, and soybeans), and for about 50% of all U.S. specialty crop acres, including raisins, fruit, and coffee.
- **USDA Sustainable Farming** programs provide grants and loans for research, equipment and crop cost-sharing for organic and non-organic crops.
- **USDA Rural Development** programs provide loans and grants to support infrastructure, housing, community and business development in rural areas.
- **USDA Natural Resources Conservation Service (NRCS)** provides technical and financial assistance for farmers to make conservation improvements to their land.
- **USDA Value-Added Producer Grant Program (VAPG)** helps farmers create new products, develop and expand marketing opportunities and increase income.
- **USDA Specialty Crop Research Initiative (SCRI)** provides grants to support research and production of specialty crops.

Many of these programs present direct relevance to the natural products industry. Of note for supplement marketers is the mammoth SNAP program, something the industry may not currently be taking best advantage of.

**The Trump years**

While many members of the natural products industry weren’t happy with the Trump administration’s agricultural policy moves, there were some fans.

“I think the Trump administration did a great job for the farming industry,” says George Pontiakos, COO at Martin Bauer Group, which provides ingredients to food, beverage, and supplement companies. “During that time, hemp was legalized, subsidies were given to farmers when China prevented imports through high tariffs, and aid was given to farmers early on in the COVID-19 outbreak.”

Pontiakos is not a fan of all government involvement, however. “The last thing the American farmer needs is more government oversight,” he says. “The market should drive the activities of farmers. If the demand for a crop is there, farmers will grow it.”

Case in point: When Martin Bauer determined a need for herbs with specific attributes, the company purchased Organic Botania’s Alaskan-based Core Botanica, producers of mints and other botanical crops.

The organic trade also gained a win in the from the 2018 Farm Bill, according to some observers. Thanks to advocacy and strong bipartisan support from Congress, “funding for the USDA’s Organic Agriculture Research and Extension Initiative more than doubled, to $50 million, by 2023,” says Megan DeBates, vice president of government affairs at the Organic Trade Association.

DeBates, however, was not pleased with some of the administration’s actions. “Trump issued an executive order during his first days in office that would dramatically reduce government regulations, but in the organic industry, we need strong regulation,” she says. “He withdrew a final standard regulation on animal welfare in the organic industry that had been created in the prior administration, and he also took many pending organic standards proposed regulations off the unified regulatory agenda, essentially stalling any further action.”

Biden’s campaign message about the role of agriculture in mitigating climate change is in contrast to a Trump administration that created policies against environmental and climate change initiatives. A recent *Washington Post* analysis found that Trump weakened or wiped out more than 125 rules and policies aimed at protecting the country’s land, water, and air. The Trump administration reduced oversight of polluting industries and ended protections for endangered wildlife. Just prior to the election, the administration moved into anti-environmental overdrive, easing requirements on power plants with proven waste leakage into waterways, and reduced oversight of mine safety, as well as opening up more than 9.3 million acres to logging in Alaska’s Tongass National Forest.

**Mitigating climate change**

There are many ways that emerging agricultural practices can help the environment, reduce climate change, and propel innovation, and many of which the supplement industry is better situated than ever to address. Agroforestry, or farming with trees, stands out. The most common form of this is alley-cropping, or planting rows of trees, and in the wide spaces in between, planting crops. “Trees are perennials, and made primarily of carbon they absorb from the atmosphere through photosynthesis,” says Keefe Keeley, Co-Executive Director of the Savanna Institute, a non-profit focused on research and education with scientists and farmers to develop agroforestry as a toolbox of solutions for farms primarily in the Midwest. Agroforestry not only helps reduce the carbon footprint, it also helps farmers economically. “By including trees integrated with other crops, farmers can grow on one acre what it would normally take almost one and a half acres to grow, if the trees and crops were grown in separate areas,” says Keeley. The trees can be sold as lumber, nuts can be harvested, and the diversity of having both

“Until we got together to get hemp legalized, we never focused on agricultural policy.”

– Loren Israelsen, United Natural Products Alliance
Over the next four years and beyond, the industry has a unique opportunity to address these opportunities on a policy level and not just a consumer level.

**Looking forward**

Israelsen has his eyes on a big target: the 2023 farm bill, which offers many opportunities for the natural products industry.

Both Israelsen and DeBates are interested in getting more natural and organic products into the school lunch program, which is a part of the larger SNAP funding in the bill. Confirmation of Tom Vilsack as Agriculture Secretary might help that agenda.

Vilsack, Biden's current nominee, served as Obama's Secretary of Agriculture. In 2010, Vilsack reformed the National School Lunch Program, increasing servings of whole grains, greens, and beans, and decreasing refined grains, empty calories, and salt. “In addition to natural food products, we could also support efforts to include supplements in federally-funded nutrition programs,” says Israelsen.

The following are changes natural products industry members would like to see during the Biden administration.

**Warner:** “I’d like to see tax breaks and funding from the Value Added Producer Grant (VAPG) go towards crops that improve the environment.”

“OTA have shared their concerns, and for the first year of the new administration, we will be advocating for these priority actions: the reinstatement of animal welfare regulations in organic farming; finalizing organic dairy transition standards; getting Obama--proposed standards for personal care, pet foods, aquaculture, and greenhouse production back into the regulatory process; and expanding the use of organic food in federal programs, such as those for food stamps and school lunches.” DeBates says policies that promote climate-friendly agriculture will also be a focus for the organization, as maintaining and building soil is a requirement of becoming a certified organic producer.

**Israelsen:** “In addition to SNAP policy changes, I’d like to see programs to fund new (actually old world) crops, to protect and revitalize lands that have been over farmed, and programs to encourage greater urban organic farming, bee keeping and other horticultural activities in cities.”

There are many ways for the natural products industry to work with the new administration, to help consumers, the environment, and the financial success of industry members, Israelsen says. “By banding together, we have the opportunity to influence government policy that supports innovation.”

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**I’d like to see tax breaks and funding from the Value Added Producer Grant (VAPG) go towards crops that improve the environment.**

– Bri Warner, Atlantic Sea Farms

**McGuffin:** “More USDA funding for forest farming would be helpful.” One way to do that, says McGuffin, is for the natural products industry to create more connections with schools that focus on agriculture. “Schools can help champion local efforts with farms and standards; getting Obama-proposed standards for personal care, pet foods, aquaculture, and greenhouse production back into the regulatory process; and expanding the use of organic food in federal programs, such as those for food stamps and school lunches.” DeBates says policies that promote climate-friendly agriculture will also be a focus for the organization, as maintaining and building soil is a requirement of becoming a certified organic producer.

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The natural products industry has long led innovation in food and health trends.

One type of agroforestry that the herbal products industry has used is forest farming, or growing high-value crops under the shade of a tree canopy. “The Appalachian Beginning Forest Farmer Coalition (ABFFC), created by project director and Virginia Tech forestry professor John Munsell, is doing great work in this area,” says Michael McGuffin, president of the American Herbal Products Association. The coalition has received USDA funding to grow crops, including wild American ginseng, which sells for hundreds of dollars per pound. Mountain Rose Herbs is one buyer of this forest-farmed American ginseng, says McGuffin.

Another way farming can help reduce climate change: planting more perennial crops, such as berries, asparagus, and walnuts. Carbon is sequestered in the soil during perennial cropping, which reduces the carbon footprint. Some of these berries, such as aronia, elderberry, and black currant, have antioxidant levels that are as high or higher than acai. Plus, growing crops locally reduces the carbon footprint of overseas travel or long truck rides.

A third way to reduce our carbon footprint: creating crops that actually improve our natural resources. One example: high-quality kelp. In 2017 in Saco, Maine, the first commercial seaweed farm was created to provide a new crop for lobster fishermen. When Bri Warner took over in 2018 as President and CEO of Atlantic Sea Farms, she had a bigger vision.

“Ninety-eight percent of seaweed is imported, and 100% is dried,” she says. “Most of it comes from China, and the water it’s grown in has high levels of heavy metals and is often near compromised waters.” Not only is the kelp from Atlantic Sea Farms grown in clean, clear Maine waters (which are heavily regulated due to the lobster industry), but cultivating it actually improves the water by removing carbon and nitrogen from it, says Warner.

Warner’s goal is to provide a healthier version of nutrient-dense kelp (both dry and fermented) to the world. “It’s a triple win,” she says. “We’re helping improve the water, providing more nutritious food, and helping the livelihood of small farmers.”

The natural products industry has long led innovation in food and health trends.
With the COVID-19 vaccine rollout only just beginning and no cure for the coronavirus in sight, researchers are examining every last molecule in hopes of finding something—anything—that might alleviate symptoms, battle the infection or provide potent immune support. Even as the global pandemic has shuttered testing facilities, stalled clinical trials and strained access to basic lab supplies, scientists worldwide remain determined to help to ease the pain of this unprecedented health crisis.

For the supplement industry, however, results in the lab are only one part of the process. A wave of new science is coming, and the question becomes not only whether an ingredient is effective but also how the supplement industry will market it with regulators watching more closely than ever.

Researchers, mainly from academia but also within the industry, are studying a broad range of dietary supplement ingredients for potential health benefits tangential to this virus. They’re not seeking COVID-19 treatments necessarily, but rather viable adjuncts to optimize immunity or support recovery from infection.

“There is a mad scramble going on,” says Thomas Brendler, founder and CEO of herbal products consultancy Plantaphile. “A quick Google Scholar search of ‘COVID-19/SARS/CoV-2/herbal supplements’ for 2020 alone gives me close to 3,000 hits. I can back this up by what I’ve seen published and what I’ve personally peer-reviewed over the last year.”

There is immense scientific interest in immune health standbys like zinc and vitamins C and D, as well as CBD, adaptogens and branded ingredients. Botanicals, especially, are getting a close look. Researchers are probing herbs rooted in traditional Chinese medicine, Ayurveda and other traditional systems, as well as anything with known antiviral, immunomodulatory, anti-inflammatory, antioxidant or other pertinent properties.

As for the type of COVID-related research underway or planned, it runs the gamut from literature reviews, computer modeling and in vitro studies all the way to randomized, controlled human clinicals. “A good proportion of the research is reviewing hypotheses, but I am also seeing a lot of experimental work being done, the majority of it preclinical,” Brendler says. “The most advanced studies are likely coming out of Asia because traditional Chinese medicine was applied pretty much instantly at the beginning of the outbreak.”

In fact, human-trial data have already produced a win in Thailand. On December 30, the nation’s health ministry approved a pilot project using Andrographis paniculata to treat early-stage COVID-19 infection. Other human clinicals underway include a Spanish study looking at milk thistle and an Iranian study investigating licorice, both for relieving respiratory symptoms. Meanwhile, a Mexican trial is assessing Artemisia annua, aka sweet wormwood or sweet Annie, which contains artemisinin, used in antimalaria drugs.

But, as Brendler notes, the bulk of the science happening right now is nowhere near the human-testing phase; much of it is not on that trajectory anyway. Thus, most early-stage data won’t inform COVID-19 treatment protocols anytime soon, if ever. Still, this research is critically important. It can yield valuable information about specific ingredients’ mechanisms of action or dietary supplements’ potential to support immune health—data that could benefit industry even after the current crisis subsides.

In late December, Phytotherapy Research published a paper titled “Botanical drugs
and supplements affecting the immune response in the time of COVID-19: Implications for research and clinical practice.” Authored by Brendler and 12 other experts, it explores Indian frankincense, turmeric, umckaloabo, echinacea, elder, licorice, herbal adaptogens, salicylate-yielding herbs and medicinal fungi—not as treatments, but as safe options “when taken before onset, during initial infection or in convalescence,” Brendler says.

“Though none of these botanicals have been clinically tested for COVID, one can hypothesize, based on known mechanisms of action, that they may alleviate one symptom or another,” he explains. “But that is as far as one can ethically take it at this point. There are many places where botanicals could potentially play a role, but no

ing companies that deceptively claim their products can treat, cure, prevent or diagnose COVID-19.

“Since early April 2020, we’ve issued 340 warning letters and brought three cases to federal court,” says Richard Cleland, assistant director of advertising practices at the FTC. “COVID claims are keeping us very busy and will continue to for some time.” And now the feds possess even more punishing power. As part of the stimulus bill Congress passed in late December, FTC gained the authority to collect civil penalties of up to $43,792 per violation from companies making deceptive COVID claims.

Of course, reputable industry players understand and respect DSHEA and wouldn’t dare make COVID claims anyway.

“Even with COVID, we’re left with the same rigid legal framework we’ve always had—full stop.”

– Diane McEnroe, partner at Sidley Austin LLP

body should make recommendations about treating COVID-19.”

As research continues to ramp up and more findings materialize in the coming years, there promises to be new discoveries and deeper understandings that will excite the dietary supplement industry. But in the COVID-19 era—as always—it remains imperative for companies selling products to approach any emerging science cautiously, interpret it correctly and communicate it accurately, ethically and legally.

Same old regulatory roadblocks

While new research may produce promising findings pertaining to COVID-19—and even lead to approved natural treatments—that doesn’t mean U.S. dietary supplement companies can use this data to market their products. DSHEA hasn’t budged. Disease and drug claims, both expressed and implied, remain off-limits to this industry. FDA and FTC have made this crystal clear, aggressively pursu

As frustrating as staying within the structure/function confines can be, they know never to include virus, infection, disease or any related verbiage in their marketing. They also steer clear of activity-denoting terms such as antiviral, anti-inflammatory or antibacterial, none of which dietary supplements can legally claim to be.

But what about those ingredients that do have antiviral, anti-inflammatory or other can’t-talk-about-them properties—and have science to prove it? Obviously, companies want to trumpet the research-backed potential of their products, and it would be nice to get more specific than the token “supports immune health” or “promotes a healthy immune system.”

Too bad.

“Even with COVID, we’re left with the same rigid legal framework we’ve always had—full stop,” says Diane McEnroe, partner at Sidley Austin LLP. “If you talk about an ingredient in labeling, you are limited to structure/function attributes and cannot talk about explicitly or implied disease prevention.”

But semantics aside, if an ingredient’s antiviral or other activity has only been demonstrated in a petri dish or animal model, as is the case for many, that alone is a problem. Unless an ingredient has been competent and reliably tested in humans, claiming that it will act the same way inside the human body is risky. And until that ingredient has been tested in humans for specific COVID-19-related endpoints, its effects most certainly cannot be conflated to coronavirus.

“Proof of real-life effectiveness for medicinal action that meets scientific standards requires clinical trials,” says Steven Dentali, Ph.D., of industry consultancy Dentali Botanical Sciences. “In vitro or animal studies don’t necessarily translate to people. Antiviral activity doesn’t mean activity against all viruses. Anti-inflammatory action in a test tube doesn’t mean it will work in a person—and if it does, the science can’t just be extended to all cases where inflammation is an issue.”

Basically, when it comes to what industry can and can’t say about science as it relates to products, the regulations haven’t changed just because COVID-19 has changed the world. “FDA and FTC mean business in the same way they did during H1N1, where companies were preying on fears and taking advantage of a health crisis,” McEnroe says. “They’ve pushed out a number of double-headed warning letters, and within those, you’ll definitely find companies talking about emerging science.”

Danger of overselling science

Despite the clear risks, some dietary supplement brands and ingredient suppliers do utilize preclinical data to market their products.

“We quite often see companies lead from in vitro studies or, as we’re seeing with COVID, computer model studies to see if a metabolite in a botanical ingredient might bind to a viral protein,” says Stefan Gafner, Ph.D., chief science officer of American Botanical Council. “That is the danger: when there is potential for a botanical to be beneficial, and then an herbal product manufacturer jumps to the conclusion that
it has been tried and established, but the data do not correspond to what is going on in human body."

For some companies that latch onto early-stage data, they might not fully understand the scientific rigor required or what the regulations allow. In many cases, however, this is a strategic profit-seeking decision—especially in situations where media has hyped the results of a study. "The problem is industry loves it when the media gloms onto early-stage preclinical data," says Frank Jaksh, co-founder and chairman of ChromaDex. "They use it as a jumping-off ground when they probably wouldn't have jumped otherwise."

When this happens, we get raspberry ketones and green coffee extract—overhyped and then gone once the true state of the science became clear. Jaksh says even resveratrol fell prey to unfounded fervor. "It didn't go away, but it never lived up to its promise," he explains. "There was literally no human data, only very early preclinical studies." Jaksh calls CBD "the current example of overhype in advance of legit data to support the claims companies are making."

The danger for companies in touting early science is, of course, facing legal ramifications. But it can also affect a brand's credibility, both within industry and among consumers. Unfortunately, these situations can also erode trust in the industry at large. "If one fly-by-night supplement company gets hit, everyone gets hit," Brendler says. "You can be as responsible and ethical as you want, but you'll still be judged on the bad eggs."

**The marketing conundrum**

With such tight restrictions on claims, and with the perils of overselling science clear, how can brands tell a compelling story about product efficacy without wading into trouble? It's complicated. Although it's legal for companies to disseminate preclinical data in a nonpromotional fashion, says McEnroe, they must do so in a way that doesn't exaggerate the findings or their connection to the product.

"Sharing in vitro data of any kind has the potential to mislead if not accompanied by appropriate disclaimers or other clear explanation of the relevance of that data to real-world effectiveness," Dentali says. "If a reasonable consumer would likely draw conclusions beyond what the science demonstrates, then it is incumbent upon the company to ensure that the information is properly qualified so that it is not misunderstood."

However, as Dentali points out, detailing proposed mechanisms of action typically doesn't make for good marketing copy. Nor do lengthy disclaimers about the state of the science, which could wind up undermining the message or, worse, bring attention to the fact that a claim is essentially unsubstantiated.

"It's tricky," Brendler says. "On one hand, manufacturers are obligated to substantiate any claims they put on their product, so anybody doing this halfway ethically should have full substantiation on file for every product. That said, that information does not necessarily use language suitable for the consumer—it's way too technical and scientific. Of course, one can create romance language based on science, but that is a fine art and should be done with extreme caution and within the stipulations and boundaries of the regulatory framework."

Given the challenges, is it best for brands to just avoid sharing early-stage science altogether? Not necessarily. When done cautiously and correctly, it can be a solid means of consumer education. "Absolutely, there is value in informing the consumer—there is way too little of that going on," Brendler says. "Not many manufacturers actually make the effort, though it definitely can be done, I believe."

The key is to not make that information promotional and to avoid the temptation to use emerging science as the basis for product claims, especially when it comes to immune health and other areas that regulators are watching closely. "You have to let the scientific data speak for itself and not link it to any particular ingredient or product," Gafner says. "That is the difficult tightrope walk companies have to do, as clinical studies are very difficult to use as a marketing tool."

With the entire world hungry for solutions for COVID-19, it may be especially tempting for companies to get lax about regulations and co-opt promising preclinical data to sell products—particularly if a certain ingredient captures media attention. Thus, in the coming years, industry should exercise extreme restraint from jumping on unjustified bandwagons and stoking the fires around ingredients not ready for primetime, potentially jeopardizing their credibility in the future. Now, as ever, this industry stands to benefit from emerging science, but it must be patient, keep playing by the rules and not let potential dollar signs skew smart decision-making.
Meatless Impossible Burgers that “bleed” just like the real deal. Creamy dairy-free ice cream made with Perfect Day’s nonanimal whey protein. Dietary supplements containing “nature-identical” astaxanthin, resveratrol or collagen made from fermented yeast, bacteria or other microorganisms.

These and many other tech-spawned products have flooded the market in recent years, even penetrating the natural products industry. They are often touted as the next frontier of food and supplements, positioned as perfectly safe and more environmentally responsible than their counterparts made the old-fashioned way. Now, new testing technology that quickly tags ingredients that were touted as “nature identical” could force the natural product industry to declare a position.

“New biotech companies are trying to pull the wool over FDA and USDA by claiming to be making ‘nature-identical’ products. But these products are not natural and are far from identical—they are genetically engineered.”

— Dana Perls, Friends of the Earth

But what the companies pushing these products often don’t disclose—at least not in clear language—is that they are made with synthetic biology, synbio for short, or genetic engineering 2.0. Synbio involves using CRISPR and other gene-editing tools to reengineer microorganisms to generate products through fermentation that they’d never produce naturally. Prime example: heme, the blood dripping from those Impossible Burgers.

“Ultimately, synbio is an attempt to re-create something that occurs in nature by using microorganisms to act as mini-factories,” explains Dana Perls, food and technology program manager at Friends of the Earth. “The problem is we don’t understand enough about how nature works to do it in a way that we can be sure is safe for human health and the environment and sustainable for small farmers.”

Despite biotech and agribusiness’s insistence that synbio is safe and eco-friendly, nobody knows for sure whether that’s true. Unlike first-generation GMOs—primarily plants modified with DNA from another species—this new form of gene editing is totally unregulated. USDA and FDA limit their oversight of genetically engineered products to those containing foreign DNA, which synbio ingredients typically do not have. Thus, the DARK Act of 2018, which mandates labeling of “bioengineered” foods, is of little use.

NBJ Takeaways

» Consumers, by and large, want GMOs labeled, but synbio goes unnoticed by those consumers, by agencies, and even by manufacturers

» Synbio ingredients pose a threat to farmer—and indigenous community—livelihoods

» New testing technology that makes synbio ingredients easily identifiable could put brands in uncomfortable situations
dark about synbio. Many food and dietary supplement manufacturers are also unaware of the true identity of ingredients they’re purchasing.

This lack of transparency around synbio—as well as biotech’s seeming lack of ethical considerations and disregard for potential environmental, economic and social ramifications—has spurred opponents into action. A growing coalition of scientists, technology-monitoring organizations and natural products industry stakeholders are working hard to spread the truth about synbio, hoping to convince industry to call it out as genetic engineering and help steel supply chains against further infiltration.

Is this stuff safe?

While synbio raises countless concerns, perhaps the most pressing is safety. “These ingredients and products have not been subjected to any long-term toxicity tests to determine their safety for human consumption,” Eisenbeis says. “Furthermore, in the U.S., evidence for GRAS determinations is compiled by the developer, not by the regulatory agency. As we have seen in the past, much of the research conducted by developers revolves around the desired outcome, not necessarily any ancillary changes or additional inputs present in the final product.”

Those lingering additional inputs, he adds, should negate any “nature identical” claim. More gravely, they also could pose significant health risks.

“When you soup up a microorganism, there can be secondary reactions that produce toxic materials that can be very harmful,” Fagan says. “Hopefully, you can purify the [desired compound] away from those toxins. But there is no certainty of that, and there is a significant risk that the contaminant could be present in significant amounts and create health problems.”

In fact, this scary side effect has played out before, says Fagan, most notably with the eosinophilia myalgia syndrome (EMS) epidemic of 1989. Japanese petrochemical company Showa Denko had engineered a microorganism to produce tryptophan for sleep supplements—but it inadvertently generated several hundred mystery compounds along with it. Those contaminants sickened thousands of Americans with EMS, a rare condition affecting the muscles, lungs and skin. In the end, epidemiologists linked 1,500 cases directly to supplements containing Showa Denko’s synbio tryptophan.

“This is a prime example of what can happen when you make a microorganism do something it was not designed to do,” Fagan says. “Toxins can be generated, posing a health risk, whether it’s vanillin, resveratrol, astaxanthin or any other compounds. Because the U.S. government is not scrutinizing the safety of these things in a careful way, there is nothing protecting the consumer.”

CONSUMER AWARENESS AND AVOIDANCE OF GMO PRODUCTS

Awareness of GMOs

Avoid GMOs

Source: The Hartman Group 2018 Organic & Natural Report; Non-GMO Project
The fate of farmers

Also concerning is the threat synbio poses to farming communities around the world. “Some of these purported ‘nature-identical’ products will likely have significant impacts on the communities currently responsible for producing natural products,” Eisenbeis says. “Because the synbio production process is generally more cost effective than traditional harvesting or manufacturing practices, synbio can render these practices obsolete, eliminating existing knowledge bases and economic livelihoods, especially in indigenous and rural farming communities.”

Synbio vanillin is particularly troubling. “Vanilla beans are the livelihood of farmers in five or six countries where that is the most important cash crop,” Fagan says. “Having a cheap substitute jeopardizes their livelihoods, so there are social and human rights impacts to this.”

However, synbio substitutes are peddled as ways to consume fewer resources and preserve agricultural lands for other uses—arguments that can sound pretty good to a buyer, Fagan acknowledges. But what they don’t reveal, he notes, is that an entire country may lose its main economic source because of it.

“This begs the question of who is benefiting and profiting from these technologies,” Perls says. “Is this a world we want to live in, where we remove the livelihood of farmers and families to benefit a couple of food tech companies? Or should our food system support health, safety and the environment for all people?”

Identifying the culprits

As for who is pushing synbio, the Non-GMO Project is currently monitoring more than 400 companies developing GMOs for the food and supplements industry—a 250% increase since 2016. “Producers include many of the same agrochemical corporations behind traditional genetically modified crops, as well as an explosion of new biotechnology companies around the world,” says Eisenbeis. “Synbio is infiltrating the supply chain at every step, as inputs and all the way to finished products, and being marketed to manufacturers and directly to consumers.”

Notable purveyors include consumer-facing brands like Impossible Foods, the startup accelerator IndieBio, and B2B ingredient sellers such as Perfect Day, Ginkgo Bioworks and Evolva.

While some synbio producers disclose the genesis of their offerings, plenty do not. “These products are often sold to supplement and food producers without full transparency about what they actually are,” Fagan says. “They’ll say something was produced via fermentation, and that’s as deep as it goes. There are wiggle words they exploit to make things sound better than they are.”

Fagan fears that supplement and food manufacturers are taking the bait, not entirely understanding their choices. “They know something is different, but the price difference is so drastic that they think, why not switch to this cheaper source?” he says. “Especially if it is guaranteed to be 99% pure.” Some ingredient distributors and even manufacturers, Fagan adds, will “spike” products with synbio so they can continue claiming to use a natural ingredient—even though, in reality, it is predominantly genetically engineered.

But Fagan insists ingredient suppliers aren’t always to blame for synbio’s infiltration, either. “It’s not necessarily that they’re being deceptive,” he says. “The details are often so technical that suppliers are not even completely clear about what they are purchasing as raw materials and offering to others.”

Can synbio be stopped?

With so little transparency and so much deception throughout the supply chain, identifying products made with synbio is tricky—but not impossible. To this end, the Non-GMO Project, plays a key role. Unlike USDA Organic certification, Non-GMO Project verification requires companies to trace their inputs all the way to the source. And unlike federal regulators, the group’s definition of GMOs covers synbio.

“We have a full-time research team dedicated to identifying and monitoring the worldwide development and commercialization of the products of traditional GMOs and new genetic engineering techniques, including synbio,” Eisenbeis says. “We regularly update the Non-GMO Project Standard to ensure that new GMOs, such as synbio, are prohibited, ensuring shoppers can continue to trust the Butterfly. The Standard is supported by meticulous supply tracking and affidavit submittals, as well as careful quality assurance practices.”

According to Eisenbeis, 54% of North American consumers already recognize the butterfly stamp and consider Non-GMO Project Verified the most trusted on-pack label for GMO avoidance. Therefore, having assurance that the seal also covers synbio will be invaluable as more genetically engineered components enter the market.

“NGP is proving to be incredibly important to hold the line on this, as one of the few groups that is well funded, aggressive and well informed about who is doing

“When you soup up a microorganism, there can be secondary reactions that produce toxic materials that can be very harmful.”

- John Fagan, Health Research Institute Labs
what,” says Alan Lewis, vice president of
government affairs, stockholder relations and
organic compliance at Natural Grocers by Vitamin Cottage. “While others
are just shrugging and buying whatever ingredients are available, NGP is tightening
its standards and making it more difficult to get the Butterfly.”

New detection tool

Biotech companies boast that synbio ingredients mirror nature so precisely that they are indistinguishable from the real deal. “That is just bunk,” Fagan says. “We published a paper showing we could detect them—and very effectively.”

Recently, he and colleagues developed a testing method that can identify and quantify synbio components previously rendered undetectable. Published in MD-PI’s open-access journal Foods in September 2020, this new test got press in Europe last year but has largely flown under the radar stateside.

To explain the method, Fagan uses the example of vanillin, derived from the vanilla bean, which contains many other compounds that contribute to its flavor. “When you extract vanillin from the bean, some of these other micro-components come with it,” he says. “Similarly, in synbio, even though it may be 98% pure, there will still be a small percentage of other compounds present that are not present in natural vanilla.”

Using mass spectrometry, one can use the tiny sub-compounds to generate a fingerprint unique to a natural extract, a fingerprint unique to synthetic vanillin and a fingerprint unique to a natural extract, a fingerprint unique to synbio vanillin. “Then the tiny sub-compounds to generate a fingerprint unique to synbio vanillin. “Then industry can work to keep the flame tend to be much more concerned about this. They are well aware that this is what they were fighting against all along, just under a new name.”

But Lewis believes industry must strengthen its resistance to ensure its very survival. “As an industry that supposedly believes in working within natural boundaries and laws, we are incredibly weak at countering the synbio narrative that it will fix all the problems,” he says. “If we don’t stand up and say we will judge the value of how each technology is applied, we will end up without a natural products industry.”

To stem the adoption of synbio, industry first must call it out for what it is. “Stakeholders must agree on a definition for new genetic engineering and that the outcomes are in fact GMOs,” Eisenbeis says. “Then industry can work to keep them out of the supply chain by putting in place checkpoints throughout.” This will involve setting standards that extend beyond those covering traditional GMOs.

Individual companies can do their part by knowing how their ingredients are produced and from where they are sourced. “Companies need to be very clear about what is acceptable in final products,” Perls says. “If they are trying to be truly natural and sustainable, they must ask very specific questions of ingredient suppliers and ask that they not be offered any ingredients derived from genetic engineering.”

Finally, consumer-facing brands must be transparent with shoppers about their ingredients’ integrity. To that end, seeking Non-GMO Project verification, along with USDA Organic certification, is highly valuable.

“People are very clear that they want real food and transparency,” Perls says.

“Synbio is infiltrating the supply chain at every step, as inputs and all the way to finished products, and being marketed to manufacturers and directly to consumers.”

– Hans Eisenbeis, Non-GMO Project
Mission regeneration
Regenerative agriculture is vital to the future of supplements and the planet, but getting there presents challenges

Guest editor Tom Newmark
Story by Rick Polito

As every farmer knows, putting the seed in the ground is far from the last step, but as supplement brands turn to regenerative agriculture to source ingredients, planting the seeds of a new supply chain has been no small task on its own.

Not only are companies having to find new sources for ingredients, implement new transparency procedures and figure whether and how to market “regenerative” as an added value for consumers, they also have to be part of saving regenerative from slipping into buzzword status. These challenges, however, present an opportunity for the supplement industry to lead other sectors in helping to change the trajectory of climate change while saving the habitats that anchor the supply chain. Without regenerative agriculture, the very future of the industry is in peril, as climate change threatens growing regions with drought, storm, sea level rise and political instability driven by all of the above.

It’s a seismic-scale mission, no matter how many seeds are in the ground. Bethany Davis, who has helped shape the regenerative sourcing program at MegaFood, says, “Every single person and every single company have to kind of ask themselves ‘What is mine to do? What is our zone of genius like? Where do we make the biggest impact?’ Because there are so many things to focus on, and there’s not one way to do it.”

The first of those many tasks may be the hardest, say those with experience in regenerative sourcing, but also the most fulfilling. That first step is making the commitment, and it means a company-wide appraisal of the motivation and the depth of that motivation. CEOs may be the ones who make the decision, but they need to share the vision with their staff to effect the fundamental changes required. Herb Pharm CEO Tal Johnson advises brands to “make sure you’ve got support and buy-in from the entire company and your senior management,” and his farm manager, Matt Dybala puts it simply: “I would say, don’t go out and do this just for another badge on the website.”

David Karr, co-founder at Guayaki Yerba Mate, doesn’t discount the difficulty but believes that, for most brands, much of it will fall into place if the commitment is genuine. “If it’s part of your DNA, and you’re someone who’s authentically doing it for the right reasons, you’re ultimately going to be coming up with a winning formula.”

Indeed, proponents of the shift to regenerative agriculture see the move as more of an opportunity than a daunting task. Regenerative agriculture presents an opportunity, they say, to better define the supplement industry as a force for good, extending the promise of health beyond human nutrition to the wellbeing of the planet. The supplement industry could stand out as a leader, they say.

Get dirty
At the foundational stage, regenerative agriculture starts with the soil. There are layers upon layers of complexity that come later, but none of them can happen without the farm crew on board. Johnson says the Herb Pharm team not only learned a lot as they converted the land to regenerative practices but they also had to unlearn a lot as well. “When Herb Pharm started in 1979, I don’t think any of it was mechanized, and it was probably doing a lot of things right in term of regenerative farming,” says Johnson who explains that tractors and other practices were added as the company grew. “We always stayed organic, and we’ve been

“Some people are going to get ahead and lead, and some people are going to catch up. That’s just how the universe works. It’s certainly how agriculture works.”

– Bethany Davis, MegaFood

Davis, who has helped shape the regenerative sourcing program at MegaFood, say, the tasks are so large and so many that no company should look to take on all of them. “Every single person and every single company have to kind of ask themselves ‘What
certified organic for decades, but we probably moved away from some of the methods that were inherently regenerative.”

Dybala works the Herb Pharm acreage in southern Oregon. The old practices were not easily shed for him or his crew. “A lot of farming is ingrained in you at an early age about how it should be done,” he explains, but regenerative agriculture has taught him to look at the land more as an ecosystem, to think about what should grow where on the land. Even on one farm, he can find a space where an herb grows best. “You’re going to find all these little niches, habitats on your land,” he says. “I’ve got wet areas. I’ve got dry areas. I’ve got all these little soil types. They’re there, you just need to be looking for them.”

For Karr, recreating ecosystems is what makes Guayaki’s product possible. Yerba mate grows naturally in rainforests, but conventional farmers cultivate the plants in the sun—where it grows faster, but not better. “It was a tree that grew naturally in the rain forest. And then you’re like, ‘Well, wait a minute. Why is it all just sun-grown on plantations, and they’re spraying roundup on it?’” Guayaki’s regenerative practice has been to raise yerba mate in the forest, cared for by indigenous people, or to reforest the plots where it has been grown in the sun. “The way we approach it is really from a biodiversity and ecosystem approach. Regenerative agriculture is basically allowing it to grow in its natural environment.”

That attunement to the environment has created new ways for Dybala to connect not just with the land but with his workers. There are new “touchpoints” and interactions for the farm manager and the crew that are built around a goal that’s not just production. Operations are more complex, but there is a greater buy-in from the workers because they can see the results of the changes in the land they are caring for. “You can start to mimic nature instead of working against it.”

**Sourcing smarter**

Not everything can be grown on one farm. For supplements with a deep label of ingredients, it’s almost always multiple farms and likely on multiple continents. Setting out to source regeneratively means pushing the supply chain transparency concept to its clearest state. Sara Newmark, chief operating officer at True Grace Health, is helping get the brand off the perfectly regenerative product at brand launch. “It was a tree that grew naturally in the sun—where it grows faster, but not better. To me, the biggest benchmark of farming is how healthy our environment is,” Dybala says. “You can start to mimic nature instead of working against it.”

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Part of that real-sizing of the mission has included formulating with fewer ingredients, a process she thinks the entire industry should be looking for as it transitions to regenerative, or at least more sustainable, sourcing. A deep list of ingredients may be marketable, she says, but it might not be the healthiest option, for the consumer or the planet. “Cut the fat,” she says. “I think the supplement industry, in a lot of ways, has dug itself into a hole of thinking that more is better. And so, it’s a lot of unlearning and reteaching that will need to happen.”

For MegaFood, sourcing regeneratively has been based on communication and accountability. The company introduced a Healthy Farm Standard in 2019 that establishes a rubric for assessing regenerative practices but also creates opportunities for conversation between farmer and brand. “We’re actually using a point system,” Davis says, “and it’s tiered as bronze, silver or gold. And there are incentives.”

It’s the incentives that keep the conversation and engagement going. MegaFood can ask farmers what their needs are. They might need a new piece of equipment or help paying for soil testing. Some are using money on pilot studies. That might not happen without the standards and the points system as a check-in, she says. “We want to know, deeply, what’s happening on all these acres where we’re buying from,” Davis says. “It’s an opportunity for us to have a conversation with them every year.”

For Newmark, the tools of transparency that were fashioned for organic, and later non-GMO, make all the challenges that seemed “insurmountable” far more practical now. Farmers and suppliers are used to answering more questions and don’t balk at being asked. “When we talk about, ‘Hey, can you go along,’ Newmark says. “It can’t be perfect right away all the time.”

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you put us in contact with your people supplying these ingredients?’ Or ‘Can you work with us to create a new supply chain?’ The answer these days is always ‘Yes,’” she says.

Karr sees sourcing regeneratively for ingredients beyond the yerba mate leaves, ingredients that are incorporated into the product for flavoring and other qualities, as an opportunity to engage in helping to grow a more regenerative supply chain. It’s tough work, he says, but necessary and, he hopes, rewarding in the end. “It’s a lot of complex relationships, but we seek out complexity. We’re not afraid of complexity.”

Looking closely at individual ingredients is part of making regenerative work, Karr says. “It’s the really big, but also the very small.”

Regenerative agriculture seals and certifications could provide a shorthand for brands and ingredient suppliers who aspire to a standard that speaks to environmental leadership. The Regenerative Organic Certified seal appeared on packages for the first time in August. Other certifications established or in the works include the Savory Institute’s Land to Market program and the Soil Carbon Index, a project of The Carbon Underground and Green America. But Newmark doubts the seals will make sourcing easier in the short term. “In a lot of ways, certifications make things easier because it makes it more turnkey and more clear. On the other side, it can make things more complicated. There’s more red tape. There’s more, just the realities of bureaucracy, whether it’s a government program or independent program, and that can slow the growth of things.”

Brands will still have work to do, Newmark says. “It’s hard” isn’t going away.

Sharing values

When considering whether and why to go regenerative, many brands won’t be thinking about a “marketing advantage.” But while the commitment may not be commercial, brands that have gone regenerative are still faced with how to talk to consumers about it. Nobody is leading with regenerative just yet.

For Newmark and True Grace, the selling point for regenerative has been more about nutrition than the environmental advantages that have garnered most of the attention for the movement. “I think one thing we’ve all learned is that if you only focus on the environment, the messaging gets lost sometimes for people,” Newmark says. The brand has instead talked about regenerative agriculture in terms of nutrient density and how food grown in depleted soils is not as nutrient-rich as ingredients that come from regenerative agriculture. A health-oriented brand should be good at talking about health, she says. “I think that is one way to unlock the messaging for our consumers because it’s about them.”

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– Sara Newmark, True Grace Health

At Herb Pharm, Johnson says the company is still figuring out how to talk to consumers about regenerative agriculture. Making a consumer play was never really the motivation, he says. So far, the communication around regenerative has been “more internal than external.” Karr says the regenerative aspects of Guayaki’s ingredients matter to a certain kind of consumers, one curious enough to explore the brand’s ecosystem focus, but the pitch for the product has never included the word “regenerative.” “Shade grown” and “organic” are the key differentiators, he says. “I would still venture to say the majority of the people who are enjoying our product don’t even know any of that. And they’re actually just buying it because it does actually taste better.”

Spreading roots

As Davis explains it, a challenge as big as converting the agricultural system to regenerative practices is not just an all-hands-on-deck matter. It’s all ideas on deck.

At MegaFood, the big idea is connecting a network of suppliers, brands, innovators and whoever else wants to join the conversation. “We’re super connectors.” Davis recently led a seminar for the Sustainable Herbs Coalition that drew “six or seven hundred” registrants, and she got dozens of emails after the event. “We’re very happy to share what we’re doing with people. If more people want to adopt it, that’s great Everybody needs to learn from everybody else.”

Dybala says he has drawn on books,
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Contact Cindy Van Schouwen at cvanschouwen@newhope.com