

National Honey Board Meeting Minutes

PRESIDING: Michelle Poulk, Chairperson

LOCATION: Kimpton Born, Denver, CO

DATE: October 27th & 28th, 2022

National Honey Board Members Present: Mindy Ryan Tharp Gehring, Christopher Olney, Michelle Poulk, Greg Olsen, Joan Gunter, Joseph Sanroma, Matt Halbgewachs

National Honey Board Members Absent: Maren Martin, Tom Sargeantson, Jeff Hull

National Honey Board Alternates Present: Alan Turanski, Jeff Caley, Nancy Seaquist, Arlen Penner, Blake Shook

National Honey Board Absent: Andrew Sargeantson, Daren Cox

National Honey Board Staff Present: Margaret Lombard, Kelly Werning, Catherine Barry, Jessica Schindler, Jocelyn Martinez, Melissa Boone-Hall, Andrea Brening

Present: Katie Cook (USDA/AMS), Laura Morin (Sterling Rice Group), Keith Seiz (Brightly Creative), Don Ladhoff (Fresh Smart Solutions), Barbara Lyle, (Porter Novelli), Jess Buchanan (Porter Novelli), Danielle Downey (Project Apis m), Linda Martin (Westbound Communications), Amy Shipley (Sterling Rice Group), Lisa MacMaster (Glorybee), Alex Blumenthal (Sioux Honey Association), Nancy Burnett (Local Hive Honey)

THURSDAY, October 27th, 2022

CALL TO ORDER

The Thursday session of the National Honey Board (NHB) meeting was convened at 9:06 a.m. by Michelle Poulk and Andrea Brening did roll call. All guests then introduced themselves.

ACTION ITEM I: TO SEAT ARLEN PENNER

Motion by Mindy Ryan Tharp Gehring, seconded by Greg Olsen to seat Arlen Penner as an Importer

ACTION ITEM II: TO ACCEPT THE AGENDA

Motion by Joan Gunter, seconded by Alan Turanski and carried to approve the consent agenda.

ACTION ITEM III: TO ACCEPT THE MINUTES

Motion by Joe Sanroma, seconded by Mindy Ryan Tharp Gehring and carried to approve the minutes.

AMS UPDATE

United States Department of Agriculture's (USDA) Katie Cook, Marketing Specialist, updated on the merging Marketing Orders and Research and Promotion Programs into one operation, Market Development Division. This will have no impact on the commodity boards.

REFERENDUM

Cook gave an update on the referendum that is mandated to be conducted every 7 years, it passed and took place Aug 8th - 26th, 2022. There were 91 ballots mailed out to different entities identified by the board and by customs as eligible voters. Of those 91 ballots the NHB received 47 back, 42 of which were valid and represented more than 51% participation. Margaret Lombard asked Cook to compare other like referendums participation and it was higher, but the NHB needs to keep in mind that the honey industry is a little smaller than those other groups.

DIVERSITY

There is a new group at the USDA called the Equity Commission. Their mission is to provide farmers, ranchers, and stakeholders an equal chance at success and

prosperity. This is a continued effort by the agency to promote diversity and inclusion across the USDA and across RP programs. Cook is going to provide the Commissions website address to Lombard, so she can share with the board. That way everyone can see the continued work to create resources, training, and webinars. Cook is also going to give Lombard a link to a recent webinar hosted by AMS called Together We Grow Diverse Agriculture. This webinar promotes the efforts being made to promote diversity. Cook asked the board to please share and ask people you know to serve on the board.

NOMINATIONS

Cook informed the board that the nomination packet is with AMS for review and is moving forward. It was delayed somewhat due to the referendum, as she had to wait to make sure the board was still in operation, before sending it up the ladder.

Lombard mentioned that there is information on the NHB website about serving on the board. If you know someone who would be great to serve on the board, you can have them fill out the information. The NHB wants to give as many folks as possible the opportunity to serve on the board and share their opinions.

FINANCIALS

National Honey Board's CFO, Kelly Werning, began by introducing herself. She then reviewed briefly what will be discussed and noted that the Board will be voting the next morning to approve the budget.

Highlights from the September 2022 balance sheet include cash in bank of \$3.7 million, \$10,000 for prepaid insurance, \$17,000 net property and equipment and \$8,700 other assets, which is NHB's rental deposit for office space. Additionally, NHB carries a Right of Use Asset of \$255,000 on the building lease, for a total of about \$4 million in assets. The balance sheet also includes approximately \$10,000 of outstanding current liabilities, which is made up of NHB's FSA & 401K program accruals, and a Lease Liability of \$255,000. These liabilities combined with NHB's net assets of \$3.7 million total approximately \$4 million.

Werning discussed in detail how the new lease standard has changed the accounting surrounding operating leases, and how this accounting will be handled on the NHB financial statements going forward. The new standard requires that a Right of Use Asset and offsetting Lease Liability are shown on the balance sheet for any leases with terms over 12 months. Under the new standard, a Right of Use Asset and a Lease

Liability must be recorded on the balance sheet for the present value of the lease. A Right of Use Asset is the lessee's right to occupy, operate, or hold a leased asset during the rental period, and the Lease Liability pertains to the obligation to make the rental payments.

For NHB, the impact of this new standard is calculating and recording the Right of Use Asset & Lease Liability, and updating the financial statement footnote presentation. These amounts will be amortized down each month for the life of the lease, and recalculated when NHB decides to renew the current office lease, or if NHB decides to move to a new office space. NHB's current office lease has a 5-year term, and there are 4 years remaining.

The Income statement shows \$4.6 million in net revenue. Total assessments are at \$5.2 million, which is ahead of budget by about \$500,000. The mix of those assessments are 80% from imports and 20% domestic. Offsetting assessment revenues are the assessment refunds. At the end of the quarter, NHB had issued \$553,000 in assessment refunds, 99% of which were organic refunds. Program expenditures are \$4.3 million, which is trending a little lower than expected, but by the end of the year NHB should be close to budget. Total expenditures are \$4.8 million, leaving NHB an excess of expense over revenue of approximately \$192,000. This excess of expense over revenue means NHB is using all the assessment funds received in the current year on programming that promotes the honey industry, in addition to utilizing carryover funds from 2021.

The 2023 budget proposal was reviewed next, with the 2022 amended budget shown for comparison purposes. NHB anticipates much more normal assessments for 2023, with a budgeted net revenue of \$7.1 million. Including an estimated carryover of \$2.3M, NHB expects to have about \$9,400,000 to work with next year. Werning then highlighted how NHB proposes to use these funds, beginning with a total of \$1.17 million for research programs. NHB is required by its Order to allocate 5% of net assessment revenue to Production Research, and in 2023, this equates to \$355,000. The remaining \$775,000 will be utilized for additional research projects. Marketing programs will have approximately \$6.4 million in 2023, for a total of almost \$7.6 million allocated for programming in 2023. Werning then reviewed the Administrative expenditures budget, which totalled about \$827,000. \$120,000 of this budget is allocated to cover services the USDA's AMS provides NHB for oversight, and \$110,000 is allocated for Board Meetings. The remaining \$597,000 is for general administrative costs, which is less than 10% of total net revenues. Additionally, NHB budgeted \$23,000 for Capital Expenditures and \$1,000,000 in required Reserves, which brings NHB to a balanced budget.

COMPLIANCE

Werning began by explaining that it is a requirement of the Order that NHB have a review program for domestic assessment payers. These reviews ensure that the assessments reported to NHB are accurate and supported by purchasing and production information. Domestic payers are on a rotating schedule to receive a review every three to four years. In the Spring, NHB reviews the domestic payer list to determine the year's reviews, and whether the review can be conducted via a virtual method, or if an in-person review is needed. In 2022, ten reviews were conducted, three were in person and the rest virtually. Travel costs incurred to as of the end of the quarter were \$8,000, and amounts determined owed to NHB were \$18,000.

FALL 2022 BOARD UPDATE

Margaret Lombard thanked everyone for attending and stated she is excited to share details on some awesome programs the marketing team and research teams have been working on.

Good news is that the sugar report put out by the USDA shows that honey consumption and demand has continued to grow over the last 30 years. In 2021 we hit a record for consumption at 618 million pounds in the US, which is up about 8 percent. The US is the second largest consuming country behind China, which equals about 2lbs per capita per person and is a huge number. The other exciting thing that this report revealed is that honey is associated as a super food and healthy option. We think the trend will continue to grow as will honey prices.

The USDA gets the information for their annual report aggregated from several different sources. It is a sugar report, but they started adding honey the last couple of years. So, NHB has its own section on page 21 or 22. Lombard will send out the report to the board.

REFERENDUM

Lombard noted the other great news, as previously mentioned, is that the referendum passed. With 74% of the First Handler and Importers, who are assessment payers approving our referendum. This represents about 86% of the volume of honey, so NHB is happy about that, but realizes there is still work to be done.

Thank you to everyone who voted and shared to support us!

STRATEGIC PLAN

Lombard shared some highlights that NHB received from the 20 plus industry members and partner interviews. There was a clear desire to provide more research and fact-based information to the industry. There was a consensus for the NHB to deliver thought-based leadership, white papers and to be proactive on a number of issues that affect the whole industry. NHB will be working on things along those lines moving forward.

TALLOW HONEY

The research is finally underway as a joint venture between the NHB and the American Honey Producers Association (AHPA). A team of economists from the University of California Davis (UCD) have put together a survey, which should start in November 2022. Joe Sanroma shared that they hope to get an economic assessment that shows clearly the financial impact. Tallow is a non-native invasive species. A lot of beekeepers are concerned about the impact any eradication efforts will have if the bees don't have the Tallow to forage on. It also impacts the colonies and pollinator health as a whole and the entire honey production industry. NHB asked the USDA what would replace the Tallow if it were eradicated? Tallow is also important from an erosion standpoint as it grows in low lying areas.

COUNTRY OF ORIGIN

The NHB has been working on creating best practices for country of origin labeling laws. This document is currently awaiting approval from AMS and we hope to be able to share it with the industry soon. The idea is that the labels should clearly show the country of origin according to the laws. The NHB is not an enforcement agency and does not influence government policy, but can aggregate data and provide information and thought leadership on current laws. NHB wants to make sure everyone is clear on the laws and has an opportunity to be in compliance.

Chris Olney stated that he has received questions about Nutrition Fact labels, and he is wondering what the response should be. Lombard relayed the nutrition facts panel that is on our website is the FDA's approved label showing 60 calories. It is a natural product and therefore subject to some variations. Poulk shared that when those questions arise, she refers customers to the United States Department of Agriculture (USDA) website. The USDA has all the nutritional charts created by them on that website.

Matt Halbgewachs asked if the industry feels these labels are sufficient or do they need to be updated. Alex Blumenthal noted that ultimately no one wants to be sued, so we want to make sure we follow the laws. Some of which are very old, so you need to know the current laws and how they can be improved. NHB is happy to help with setting guidelines to create this. For the best practice document, we had a person who is an expert in law write the brief. It is basically a capitulation of the labeling laws and how honey is not really called out in any of those laws, but are impacted by some of the things that came from farm bills. But the USDA is clear that if you are using USDA Grade A on your packaging, you should have the country of origin in the same font, near the same label.

RESEARCH STATE LAW GOVERNING LOCAL PRODUCTS.

NHB has recently been made aware of retailer-initiated products that are 100% honey, labeled as local that may contain nonlocal honey. So, another big project for the NHB is a research proposal that the board has not yet approved and needs to discuss today. It is to research state laws governing local products. Then create a comprehensive summary of food labeling requirements as they pertain to local source marketing claims in each state. The proposed cost for this is \$15,000 and timing is 90 days once approved. NHB has law students and others who would do oversight. It would probably be a white paper by state and maybe include some regional laws. We need to know if something is labeled local, what does that mean by the laws that currently exist. Blumenthal spoke to the benefits of this especially for producers and private labels and would help create a higher priced and premium product. This would also be beneficial from an importer standpoint by creating True Source labeling and trusted rules and legitimacy of honey as a whole.

A national law that could supersede state laws would be great, as state laws differ and tend to make things complicated. Interstate commerce is something that also needs to be considered

ACTION ITEM IV TO APPROVE RESEARCH ON FEDERAL LABELING LAW

Motion by Arlen Penner, seconded by Joan Gunter to approve the Research Study regarding local labeling state laws and passed to approve.

NATIVE VS MANAGED POLLINATORS

Lombard asked about the thoughts of the board on current narratives on Native vs Managed Pollinators. Gunter stated that she represents the American Beekeeping

Federation (ABF) and whenever she is in Washington DC, they discuss this issue. Gunter said she always encourages the two groups to work together for a healthier environment and she feels like that seems to be working. The industry needs to continue to promote the honeybee and educate the public with factual information. AlanTuranski mentioned continuing to create messaging around “What’s good for the bee, is also good for all pollinators.” Honey Saves Hives is a great way to share this information.

More research on this topic would be helpful. The Bee & Butterfly might be a good resource to coordinate with, which PAM works closely with.

MARKETING PROGRAM OVERVIEW

Catherine Barry, Vice President of Marketing, began by introducing herself and thanked the Board and members of the honey industry for their support and for voting in favor to keep the NHB in the recent referendum.

Barry then went on to review the NHB’s marketing strategy. It is focused on educating consumers about the benefits of honey and honey bees, as well as their impact on our food supply. The NHB’s strategic priorities include:

- Protect honey consumption and reinforce reasons WHY to use honey vs. HOW to use honey
- Leverage honey’s health attributes and lean into the positive perceptions of being all natural
- Showcase the craft of beekeeping and the pollination impact bees have on the global food supply
- Build a linkage between using honey, supporting beekeepers and bees, and an abundant food supply
- Differentiate honey by showcasing how honey is produced compared to other sweeteners

As emerging sweeteners look to steal market share from honey in the sweetener category, the NHB will continue to work on differentiating honey. Barry shared that the NHB continues to showcase how honey is naturally made and how all the benefits of honey help to separate honey from other sweeteners. All while reinforcing the message of Good For Me, Good for the Planet throughout all NHB’s programs.

Barry shared with the Board that the NHB had slightly decreased funds for programming in 2022 due to market instability, which created a need to be strategic on how the NHB focused the funds spent on program activations. Therefore, strategic filters were put in place to make sure the NHB programs were not only protecting honey volume, but also driving maximum reach and impact. Lastly, Barry explained that it was important for the NHB to position honey for long-term growth, while evaluating programs on whether they help build the foundation for long-term demand and continue programs with strong momentum.

HIVE OF PARTNERS

While the NHB has a strong group of staff members, it is essential for the NHB to enlist the help of agency partners to execute the extensive programs for the various focus areas. Barry touched on which agencies the NHB currently partners with and which focus areas each agency manages.

Sterling Rice Group (SRG)

- Strategy and Brand Management
- Consumer Research & Insights
- Nutrition Professionals Outreach

Porter Novelli (PN)

- Consumer Media Relations
- Influencer Management

Westbound Communications

- Reputation Management
- Industry Communications

Brightly Creative

- Ingredient Marketing - Food & Beverage Manufacturers
- Technical Research

FreshSmartSolutions

- Retail & Shopper Marketing

Lastly, the NHB's Foodservice Marketing agency, Evans Hardy + Young, lost two primary account team members earlier in the year that worked on the NHB account for more than a decade. With the loss of the account team, the NHB brought the majority of the remaining foodservice program elements in-house. This work was primarily

overseen by NHB staff member Jessica Schindler. She stepped in to help manage the foodservice work including public relations, media pitching and restaurant partnerships.

FOODSERVICE AGENCY SEARCH

In June, the NHB initiated a search for a new Foodservice agency to reinstate an agency partner to manage this focus area. During the transition period of managing the foodservice program, it provided an opportunity to decide what the NHB was looking for in a new agency partner. Barry provided an overview of the criteria the candidates will need to possess or execute against:

- Thought leadership on foodservice industry trends and the growth opportunities for honey
- Increase the usage of honey in foodservice operations by establishing promotional partnerships (e.g. LTOs)
- Promote honey as an all-natural, sustainable ingredient to industry professionals through advertising
- Bolster visibility with key industry influencers and decision makers through conferences and events
- Build relationships on behalf of the NHB with influential leaders, chefs and restaurateurs in the industry
- Generate coverage of honey in foodservice trade media

In June, the Request For Proposals (RFP) was distributed to an exclusive group of agencies, including some of the current NHB agencies. The list of agencies invited to participate included: Porter Novelli, Sterling Rice Group, Brightly Creative and a new agency Summit F&B Marketing Collaborative. Ultimately, in August the choice was made to select SRG due to their depth of knowledge and expertise in the foodservice industry. Barry shared that they have already taken over this program and it was an easy transition.

NHB TARGET AUDIENCE

Barry then provided an overview of the NHB's target audience, Goodness Seekers. They represent approximately 19% of the US adult population and are female skewing, are 35% millennial, college educated and food involved. Goodness Seekers tend to be involved in balancing their health, flavor, and sustainability when making food and purchasing decisions. Barry explained how they are also a powerful group of influencers and the NHB would benefit from leveraging their impactful voice. Due to limited funds, the NHB aims marketing messaging and programs towards this specific target

audience, but they are not the only audience we reach out to. They are simply our bullseye and there is often spill over into Gen Pop.

Lastly, Barry reviewed the presentation topics that will be covered throughout the remainder of the board meeting:

- Research Insights & Latest Industry Trends
- Sustainability Initiatives
 - Celebrating Beekeeping Video Series
 - Honey Saves Hives
- Food Professional Outreach
- Nutrition Professional Communication & Research
- Synthetic Honey Research & Strategy

RESEARCH UPDATE

Laura Morin, Sterling Rice Group, started by reviewing the methodology of the Consumer Attitude & Usage study. SRG has partnered with the NHB since 2017 so this is the sixth year of conducting this exact same study for the NHB. It is intended to be a tracking study so the NHB can look at the data and figures over time and provide a nice body of data to see how trends are moving. Since it is a tracking study, minimal adjustments are made based on the target audience profile or things that are happening in the world such as COVID. So, from a methodology perspective this is an online quantitative study with about 2,000 general population consumers. Then we also have a group of more than 400 Goodness Seekers who are the NHB's target audience. This allows us to really look at how they react to these questions compared to the General Population.

Goodness Seekers care about the food they are eating being healthy, but they also care about the environment and being stewards of the environment. When we look at their profile, about half are male/female but a little more male skewing 55%. We did have some increases in household income, and they fell into the 25 to 45 year old age bracket. In 2022, we saw some incredible momentum, almost every number was through the roof. This year that growth has stagnated a little but is maintaining which is really positive.

Morin then went over in more detail covering off on four key points regarding these numbers. First is the story recall and mentions of sweeteners as a whole declined. When reviewing sweeteners that were mentioned honey claimed the majority of positive

stories as far as its health attributes and benefits. Honey is still by far the favorite sweetener for goodness seekers. However, sugar is still winning among the general population, but we continue to close that gap. Then looking at honey usage that growth has leveled out, but still maintaining which again is positive. From 2020 to 2021, we had a 6% increase in heavy users. Those are people that are eating honey multiple times a week, so that 6% increase last year was huge. Essentially in 2022 we maintained that number and the same with medium users. However, with light users we saw a decrease in overall usage from 89 to 81. The heavy users are the ones we want to protect as they are the ones driving consumption.

Goodness Seekers are the NHB's focus because they are influencers that care about their health and the environment and through them, we can have a broader reach. We see both preference and overall usage increase by 2% for heavy users. However, we are confused that they don't seem to care as much about the environment and sustainability as they did in the past. They are now lower than the General Population with their overall awareness. Bee decline is still an issue and a concern, so seeing a decline in their concern for this is an issue. With the General Population, about 50 % think eating honey is good for bees and 25% think it is bad and 25% don't know. So, we will continue to address this issue. With Goodness Seekers we saw a decline by 8% who think that eating honey is good for bees. This creates a huge opportunity for us to relay this message.

When Goodness Seekers were asked about sustainability concerns in relation to food, not just honey, what they cared about most is the following:

- Food Safety, Farming chemicals, pesticides, or chemical residue
- Bees
- Food or Beverage being over-processed.
- Packaging that is recyclable or environmentally friendly
- Added Ingredients
- Carbon footprint

We saw very little variation on this with the General Population and their concerns and ranking the same things in similar ways.

In 2018 we saw more concern for the above issues and since then we have seen an overall decline. More so with the Goodness Seekers than the General Population, although their numbers are still higher than General Population. Morin said that they theorize this is because they are more educated and more affluent. These issues

therefore are currently less important as they are more focused on the economy, recession, climate change, gun violence and war.

This creates a huge opportunity to continue to educate Goodness Seekers that honey is good for them and eating honey helps with keeping bees healthy. We also want to delve into why there may be less concern about some of these issues.

Shook stated that CCD has been in the news since 2006. He wonders why there is not much interest and concern with this issue and how does the industry get people's attention with this issue. Morin stated people do still care and they do realize bees are vitally important and that knowledge is really growing around pollination. The NHB needs to drive home the message of how honey is a part of the answer to helping bees and how it ties in with the global food chain. This message is something that also distinguishes honey from other sweeteners.

The number one answer to "Why honey" is for its perceived health benefits, then honey bee health. Year after year consumers are paying more and more for honey, so the NHB needs to continue to demonstrate the value of honey. The most motivating messages relate to nutrition and bee health, so we will continue to focus on these messages. Here are some of the most motivating reasons as to why consumers will choose to eat more honey:

- Honey is a natural form of antioxidants and helps protect against inflammation
- Pure honey contains trace amounts of vitamins, minerals, and antioxidants
- Bees pollinate a third of our food
- Eating honey helps keep bees alive to help pollinate our food supply
- Honey is an all-natural sweetener

Morin pointed out that at the top of this list we've got two nutrition focused statements, then followed by two bee health statements. So, this tells us that the NHB needs to stay focused on both of those two areas - health and bees.

Morin then noted that actual sales data shows that over the last three years consumers are paying more for honey and 70% are saying they did not buy it on sale. So, we need to continue to show the value of honey and why it's worth more. Consumers appreciate honey for its natural unprocessed qualities and its health benefits.

Honey usage is about a little over half at breakfast then about 17% for lunch and 17% at dinner. We are seeing a trend of people figuring out how to use honey and the diverse ways in which they can incorporate honey. The strategy is to now show consumers why

to use honey and the value of honey. The NHB's focus needs to stay on Goodness Seekers and connect with them on maintaining equal balance between health and planet, Good For Me, Good For The Planet. At the same time, the NHB still needs to show consumers how to use honey through recipe development, photography and through social media platforms.

NEW PRODUCT INTRODUCTIONS

Morin continued to detail another research tracking study the NHB reviews every year. Innova tracks new products that hit grocery store shelves. It is the world's biggest food industry database. However, it does not provide any connection to volume. It does show trends and what is top of mind with manufacturers. New product introductions show a small increase versus last year when there was a decline due to COVID. Honey has declined by 9% with new product development, while total food saw a 1% increase. Other sweeteners are seeing a decline in new products as well, but honey is losing its share. We've declined from 2017 where our share was 4.2% to 3% in 2021. Olsen noted that since the price of honey has increased, that is likely impacting new product development. Morin reiterated that's why we need to continue with our message on the value of honey. The new sweeteners are seeing an increase like monk fruit, coconut and allulose are growing and they're taking share.

There are a lot of different food & beverage categories, but the NHB is really focused on the key categories that we believe are driving volume for honey. The most introductions for honey were in alcoholic beverages, cereals, bakery, snacks, sauces, and seasonings. When looking at the percent change you can see there were increases in all of them, but there were some declines in cereal and snacks. Morin pointed out that to put these numbers in context we did see a 33% decline in cereals, which can feel alarming. However, we know there are four big manufacturers of cereal in this country and that General Mills introduced a new product with honey last year. That product has significant volume tied to it so that one product could be so much more meaningful than the other 218 products that are listed here for cereal. If we get honey in the right products, with the right manufacturers, honey can still see volume growth.

The honey industry continues to get pressure from emerging alternative sweeteners that are positioning themselves as more natural. The NHB has seen things like Stevia, Monk Fruit, Coconut Sugar, Agave and Maple syrup growing and, in some cases, outperforming and becoming true competitors. The takeaway on this is that the NHB really needs to keep an eye on them. The NHB recently completed a study with manufacturers around emerging and other sweeteners and received a lot of meaningful insights. Keith Seiz with Brightly Creative and his team are creating messaging that

shows honey's value compared to these emerging sweeteners. The NHB will continue to focus on honey's value to consumers and the fact that they want products with honey and they'll pay more for it.

Shook asked if we are measuring honey volume and usage in medicine and beauty and edibles. We haven't as it has always been such a small part of the pie.

FOODSERVICE MENU TRACKING

Amy Shipley, Sterling Rice Group, shared that the foodservice industry is a trillion-dollar business. Datassentials is all about trends and penetration and how we are showing up on menus. When reviewing the key findings of the latest Datassentials Menu Tracking study, it found that honey is on six out of ten menus and on all types of menus, whether it's fast food, casual restaurant, fine dining, commercial restaurants, non-commercial restaurants, and college universities.

Honey is showing up on cocktail menus across the board. Casual restaurants make up about 50% of the industry and fine dining is coming back. When it comes to the outlook of the foodservice industry, there are 300,000 fewer restaurants than there were pre-pandemic. Yet sales are growing and menus are getting smaller. The most important data point here is versatility. Honey needs to show up across the menu. Due to the economy when foodservice is sourcing their ingredients, they have to work across the menu at different day parts. Honey is growing here at 26% we are up in terms of menu incidents. This means they're bringing in honey and honey volumes are increasing because they're using it across the menu.

The hottest new trends being seen are hot honey and honey butter. The other thing is that as chefs are experimenting with new flavors, honey grounds the dish. So, as we do innovation work in the foodservice area, we are going to be looking for new innovative ways to use honey.

Honey is an ingredient that works well with all restaurant types. It is the top sauce and most menued, it doesn't mean it has the most volume. But, most importantly it shows the value of honey. Applications for honey are huge due to its versatility. The number of items featuring honey has risen and even rebounding from the dip honey saw in 2021 and is mostly seen in entrees, appetizers, desserts, sides and lastly beverages. Honey is definitely trending in the foodservice industry.

STRATEGIC PLAN

Morin provided some background to the NHB's Strategic Plan. In 2017, the Strategic Plan was developed and after five years we felt like it was time to reevaluate the plan. The objective was to review the plan to ensure it would really serve as the road map to the organization for the next 3-5 years. It should ultimately outline what the NHB is trying to achieve and determine how best to measure its success. The NHB kicked this off at the last board meeting to find out what the Board thinks the goals should be. Then after that stakeholder interviews were conducted with about 15 industry members. From all those findings, the NHB developed the new Strategic Plan. The main message that was heard from stakeholders was to continue doing what the NHB is doing. That the NHB is a strong guiding light, but that we just need to refine our messaging. The main objective was to drive increased consumption and the demand for honey and specifically at the consumer level. It is critical that the NHB show the value of honey and why it is worth the money.

There is a lot of concern around inflation, around the tariffs and the crisis is growing. Fueling worry about being reformulated out of products and once you're reformulated out, getting back in is really challenging.

Synthetic honey is also a huge concern to the industry, as the biggest challenge and foreseeable threat. The alarm with this is not necessarily from the volume it could take away, but more about the claims being made about honey. It is a scary situation because they are going after honey's key messaging with a negative undertone, and the industry needs to solidify the trust of consumers. The real danger is in their messaging that the honey industry is destroying bees and not to eat honey because it is bad for bees. The NHB needs to be proactive in combating these messages.

Good for Me, Good for the Planet will be incorporated in the new Strategic Plan and how it ties back to honey consumption. Honey purity is also on the minds of stakeholders as an issue to be aware of and to make sure that the NHB is protecting honey's reputation.

Engaging the next generation of honey users is another area of opportunity. So, the NHB is focused on Goodness Seekers. Then also thinking about how to engage the younger generation from elementary school to college. And getting them to appreciate honey and its connection to our food supply. We want it to be ingrained in them and get ahead of that next generation of consumers.

A huge desire from the honey industry is to have the NHB be the unifier of the industry to serve the collective good and be the source of objective information. The NHB also sees a need to create opportunities to engage under-represented parts of the industry and get more engagement. When asked what the NHB can do better, it was to:

- provide more resources and tools for the industry
- amplify the retail programs
- Drive and assist in providing more best practices and assist with labeling laws.

For the information the NHB already has we need to find a better, more useful way to disseminate it to the entire industry. As far as our retail program, there could be a much bigger presence in the industry if given more advance notice. Then there would be time to get retailers and contributors on board with promotions. Lastly, if the NHB could gather current labeling laws or provide clear best practices for labeling and make it available to the industry, it would be of great value to the industry so that everyone can have the opportunity to comply with the laws or guidelines.

Morin shared copies of the Strategic Plan with the Board for them to review. She asked for them to reflect on the following items as they read through it. Key things like elevating the goals, not just from growing honey demand, but also showing the greater impacts that honey has on the ecosystem in the world. You'll see that we've tried to take a more community-based tone and develop that sense of community. We have strategic filters in there and we've tried to prioritize and streamline those to make them even more focused. When you look at the marketing section, you'll see more emphasis on Good For Me, Good For The Planet. And showcasing the value of honey, protecting against synthetic honey, and promoting the purity of honey. Then regarding implications for the future moving forward is industry outreach and how we can expand that program. There is also a shift to drive engagement with all members of the industry and provide tools and best practices.

RETAIL & SHOPPER MARKETING

Don Ladhoff, FreshSmartSolutions, began by providing a sense of what retailers and shoppers are battling. Supply chain issues still exist and in some cases they're even worse. Empty shelves are a serious problem, as is labor and staffing. Inflation shows that grocery store prices are 13.3% higher than last year, which is a 43 year high. The positive might be that it promotes consumers to eat more meals at home, which has them shopping more and translates into more grocery business. At the same time, consumers are looking for deals and doing more comparison shopping and trading

down. The average shopper is going to 5.5 bricks and mortar food stores in a 30-day period as they try to stretch their dollars. Plus, they're buying lower cost items and buying fewer premium items

Ecommerce grocery sales surged but have slowed lately. Omnichannel shopping is becoming more popular. Digital grocery sales were up 103% in 2020, but still managed another 7% gain in 2021, but has leveled in 2022. Retailers are now strategizing to be able to service shoppers that want to be able to buy food in any way, any channel, and any time of the day. Retailers are making big investments in digital media capabilities and pulling some of these services back in house and providing more offerings such as click and collect. We are seeing digital media options continue to expand, while the printed circulars are becoming more and more infrequent with some retailers. 20% of shoppers are checking prices before they go shopping and checking them online and that's up three points from a year ago.

Health and wellness is getting more attention with retailers with antioxidants and immunities being the number one reason to eat more honey. The idea of food as your partner in health and food as medicine is getting more and more attention. The White House Summit increased the attention to that sector. Kroger made a \$3 million investment in the American Heart Association so they could partner on these activities going forward. Finally, industry experts show the following big areas key to engaging shoppers inside stores.

- Omni Channel Strategies
- Experiential Marketing
- At Shelf Tactics

So, these are things to keep in mind as you're thinking of your own marketing activities.

NIELSEN DATA

Ladhoff shared recent Nielsen data that shows the overall honey category is up 13% in dollars for the last fifty-two weeks, but essentially flat in volume. Further, if we compare the latest fifty-two to two years ago it's up almost 10% in dollars and off almost 10% in volume. So, inflation is making the dollar side of that equation look good but you know there's some challenges there too. A couple of promotional performance measures 14.4% of the sales dollars of the entire honey category were done in the presence of some promotion, but that's down from 15.9% a year ago. So, shoppers are not only buying honey off deal, but they're buying a bit more of it. On the other hand, a slight increase in the dollar sales lift that honey is getting on promotion versus a year ago.

The retail strategy for 2022 has been to continue our focus on the why. The reason being buying honey helps beekeepers keep healthy bees and bees help with sustaining the global supply. So, getting that message out in front of shoppers as often and in as many different ways is key. Retail activities have been focused primarily on National Honey Month and Earth Day.

This year really pivoted to things that can be planned well in advance, so that the industry could leverage their own marketing programs in conjunction with those promotions. A big part of that has been print advertising in retailers' own publications. NHB ran full color full page Honey Saves Hives in several retailer publications. Collectively the magazines had better than 2.1 million issues and circulation better than 5.5 million shopper impressions. Ladhoff noted that not every retailer offers an in-house publication, but it's an affordable and effective way of generating sales and educating consumers, specifically the GS. Another area they expanded on this year was digital ads even within the retailers' own ads. We are trying to have consistency within all the ads despite different retail specifications.

Looking ahead at 2023 the industry should see a similar program of retail print and digital ads. With a focus on National Honey Month and Earth Day. In addition, NHB is partnering with Savory magazine including ads and recipes with a sustainability focus. It will include a number of sidebars about the connection to honey and honey bees and the food supply.

NHB will be posting the plans and updates on the retail section of the NHB website and including it in the quarterly industry newsletter with any changes and updates.

It was asked how historically NHB has been able to measure ROI. Ladhoff stated that digitally it is easier to measure Return on Advertising spend (ROA). With this the retailer looks at both the ecommerce sales and the in-store sales, with people that look at your ad online. They then give you credit for that, so you are able to see a more holistic view of sales attributed to our ads. Print is a little more difficult to measure. As it is measured in terms of impressions and then you can hold it up to the sales at that retailer during the same period. But it's hard to say that there is a one-to-one correlation, so it's somewhat anecdotal. Blake Shook asked if we are seeing any shrinkage in the retail shelf space for honey. Ladhoff said that it's not easily trackable, but to date we haven't, but we want to be mindful of this issue in order to maintain the shelf space.

Nancy Seaquist asked about how the focus has switched from Good for me, Good for the Planet, do we need to change the messaging? Ladhoff said retailers are still interested in the sustainability message as they know this is important to consumers.

IN-HOUSE MARKETING PROGRAMS

Jessica Schindler reviewed the In-House programs that the NHB executed in 2022. Beginning with the Food & Nutrition Conference & Expo (FNCE), the largest conference for registered dietitians to attend. This year it was in person in Orlando for the first time since 2019. The NHB shared with attendees marketing research projects, trends, and the different things the NHB is doing for the industry. Over the last few years, the NHB has found that with the online conference, the different infographics and research projects that we had available online were very popular with the attendees. Also sponsored in 2022 was the Texas Academy of Nutrition and Dietetics, where the NHB provided a tote bag insert to attendees. This provided the NHB with an opportunity to share the Mediterranean Diet research with a group of targeted RDs.

Additionally, the NHB provided a tote bag insert with an infographic about the Mediterranean Diet for the Today's Dietician Spring Symposium attendees. This was another strategic opportunity to get new research into the hands of RDs.

Disney's Epcot Flower & Garden Festival saw about 4 million guests through the park during the 4-month event. This festival gave the NHB the opportunity to make the connection between eating honey and helping the bees. Park guests were also educated on pollinators and the different crops that are pollinated by honey bees. Lastly, the NHB provided attendees with tangible things they could implement when home that can help the honey bees.

The festival allowed the NHB to showcase the versatility of honey within recipes available for purchase at the Honey Bee-stro marketplace. Also found in the marketplace was the Spike the Bee sipper cup, available for purchase specifically at the Honey Bee-stro.

Another event here that the NHB sponsored revolved around World Bee Day and Earth Day. For this the NHB provided 15,000 bee antenna bands.

The media day hosted at Epcot is an exclusive event where guests can visit the different marketplaces and experience the food offerings of the festival. The media represent national, local, Latin, and Hispanic food publications. This provided the NHB with lots of different social media impressions and quite a few Instagram stories. This earned honey an overall collective of 1.8 million followers and a 1.2 million reach with different stories, photos, and videos.

Print and digital advertising had a really strong year with 380 MM impressions throughout Eating Well, Allrecipes and Better Homes and Garden. Honey was featured in publications that amplified NHB messaging and appealed to our Goodness Seekers. With all our digital advertising, the NHB was able to promote environmental awareness and healthy you, healthy planet. Focusing on how honey bees are essential to our global food chain.

Digital advertising can be expensive, but the Meredith brand created digital print pieces throughout the year with 3 different ads for Earth Day, Pollinator week and National Honeybee month. Here are some of the topics for these pieces:

1. Six Reasons Why Bees Are The Best
2. Making Your Space Pollinator Friendly (planting bee friendly plants)
3. Six Reasons Why Honey Is A Pantry Staple (focusing on why honey)

Better Homes & Gardens ranked well with our Goodness Seekers and the NHB had a placement in their 100th year edition which focused on sustainability. With this came two added value placements. The first was a Special Interest Magazine (SIM) that featured the Mediterranean Diet. The second was a 100th anniversary event in New York City for Better Homes and Gardens, where they invited a bunch of media influencers. Honey was part of the signature cocktail and a smoothie and the NHB donated honey drizzlers to the attendees.

Lastly, the NHB created digital activations with the Eating Well Magazine and Better Homes and Garden with campaigns featuring beekeepers. Messaging centered around buying honey helps the beekeepers, puts money back in the industry to help them support their honey bees. Buying more honey to save the honey bees is the crux of this campaign.

NEW COLLATERAL

Schindler shared the NHB's new collateral piece "Honey Bees Nurture The Planet & Feed The World" that promotes the importance of honey bees and the things consumers can do to help them thrive. Also created is a recipe brochure that is available for the industry. On our website you can find these brochures along with hang tags, kids activity sheets and stickers.

A sample was shown to the board of our new infographics that were created around the Mediterranean diet. This is one of the pieces that the NHB took to FNCE, along with honey and honey bee themed decals for attendees.

POLLINATION PHOTOGRAPHY SHOOT

This year the NHB created new pollination photography showcasing that without honeybees we wouldn't have all these wonderful fruits and vegetables. The NHB worked with our trusted photographer and food stylist to create some beautiful photos showcasing produce and herbs, along with hives and honey. These will be used for different advertising and collateral pieces.

Schindler briefly touched on some of the key learnings for the year that will impact NHB programs as we move forward into 2023. The nutrition conferences are a good place for honey, while looking for additional opportunities to share the latest research. The Epcot Flower and Garden Festival is a great opportunity for honey to get in front of a lot of people in a relatively short amount of time. The NHB will continue to seek additional opportunities in other parks and special events.

Print and digital advertising is a great opportunity to get in front of many people with messaging, so the NHB will continue to look at publications that would be a good fit for honey. With all of this the NHB will continue to share our messaging that aligns with the Goodness Seekers.

FOODSERVICE UPDATE

Schindler spoke to the fact that the NHB took over the Food Service (FS) programs that were already underway while looking for and then onboarding a new FS agency.

The restaurant Another Broken Egg had a fall promotion featuring new menu items like the chicken and waffles with a sweet hot chipotle honey and a beignet with orange blossom honey marmalade and a chicken and biscuit sandwich with chipotle honey. This was sent out in an e-blast to 190K emails encouraging people to come in and try these new menu offerings. The NHB wrote the content in the e-blast and was able to not only directly speak to this new market, the content was also educational about honey bees and what honey bees do for our food supply. Lastly, there were social media ads ran on the ABE platforms throughout the promotion and a website homepage takeover giving honey a lot of love.

SOCIAL MEDIA

Jocelyn Martinez talked about all the different channels. Facebook #1 and has our largest audience. It is NHB's number one social media driver to honey.com. Twitter is our #4 driver and is our broadcast vehicle which is seeing some growth. Instagram is

our primary channel and we are excited that we finally reached 10,000 followers. That platform is doing a good job driving traffic to honey.com. Pinterest where we share a lot of our recipe content is the number two social media driver to honey.com. This platform along with Instagram maintains pretty steady organic growth without a whole lot of help. LinkedIn was a project that NHB took on last year and we're up to just over 1000 followers. We've been using YouTube a lot lately, with our Celebrating Beekeeping videos housed there we're growing with our subscribers.

Martinez discussed some of the shifts and changes on the social media platforms. Instagram is where NHB is really connecting with our Goodness Seekers. We're telling honey's story in a visual and impactful way. This is where most of our resources are focused because it's also where a lot of our influencers and our social media contacts are. This ensures that we're hitting that target audience. We have noticed an increase in honey bee related content, especially with the Celebrating Beekeeping videos. Help the honey bee was our top engagement of the year. Facebook doesn't reach as many Goodness Seekers, but NHB still invests in it because it's a good way for us to stay connected to our beekeepers and small scale honey businesses. We are seeing a shift here also to "why honey" from "how honey".

Twitter as our broadcast vehicle is where NHB does a lot of our news stories and industry communications. We do see that a variety of content works really well on this channel, but our top performing content continues to be honey bee-centric content.

Martinez noted that Facebook and Twitter audiences have kind of plateaued over the last few years. So, NHB ran a series of follower ads on both of these channels, which generated over 5,500 new followers and page likes. So, we plan to continue that throughout the rest of the year.

Pinterest is NHB's second top driver to honey.com and an excellent way to share branded recipe content with the objective of driving traffic back to honey.com.

HONEY4PROS

Honey4Pros has had a significant impact with our food beverage manufacturers due to the return of conferences and in-person events. NHB's year-to-date metrics are positive and we're seeing strong, steady growth. This shows us that we are engaging our audience and definitely seeing an increase of general honey information. As our audience grows, they help us to spread our message and inspire their peers and industry members to use honey in a variety of applications.

Honey Saves Hives returned for a 3rd year with some new partners and familiar friends like Justins, Sprecher, Teakoe Tea, Tillamook Country Smoker, This Saves Lives, and Mary's Gone Crackers. This program is promoted across all of our social media, and it's great to have partners who are really engaged and sharing the message as well. With the help of our online friends we reached over 2.4 million users and generated over 3.6 million impressions and 2.8 thousand engagements. This may seem a little low, but this year we focused more on awareness ads as opposed to traffic ads.

We kicked off National Honey month with our newsletter, which had an open rate of 18% and 732 clicks, most of which were focused on our influencer partners.

Looking ahead to 2023, the main topic being discussed in 2022 was authenticity. This is what consumers are looking for and they're really wanting to connect with brands in a more authentic way. According to the pros at Brandwatch, influencer marketing has become a go-to marketing strategy for many brands to connect with the right online audience. With that, they're forecasting the rise of user generated content creators or micro influencers. These influencers have smaller audiences, but higher engagement rates and they're seen as more cost effective and authentic ways to really reach your target audience.

As far as social media trends, TikTok is expected to continue to grow. This platform appeals to the audience who are looking for consumable media, information and things that are really easy to take in quickly while on the go.

An emerging trend is social media shopping, which is being watched by a lot of companies. Shopping platforms that allow users to shop within the platform without having to leave. So, now there are new features popping up like Facebook and Instagram shop and TikTok that keep users within the app to shop. E-Marketer anticipates that social media commerce will be worth about \$80 billion by 2025.

Martinez finished up by talking about new niche platforms. With all the noise and congestion on these larger platforms there has been a migration to some smaller platforms. With niche platforms, brands feel like they can really connect with a specific audience and it causes the bigger guys to test out new features.

Jocelyn monitors these platforms 24/7 and she does get support from the agencies, so at this point she is able to manage. She is also using a lot of tools to help schedule a lot of these posts.

CONSUMER PR

Jess Buchanan with Porter Novelli touched on some new trends and the state of the consumer. The pandemic has influenced how the consumer behaves and one of the big focuses we've seen is the concepts of "home" - whether it is nesting, spending more time eating at home, or cooking and this trend continues to grow. With inflation, consumers might not be able to afford to go out and they are thinking more about food waste, so this trend of cooking is super important. The other huge trend is that authenticity and sincerity are becoming more and more important to consumers. This relates to comfort and simplicity which is important for honey and fits our messaging perfectly.

Buchanan explained that Millennials are the fastest growing segment joining the TikTok platform, so it's very important for us and the audience we are trying to reach, and something to consider as the NHB moves forward.

Buchanan then spoke about consumer media and the fact that it is the role of the NHB agencies to help amplify all of our amazing work with consumers. This is done with general consumer publications and media. There are so many freelancers and podcasts now. Consumers are reading their news online. Though traditional publications and magazines still have a place, online is on the rise, so, we need to continue to use those social networks to help amplify the NHB's online presence.

Buchanan explained that the strategy in 2022 for all consumer programs was to drive greater awareness about the role bees play in our food system, so that we balance the Good For Me, Good For The Planet pillars. We were able to achieve both, and one of the ways we were able to do this was through Honey Saves Hives. This was an all-year educational campaign to get consumers to think about the easiest way to support the honey bees and their hives by purchasing honey and honey products. The Honey Saves Hives program itself delivered 150 million consumer impressions through the traditional media, press releases, media ads, podcasts, and read-ins.

Buchanan shared that a big voice for the Honey Saves Hives program was from influencer partner Brandi Malloy, who is a TV personality, podcaster, and lifestyle expert. Malloy created a "How to Host a Pollinator Party" piece that elevates the experience of what Honey Saves Hives is. The NHB also partnered with baking and food expert Josh Schneider to promote Honey Saves Hives throughout the year. The NHB has data that suggests that they both really speak to our Goodness Seekers. When we search for influencers, we look for people who are a true authentic partner. These 3rd party

advocates are a great tool for the NHB, as their engagement rates with their audiences are really good.

This year's RD Spokesperson was Marisa Moore, a strong influencer when it comes to nutrition, wellness and the food industry. She has gotten us coverage with Good Morning America and ABC News.

Buchanan explained that the NHB also relies on a smaller group of RDNs that we call our Bee-ffs; the current network is up to 60 parties and 121 articles. The NHB does not pay them; they already believe in the goodness of honey but the NHB provides them information and makes sure they know we are a valuable resource, and that honey remains top-of-mind for them. We also continue to collaborate with supermarket RD's to share the message Good For Me, Good For The Planet in an authentic way. Through them NHB was able to connect with more than 10,000 supermarkets and gain an even bigger reach.

Buchanan mentioned that the two key takeaways for 2022 are that NHB needs to continue to provide compelling and aspirational content, which is what consumer media is craving. This can be achieved by using authentic lifestyle influencers and RDNs who are also a credible source of honey information to consumers.

Buchanan shared that in 2023 the NHB will be creating a custom editorial piece to share with journalists and the media publications. It will be a mix of paid digital along with some earned PR plays; the NHB wants to pitch them ideas that they want to talk about. The goal of this custom editorial is to get a long form article or an explainer video from a huge publication. We plan to pitch an amazing story in a new way that will show up in a new form or in a publication that might not normally talk about honey.

The recent press release on the new Mediterranean Diet and nutrition research is really resonating with great results, so we will continue to share that information with RDs.

Buchanan went on to explain that as the NHB is thinking through the synthetic honey issue and how to address it, we want to control the narrative. By doing a custom editorial we can get the message out about the purity of honey and the benefits of eating honey.

INGREDIENT MARKETING

Keith Seiz with Brightly Creative touched on the impact the last 3 years has had on the ingredient market due to Covid, supply chain issues, and now inflation. Seiz explains

that when Covid hit, the ingredient honey market was fine; consumers were treated to those comfort foods and a little bit of healthy foods, and honey had a solid presence in all those categories. Supply chain issues have been a little bit of a concern, but not bad. He expands by saying that inflation has the potential to have a significant impact on the ingredient market and that it is shocking to see how the food industry has handled inflation. Basically, along with the energy sector, we've taken the brunt of it, and that impacts consumers, whether they're paying more at fast food restaurants or the grocery store. With private labels growing in stature, and as consumers look to save, food manufacturers are also looking into how to make their products cheaper. If they are thinking about trading down, sweeteners are definitely an area they can do that in. Seiz explains that honey is the most expensive of the mainstream sweeteners that are being used in the food industry, and it's a bit of a cause for concern. It is a massive point of conversation with food manufacturers, and it's all about the price of honey and what's going on with the price of honey. We have not seen any reformulations of ingredients yet, but Seiz wonders if manufacturers will lower the honey levels in their products.

Seiz explains that research and development are also being impacted as improved ingredient lists are all the rage now and are more important than ever. Manufacturers are basing their new product development brands on lists - basically, they have a list of ingredients, where they have three to four suppliers of each of those ingredients, which is why it's important to get on those approved ingredients lists. We're also seeing volume brands receiving much more innovation, which is something that we're trying to take advantage of. The other thing that's interesting is that no one really knows what consumers want, whether they want comfort food or healthier food. The good news for the honey industry is that one of the biggest areas of excitement is in the center of the plate (entree-style items), as they can carry a higher price point, and it's where chefs are more likely to use honey.

Seiz mentioned that the alcohol industry is struggling a little with the smaller brewers and distillers saying they can't afford to make products because of the cost of honey. But, the big guys still don't care; they continue to buy premium ingredients and consumers are still buying. He continued by stating that malt-based seltzers are a thing of the past, versus the spirit-based cocktails that are dominating the industry, and are perceived to be a cleaner alcohol. There is a lot of honey used in these and a lot of potential.

Seiz explains that the state of sweeteners in food manufacturing is chaotic. Natural sweeteners are the biggest concern, and they are coming after the honey industry. They are innovative ingredients and that appeals to RDs, so the NHB is working on positioning honey as an innovative ingredient. Another concern is due to the fact that

the FDA is attempting to define “healthy.” They released their proposed rules and we have started to see articles about cereal brands that will not be able to be labeled healthy because of the sugar content; the sugar is not coming solely from honey, mainly from regular sugar, but this could impact the honey industry. The positive news is that when consumers were asked what sweetener they want to see in their food and beverage products, honey is number one by far. There is a disconnect between what product developers think consumers want and what consumers actually want, and we need to continue to convince manufacturers that honey is worth the value. Seiz continues to explain that the last two years we have seen a shift away from honey in new product development mainly in baking, snack and cereal, as they try to get to zero added sugar, largely turning to Monk Fruit, Stevia and a combination of Erythritol to add bulk. So, for the last couple of years the NHB’s main focus has been on baking and snack, and while we’ve been successful on the baking side, it has been a bit of a struggle on the cereal and snack side. Seiz stated that he is confident that we will get there. One of the biggest opportunities we are seeing is in emerging categories such as meat and center of plate. We have minimized the focus on alcohol as we are really stable there. A lot of new products focus on Keto diets and calorie counters and things like that, which is tough for the honey industry, so we are focusing on baking, because of the price of honey, to protect on formulation so that we don’t lose ground. Seiz shared that in 2023 the focus will be on our core, because that is where our volume is and we want those manufacturers to appreciate the value of honey. The trend has been removal of product ingredients and now we are seeing a trend to add good ingredients, which is beneficial to honey.

Seiz mentions that virtual R & D summits have been very successful and are geared towards product developers for some of the largest food manufacturers. He stated that we steer these towards our key markets like bread bakeries, where we explain the value of honey, and if there is real interest, then we will do it in person for their whole company. These are best done as virtual events because of the competitiveness in the baking industry. He says that the NHB will continue these in 2023 and will probably do more of them as they always sell out.

Brightly Creative’s public relation efforts are also directed more towards the food and beverage manufacturers. We do really well here in getting honey in-story and in publications.

HONEY20 FOOD & BEVERAGE

Seiz explains that the Honey20 Food & Beverage is a program the NHB launched to generate excitement with food and beverage manufacturers, spur inspiration and

encourage them to use honey. It has been very successful from the standpoint of generating leads. From an advertising perspective, it's been successful from a point of generating leads; all digital advertising is placed with the goal of generating leads. He continues to explain that the advertisements about the Honey20 have done a better job with some of the biggest food manufacturers compared to anything the NHB has done before. It has generated some interest from General Mills with Honey Nut Cheerios and Nature Valley.

The NHB's Queen's Choice Awards was brought back and was given to our favorite new products with honey, including everything from a cold brew coffee and Heinz 57's take on a hot honey, to crackers and Arizona and Honest Teas. Two categories we recognize and are seeing so much honey usage in are ice-cream and meats.

Seiz mentioned that the International Baking Industry Expo (IBIE) trade show is our biggest one and only happens every three years. The NHB had fantastic coverage there and were able to schedule meetings with a lot of the main bakeries that stopped by.

Social media has been something we have tried to grow, which is not easy as there are not a lot of ingredient social media platforms. We have figured out what our market wants to see and how to engage them, and it has grown significantly. Overall, @Honey4pros has proved to be a very successful tool for the NHB.

Seiz explains that our retail bakery program focuses on the top bakers. The team sends them honey tasting kits, and in September they convert their menus to feature honey products for honey month. He states that we get a ton of publicity for these events, and they have lasting impact, as often they keep these items on their menu. The NHB also does a lot of takeovers with bakers that are part of the Bread Bakers Guild or Retail Bakers of America - where we take over their Instagram accounts for a day and promote honey. These bakers have hundreds and thousands of followers, so these events are a great free way to promote honey.

The Honey Beer Summit is always popular, but this year we increased it to 45 brewers, and it still was a great event. We are now focusing not just on those with the best beers, but on the brewers that are the greatest influencers and have a lot of followers.

Seiz said that the Honey Spirits Summit had only 33 attendees, instead of 45 due to the cost of flights. This enabled us to keep the event within the budget, but it was still successful and well received.

COMPETITIONS

Seiz then went on to provide highlights on the year's various competitions. The Honey Beer Competition beat last year's entries with 244 entries, which was a small increase over 2021. The big focus on this was more on the social activity afterwards and not so much on the competition itself. Consumers' perception of honey beer is that it is sweet; through this social activation, we are able to educate brewers to share with consumers that honey beer does not necessarily have to be sweet.

For the Mead Crafter competition we had 348 entries, and this is considered to be one of the top mead events. Mead producers are feeling very confident in their growth and trends towards ready-to-drink (RTD) seltzers and cocktails.

Seiz shared that looking ahead to 2023, the NHB is working to maintain its focus on messaging as the Good For Me / Good For The Planet messaging not only has an impact on consumers but also food manufacturers.

Seiz explains that the NHB is starting to proactively market against synthetic honey by reinforcing our positive messaging and pointing out how consumers want honey because it is naturally made by bees. In addition, we are doing a lot of PR and advertising about how honey is made in comparison to other sweeteners. He continues to share that market share-wise, synthetic honey and other sweeteners are not a threat for the next 3 years. The major concern is for their attack on commercial beekeeping, which is why the NHB needs to focus its message on why beekeeping is good for bees, how wonderful honey is, and why commercial beekeeping is necessary to feed the world.

Seiz closed out by saying that the latest video, *Fact Or Factory*, that the NHB put together really shows the connection between beekeepers, bees and the health of the bees. This video focuses on why to choose honey and capitalizes on what makes honey unique and special.

SUSTAINABILITY UPDATE

Laura Morin, Sterling Rice Group mentioned how it complicates the issue when the synthetic makers are saying we are hurting the bees by eating honey, whilst we are saying why it helps. This confuses the consumers.

Morin reviewed the message map and its core message that the agencies all share. Beginning with Honey Saves Hives the goal of this program is to build an undeniable

link between consuming honey, supporting bees and beekeeping and an abundant food supply.

The Celebrating Beekeeping videos have been shown on YouTube and they have performed extremely well. The NHB has shortened them in order to post them on Facebook and Instagram and the views have been tremendous on both platforms. They are also generating lots of engagement from viewers.

- YouTube – 14 million video views
- Facebook & Instagram - 26 million impressions & 5 million video views

SYNTHETIC HONEY

The goal is to combat synthetic honey and to continue to build that undeniable link between honey consumption and bee health. To understand what consumers think, the NHB conducted four focus groups. These were done with the following groups: heavy honey consumers; Goodness Seekers; light honey consumers and with people that are really into alternative foods and trying new things.

The findings across all groups were very similar. When we talk about alternative foods, we see that they have become very accessible and mainstream. Many of the reasons people are turning to these is because they are perceived as being environmentally friendly and ethical. There is however a growing understanding that just because food is plant-based, doesn't mean it is healthy and can be highly processed. Consumers are beginning to question the nutritional value and the unknown ingredients.

All respondents agreed that alternative foods are not going away, and we will see more and more of them. They also noted that there is an educational barrier when it comes to understanding how it is made, creating more skepticism.

When asked about honey they provided such wonderful descriptive attributes:

- Natural
- Unique
- Directly connected to bees
- Pure & Simple

Honey is loved and consumers don't see it as something that needs to be fixed. They think it is healthy and magical. Which then brings them to ask, "Why we need bee free

honey?” After the initial question they began to ask, “Why and how it is made? And what it is made with? And why is synthetic honey needed?”

The respondents after more thought began to question if honey is bad for them and why is there a bee free honey. They start to question if it is harming bees, maybe there is a resource issue. This thought process left them being open to trying synthetic honey, especially if it has the benefits of honey.

The message coming from synthetic honey companies that must be addressed is that honey production is damaging to bees and their ecosystem. They understand bees are important and no one questions the importance of pollination. Another concern is if we are stealing the honey from bees and are we overworking the bees. When we start talking about harvesting excess honey and that we’re helping the bees this message goes a long way in helping to educate consumers. The biggest takeaway was that consumers love honey, and they need a compelling reason to trade off from using honey to using synthetic honey.

Synthetic honey is marketing towards food manufacturers; therefore, ingredient lists may not be as much of an issue. There is also a concern that they could increase the nutritional value by adding vitamins or antioxidants. Seiz also noted that he has heard that they are trying to market synthetic honey as a plant-based honey. The carbon footprint is an issue to look at when combating this problem and addressing it from a sustainability and economic impact.

The NHB needs to redefine and own the reason “Why” honey. We need to get ahead of this and focus on addressing the problem of the declining bee population and what is causing it. Clarify why eating honey is good for bees and solidify our excess honey messaging.

Program implications for this is to protect our early adopters and influencers and protect heavy users and make them believers.

Food manufacturers and the foodservice industry are probably who the synthetic honey companies will target. The NHB needs to leverage chefs to advocate for real honey and for ingredient manufacturers we need to protect usage with our core users.

To address this, we are going to go into quantitative research to validate learnings and identify what is the most effective messaging. The timeline for implementing this proactive program is beginning in 2023 and from the learnings collectively we will tackle this issue.

It was asked if there is any data that shows the impact on usage when new products like this are introduced. Lombard noted that commodity boards on average see a 15% drop on product usage when a new alternative product is introduced. When you look at the honey industry at about 619,000,00 lbs, which is a drop of about 93,000,000 lbs. Traditionally commodity boards do not fight any alternatives, we just make sure that the messaging is accurate.

Poulk shared that the industry has on several occasions submitted to the FDA a standard of identification for honey. She went on to say that they put it to the USDA and helped create a Commercial Identity Description (CID), but that is not an official standard of identity. Recently the industry submitted to FDA documents as to why lab and plant-based honeys should not be labeled honey. Along with that they provided some financials as to how it would impact the industry and suggestions for alternative names.

FOODSERVICE PROGRAM

Amy Shipley with Sterling Rice Group (SRG) brought up the importance of being proactive and getting chefs to endorse why they use honey and its value to their menu offerings.

Foodservice (FS) sales are a 946 billion industry and 2023 is projected to see a 5.5 % growth on average which is really high. By the end of 2022 FS should be back to before pandemic sales.

SRG has a strong understanding of restaurants, the innovational and operational side of their business and how honey works within the menu. The NHB will create a plan that appeals not only to the chefs but all the stakeholders, building relationships with the right people, making connections at the right events and how honey works across the menu. Furthermore, innovating around ideas that increase the volume of honey in a recipe and in a variety of recipes to drive usage and revenue is the goal.

Foodservice truths are based on relationships and how and where you show up. It isn't about recipes but about applications and ideas that drive volume. ROI is key to making money and driving revenue and volume.

Inflation is showing smaller menus and items are more expensive. Drivethrus did not take a hit during the last few years and in react, fast food is growing rapidly, fast casual is skyrocketing, and fine dining is the last commercial restaurant starting to recover.

Retail food service such as grocery stores are competing with traditional food service to try and encourage people to come into the store. This industry is coming back in a major way. The non-commercial food industry like universities, hotels, healthcare, senior living drive a lot of volume. Room service still is not available due to labor whereas senior living never took a hit. Operators are concerned with high food costs, high labor costs and high fuel costs.

Menu shrinkflation is an indicator of smaller menus and yet a more expensive menu. Honey needs to align itself to be on multiple menu items and needs to be simple. On premise (eating at a restaurant) and drive thru still have the largest shares of the market and on premise is increasing. Brick and mortars need to find a way to make the most of their kitchen, by somehow using their kitchens for breakfast or rent it out to others.

This means that for suppliers and the NHB we need to be a resource. We need to help with menu innovation and simplification. And for chains to compete they need to offer different options, so we need to help them differentiate their menus. The NHB needs to make a case that honey allows you to increase prices on the menu. It also brings a younger consumer through the door. The plan is to focus on emerging day parts from breakfast, to lunch to dinner, cocktails.

The food service industry is an important resource as an influencer for the honey industry. It will help us in the following areas:

- Provides an opportunity to educate against synthetic honey
- Food service drives volume
- Provides a forum for Good For Me, Good For The Planet

The strategic framework for this is to drive awareness and education. Good for the planet helps draw the value of innovation, partnerships, limited time offers, driving volume and making more money.

The NHB is working on a target prioritization, but currently the foodservice target is chain restaurants, high volume trendsetting independents and fine dining restaurants are also doing fun stuff with honey. Non-commercial is a major opportunity for the honey industry as are hotels.

Interviews with foodservice operators and chefs showed honey has many strengths as an excellent sweetener with endless versatile options and a staple in the kitchen. There is an opportunity to educate this group as they still don't understand all the value of

honey. There was also not a lot of awareness of synthetic honey, so this provides another avenue to educate consumers through their menus. Sustainability is critical to them but the bottom line is they need to make money.

Lastly, SRG will be conducting an Operator A & U, which has never been done for the honey industry. We will be doing operator one on ones' to see what they think and what they want. This will help us to measure the program's success.

Meeting was called to adjourn at 4:55.

October 28, meeting was begun at 8.33

STRATEGIC PLAN

Laura Morin began by asking questions. Alan Turanski stated that the sustainability message needs to be the framework for the plan. Poulk noted that no matter what the diet, we need to get the message out about the importance of bees. That eating honey helps bees, beekeepers, and impacts the entire agriculture system. Morin stated that it was added to the mission and elevated its importance to the planet. In the vision it was added that bees that make honey make our entire food system possible. It was suggested that instead of promoting the natural purity of honey maybe the NHB should go with the wholesomeness of honey. As far as unifying the industry, Turanski noted that despite the limitations on the part of the NHB, continuing to educate the whole honey industry, not fragments of the industry, brings the industry together. That it should be the honey industry aligned together against the other sweeteners. We need to devise a plan to do that through messaging, outreach, and resources. Maybe by attending state meetings and the Hive Life is another industry meeting to get involved in as that group has a totally different demographic. They promote through a lot of YouTubers with huge followers. This meeting takes place in early January.

NUTRITION RESEARCH

Barbara Lyle, NHB Nutrition Consultant, began by mentioning there will be information on antioxidants coming in the near future.

Lyle is excited to share that the first official publication in a peer reviewed scientific journal has been released. This stems from the nutrition research investments that the NHB made. It positions honey as a way to help people eat a healthy Mediterranean Diet. Honey is uniquely associated with this diet pattern and is a perfect fit for us. Honey & Olive oil paired with fish, whole grains and greens can improve the

Mediterranean score. This is providing us the opportunity to create messages and infographics for health professionals and is on the website.

Carbohydrates and honey are important from a health perspective in how it relates to calories and blood glucose. The NHB's research programs contributing to these studies conducted in Canada are helping to establish a compositional analysis.

The idea here was that every time we send samples to a research institution to do a clinical trial, samples from that exact same set of honey goes to Canada. The Canadian group is where we do all the compositional analysis. The reason we do that is that it's less expensive, so we can send the same honey samples to a couple of different places and have one centralized place to do the analysis. Secondly, we can also overcome any chances of inconsistencies in methodologies. So, we know that if there's a difference, it is actually a real difference measured in the same lab.

The University of Toronto is our coordinating center and has been a great partnership. It has provided us with some additional analysis for free because they were so interested. They're supporting the analysis for the two studies. The gut health one is looking specifically at carbohydrates in honey that may promote gut health. The second one is they're looking at the carbohydrate content, while the exact same samples are being measured by Michigan State University. This is where they are testing sensory attributes. Specifically, not only the sweetness but whether the sweetness is associated with specific carbohydrate components. But, also with the aromatics, which is a unique attribute of honey and are not there with some of the other sweeteners.

The carbohydrate composition of honey affects the calories and it affects the glycemic response. If you look at the composition of honey, there is a lot of fructose, primarily it is 82% sugar by weight. There is also glucose and maltose, all of those sugars have about four calories per gram. But they do differ in how your body responds in terms of the rise in blood glucose that occurs. Fructose is known to be the sugar that has low rise in your blood sugar when you ingest it. Whereas glucose and maltose have a high glycemic response. So, because glucose is the primary fuel that is used by your body, when you eat a carbohydrate food you want to get a small rise in your blood glucose. You just don't want it to spike really high. Instead, you want it to go up and then naturally come down slowly. Fructose is naturally present in fruit. The other sweetener that's high in fructose is agave, which has 11 1/2 grams of fructose per tablespoon. Whereas honey has about 8.6 grams. Fructose is often associated with people who have diabetes because it doesn't require an insulin response by your body, in order for your muscles to use it. There is a difference between fructose in corn syrup versus honey. Corn syrup is used in a lot of processed foods and has been hypothesized as a potential link with

obesity. But if you drink a 12 oz beverage with corn syrup the amount of fructose you're getting is like five times higher than you would get in a tablespoon of honey and most people don't even eat a tablespoon of honey. So, the big difference is in the amount you get, not that it's a different fructose. Food labels focus on nutrients. The other carbohydrates like saccharides are organic acids and they're not a nutrient so they don't show up on nutrition fact panels. However, when calculating calories that's where organic acid needs to be quantified. The difference between some products that have 17 grams of carbs and then 16 grams of sugar, comes down to rounding. Sugars must have been rounded to 16. Then the carbs are calculated by difference, they add up the water, the fat, the ash and the protein then everything else gets counted as carbs.

However, when you go to calculate calories you have to take that total carb piece apart and try to figure out how many calories to each part of that. Lyle explained that it has been an ongoing question as to whether with honey we should be rounding up to 70. The organic acids could help us round to 60, but can we get to 50. She doesn't think it's possible. About 4.2% of the carbohydrates in honey are not the free mono or disaccharides and that's what gets labeled as a sugar on the nutrition facts. Honey does have sugars that are rather unique in nature; they're usually found in small quantities in other foods. Then you have the organic acids and those all get combined and are part of your total carbs. Organic acids are less than 1/2 a percent by weight. But combined with these other uniquely metabolized sugars, it may influence your calories and the glycemic response. There has been some research about the fact that organic acids might change the pH and that the pH itself might be influencing the glycemic response. It's important to note that rounding is used to calculate calories, so sometimes things don't add up. This is because with the two subcomponents one might round up, whilst the other one might round down, creating weird discrepancies. There are six ways that the FDA allows you to calculate calories. With the general Atwater one, if you take all of the total carbs listed on that nutrition facts panel and you use the standard 4 calories you will end up at 70. There's no need to do that, another alternative that can be used is called the specific Atwater values. The USDA has the standard food composition database and when they use a specific Atwater calorie value they use 3.68. Which doesn't consider that the organic acids would have an even though lower Atwater value. That is one of the things we're exploring with the compositional analysis in Canada is whether we did quantify the organic values which don't go into USDA database. So, if we quantify those organic acids could we get that 3.68 to be even lower. But to get rounded down to 50, we would have to get down below 55 calories per tablespoon serving. It was asked why does the government round and why can't it just be 62 or 63? The answer is that if people are looking at packaging how would they know whether 2 calories is a meaningful amount. So, with each one of the values the FDA tells you whether you round to the nearest ten, or the nearest five, or to the nearest one. It's

meant to help sort out what's really meaningful. It may sound complicated, but it makes good sense, especially with things like sodium.

A common question is if honey is lower in calories, then sugar. The answer is that due to its water content 17% weight by water, yes on a weight basis it's lower. However, when you put table sugar in a volume measure the crystals take up so much space that the weight of a tablespoon of table sugar is quite a bit lower than it is for honey. Because of that when you look at it on a tablespoon per tablespoon basis, you'll see that honey is higher. What makes it more confusing is that the way FDA defines their serving sizes the sugar gets to be labeled on a teaspoon basis not a tablespoon. It's challenging for honey, that it's shown to consumers on the volume basis as a tablespoon and not a teaspoon basis.

If we changed the serving size would it make a difference with consumption. Lyle stated that it would be difficult because we would need to move to a different group, currently honey is with spreads. When we looked at the USDA's database to see how people report eating honey and it was mostly at 7 grams not the 21-gram tablespoon. Despite sharing that with the FDA they said no you are used like spreads. Lombard said that in the past when we looked at changing the serving size and if it would change consumption, the beekeepers were concerned. They wanted to raise the serving size, not lower it. A relevant question to investigate is if consumers are seeing the 60 calories and is it prohibiting them from using honey. That would be a good question for one of our consumer surveys. Another thought is to revisit dual serving sizes and might be worth a sit down with the agency, especially if we have the data.

Lyle then reviewed how the amount of honey and type of honey relates to calories but it also affects the glycemic response in humans. The glycemic response is important because it's a key factor in maintaining cardio metabolic health. It affects body weight, body fat, long term brain health and blood lipids. It has an impact on everything in your body and how your body manages glucose response. The glycemic index is how it's communicated to consumers and is a very popular diet around the world. The glycemic load basically takes what's an index and says OK the index tells me how one gram to 1 gram of carbohydrate responds. But if you eat this food you actually eat 3 grams, shouldn't you take the fact that it's not just how this 1 gram to 1 gram responds in your body with the fact that you are eating three times more. Interchangeably one is an index that tells you relative to another carbohydrate, usually glucose, how it responds and how much do you need. Fructose is a low glycemic index sweetener. Keep in mind that honey has not only fructose, but also maltose, glucose and organic acids. All of which might affect how your body responds. The University of Toronto is doing work with Inquests, who are the world's leading experts who originally developed the glycemic

index. In the future we will share about carbohydrates, antioxidants, and nutrients. For now Lyle talked about a high glycemic response compared to a low glycemic response food. Then she spoke to how honey compares to other sweeteners regarding this.

Blake asked if there is an opportunity to promote a low glycemic honey. Lyle said that most of these are based on one or two samples, so we don't know if the results would be consistent or how much it might fluctuate. However, we should make note to investigate that. It was also asked if there would be a way to test the honey that was batched, prior to packaging to figure out what the glucose level is. And would it be possible to blend honeys to get down to a lower level. Lyle commented that that poses several questions. Can we predict that based on its fructose content and then would a fructose and glucose ratio be able to predict it based on carbohydrates? There has only been one paper published on that and what they found was that the fructose content did not correlate highly to the glycemic level. That would be another possible research project that we can look into.

The NHB is working with the world's experts in these fields and Dr. John C Piper who is one of the experts in glucose metabolism. He will be writing our paper about the sugar organic acid glycemic index response to honey. He will also be interacting with the people who do the tables to make sure that not only the index but that the load is being calculated on the correct serving size.

These are the messages we are looking at with respect to the glycemic response. Honey is a moderate glycemic index food and when it's used in small amounts it is also a relatively low glycemic load. It has several dietary components that may affect the glycemic response. With respect to calories, honey contains small amounts of uniquely metabolized sugars as well as organic acids that are slightly lower in calories and therefore that can affect the total calorie labeling but is still going to round to 60 calories.

Lyle then provided the following answers to popular questions about honey:

- Is honey a low-calorie food? Honey does not meet the FDA's definition of a low-calorie food, which is 40 calories per serving or less.
- Is honey recommended for people with diabetes? Some diabetes educators in fact do suggest using honey as a sweetener due to its fructose content. But once digestion begins in the gut, table sugar is fructose in the form of a disaccharide. So, it has about the same amount of fructose and doesn't offer an advantage from that perspective. However, as with calories it does have the benefit that you can use less and get great taste and aroma.

- Is honey a prebiotic? Honey does help that probiotic bacteria survive digestion. It turns out that honey can be prebiotic even without a fiber because it's got other components.
- Is honey healthy, specifically from a labeling perspective does the FDA allow you to call it a healthy food? The answer is not currently because it does not meet the requirement that it is a source of at least one or two nutrients. Even when the new definition comes out from the FDA it will most likely be disqualified based on sugar. The other aspect of this is that foods that qualified as healthy in the past, in the future may not if they're using honey as an ingredient. That would be a difficult issue to overcome.

In closing, honey is part of a healthy diet and the NHB needs to continue to position honey as a culinary tool that is well suited for the healthy Mediterranean Diet.

BEE HEALTH & BEE RESEARCH

Danielle Downey with Project Apis m (PAM) began with the good news that since they were founded in 2006 they have funded more than 10 million dollars in bee research. The NHB has been a big part of that.

The USDA has put billions of dollars into climate smart commodities. They have been offering a lot of grant money to develop food in a more climate smart way. There was one proposal that was funded with the Almond Board and Seeds For Bees was a partner in that proposal. So, we're expanding that program with a 5 year grant.

Over the years there has been a litany of concerns that have come up in industry. We have been very successful at answering a lot of the following concerns:

- Bee health concerns of viruses and parasites
- Forage and habitat
- Better nutrition on the landscape for bees, which helps to address the sustainability question and honey production
- Pesticides
- Honey bee nutrition
- Queen bee problems

Tropilaelaps which are another mite that's allegedly worse than Veroa. It hasn't reached the United States yet, but early detection and rapid response is crucial. Especially since we don't really know very much about this mite. There's not a lot of funding being put into this issue so PAM will be funding research projects pertaining to this.

Downey talked to where their funding comes from and from what groups. Pam has become a really important vehicle to do the research that the industry needs and wants. They just finished up with a new RFP. This year the amount of funds being asked for is down as researchers are focused on catching up on other commitments. But they have received some great proposals. The request for budget is 1.3 million and budget for NHB research is usually about \$300,000

The NHB has funded projects like *Understanding The Pathogen Spillover*. There is a lot of push back from that honey bees are hurting native bees and honey bees are sick and making other bees sick. That they are competing for resources. This is coming from conservationists and environmentalists whose values are protecting native species. So, the NHB has funded some of that work to look into Pathogen Spillover.

The 2021 research projects are still being worked on, so we don't have a lot of that information. Downey then discussed some of the 2022 projects that have been submitted:

- Enhancing Selection and Breeding for Hygienic Behavior and Mite Resistance in Commercial Queen Bee Breeding Selection
- Viral Diversity in Mite Resistant Honey Bees and Its Impact on Colony Health
- Further Development of Pharmacologic Proteasome Inhibition as a Therapeutic for *N. ceranae* Infection in Honey Bees
- Testing Pesticide Residues in Honey Bee Colonies Across Ca Landscape to Aid Development of Predictive Risk Models
- Is Newer Better? Assessing Traditional and New Methods of Varroa Detection

BEE HEALTH COLLECTIVE

Project Apis m. has been building this website to reach the industry with more resources. They are working on improving the website. Downey then went through the timelines. There are over 850 projects on the BHC. There is also a bulletin board. Keith asked if there is good news about bees? Downey said the good dialogue is good. It's good that we know what is killing bees, and we have good strategies to help bees and create good foraging. The directions we are taking with research is good news too, but it is a slow process. Shook noted that a great marketing tool is that people are paying attention as are governments and that is a good thing.

ORGANICS

Laurie Demeritt with The Hartman group shared the organic research, as well as the predictions and forecasting that came from that. Touching briefly on their methodology with a large body of both primary quantitative and qualitative research for syndicated studies. We had a robust sample size of over 2800 consumers in the US that were balanced to be nationally representative. The most important demographic was generational in terms of attitudes, behaviors, and aspirations around organic. We found that younger consumers, primarily Gen Z and Millennials, perceived organic as a healthier product for their families. It's not that they don't care about social and environmental benefits, it's just that those things aren't necessarily the true motivators to purchase today.

Organics have become a more mainstream market, representing almost 10% of retail food and beverage retail sales. At the same time there is a rise in a lot of other products that have health benefits and so it is a much more competitive market for organic. There is a small vocal group of consumers emerging that are beginning to question whether organic represents the social and environmental values they are seeking. They are thinking about planetary health and climate change. Social conditions on the farms where the products are being made and raised. They're starting to wonder if there is something beyond organic.

What consumers consider to be very important when they're shopping for food products are fresh, real, clean and with healthy attributes. They are looking at low/no sugar, high protein, simple ingredients, no artificial flavors/colors. Some of the top claims sought by engaged organic consumers are it supports regenerative ag, gut health, nutrient dense, sustainable, fair trade. Organic usage is growing in frequency with 83% of consumers using organic products at least occasionally and 34% use them once a week or more. Millennials are truly driving the charge to organic and in many households there is a progression of organic from kids to adulthood. The reasons to buy organic or it's safer and cleaner, avoiding things that rely on pesticides and higher quality. Some new things are quality and consumers no longer have to give up on taste to go organic.

Organic is now more about what happens when it is raised vs natural is now more about when it's being processed. Barriers for organic are of course cost, but that is declining due to private labels. Consumers are seeking information and are savvy with reading labels.

Laurie noted that consumers do not have a great understanding of GMO's and have not

equated Non-GMO as being organic. Downey stated that she thinks there's going to be a big push for regenerative. Perceptions that if the soil is healthy so will the plants be and the food we eat. Regenerative is about restoring and making it good and doing more and being proactive which appeals to the consumers. Savier consumers will question how honey really can be organic, when you can't control where the bees go.

NUTRITION PROFESSIONALS OUTREACH

Morin noted that this is focused around Good For Me, Good for the planet pillar and is really delivering with registered dieticians (RDs). It has positioned honey as the preferred choice and goes to recommendation. It also has a health halo and is unique and is different. Along with all this we have great new research from Barbara Lyle that provides backup to honey's healthy attributes.

The strategy is focused on sustainability and many RDs feel it should be part of the food pyramid. We have been working with them for years, but for the past 2 years we started off by talking about simple, natural unprocessed equities of honey. Then we began making the connection for them through education, of the importance of bees and agriculture. More recently we have been pushing the pollination story and how it all connects to make a healthy diet possible.

As we look at the media plan as it relates mainly to RDs. Media objectives prior to FNCE is to have a huge outreach to RDs with eblast, print and social media and then follow it up by meeting with them in person at FNCE. This all generates a lot of excitement around honey with RDs.

Morin stated that while we've seen a lot of amazing traction with dieticians, now that nutrition research is starting to come through we're going to see a huge amount of momentum. We are also going to utilize those RDs as influencers to amplify those messages to consumers.

Olsen asked if with the Goodness Seekers we have thought about a marketing plan promoting adding honey to your water as a way of adding flavor and an energy boost. That would increase consumption of honey tremendously.

INDUSTRY COMMUNICATIONS

Linda Martin with Westbound Communications shared the industry communications plan and the 5 areas of the program. First, we will talk about industry communications and the goal of that is to share important news, research, and promote resources and

the website. Most of our social media platforms are our way of reaching consumers. LinkedIn is the business-to-business channel that we use as a way of reaching and engaging with the industry and building that community. We have conducted audits of similar commodity boards to determine what content gets the most traction. The topics we focus on are industry news, sustainability, events, professional spotlights, then honey content for partners and news of the day. Engagement is up, our followers are up as is involvement, we have since a 30% growth in the last year.

Media relations for industry communications is reaching out to industry related publications such as agriculture, farming, and beekeeping. We send out press releases with news for the industry that we want to get a lot of traction on.

They also provide content to newsletters monthly or quarterly to the American Beekeeping Federation (ABF), American Honey Producers Association (AHPA), magazines and we contribute to PAm's newsletter. The industry newsletter has been in place for about 3 years and subscribership has grown to over 600. We have metrics for this with opens, total clicks and engagements.

One of the most popular events is our Honey Industry Summit which recently has been a great virtual event run by Brightly Creative on behalf of the industry. We take a lot of the content from this event to reach more people through LinkedIn.

Lastly, Martin talked about some of our great tools and resources available to the industry. These include the Honey Locator directory on honey.com and the online store both of which help to share our messaging.

Shook asked with the industry outreach, how is the NHB defining industry and what segment of the industry is outreach most needed for? Martin noted that there is and it varies. There is the board membership, which is a small group. Then there is also a whole other group that impacts what is going on and still have a vested interest. We are trying to reach the entire industry including packers, importers, beekeepers and researchers. The question was asked if there is a unique plan for reaching these different groups as it is vastly different for all of them. Barry said that moving forward the NHB will have different plans for different audiences. Mindy Ryan Tharp Gehring asked about coming together as a group to show the whole spectrum and not just as individual parts of the industry. She also suggested creating a tool kit that could be taken to state meetings and a panel that could share what each group does and what the marketing teams do.

ACTION ITEM V: TO APPROVE THE 2023 BUDGET

Motion by Blake Shook, seconded by Joan Gunter and carried to approve the budget.

Lombard thanked the members that are rotating off the board Michelle Poulk, Joe Sanroma, Alan Turanski, Marin Martin, Andy Sargeantson and Jeff Hull.

UPCOMING MEETINGS

Spring Board Meeting, April 20th & 21st, 2023 in Austin, TX

Fall Board Meeting, October 26th & 27th, 2023 in Boulder, CO

ACTION ITEM VI: TO ADJOURN THE MEETING

Motion by Joan Gunter, seconded by Michelle Poulk to adjourn the meeting at 11:21 am.