



HOWARD MARKLEIN

STATE SENATOR • 17TH SENATE DISTRICT

February 9, 2021

Senate Committee on Agriculture and Tourism Testimony on Senate Bill (SB) 81, SB 82, and SB 83

Thank you committee members for hearing Senate Bill (SB) 81, SB 82, and SB 83, which create truth in food labeling laws to support Wisconsin's agriculture economy and alleviate consumer confusion.

My Senate district is one of the most agriculture-dependent districts in Wisconsin. I consistently hear from farmers that they are growing increasingly frustrated with the number of imitation products that are on the market. Walk into most grocery stores and the "2% Milk" will be sitting right next to the "Soy Milk" and "Almond Milk". Imitation dairy products, such as imitation cheese, butter, and ice cream, are all in close proximity to each other on shelves. In restaurants, the 100% plant-based "Impossible Burger" is listed under the "Hamburger" section of the menu. This is not right.

In fact, the Wisconsin Cheesemakers, Edge Dairy Farmer Cooperative and the Dairy Farmers of Wisconsin recently conducted a study to determine whether consumers know the difference between real cheese and plant-based, imitation "cheese". They found that 48% of people surveyed thought that fake, plant-based "cheese" was actually real cheese!

In response, I have introduced these three bills to tell the truth in food labeling. I want consumers to know what they are buying and eating. I want consumers to know the differences between the real, nutritious products grown and made by our farmers versus the fake, lab-grown, plant-based products that are passing for milk, meat, cheese, ice cream and other dairy products in our state. I want consumers to fully recognize the nutritional differences between real dairy and meat versus imitation food by the same name.

SB 81, the truth in dairy product labeling bill, will ensure that if a package says "cheese" or "yogurt", the product actually has dairy in it. 90% of Wisconsin's milk goes into cheese. It is concerning that many consumers don't know the difference between which products contain milk and which do not. This confusion, oftentimes without the consumer knowing otherwise, hurts Wisconsin's dairy industry. Wisconsin would be the first state to pass a truth in labeling law for dairy products!

SB 82, the truth in meat labeling bill, will make labeling plant-based meat alternatives and cell-cultured meat alternatives as "meat" or a similar term, such as "burger", "sausage", "chicken wing", or "bacon", illegal. This legislation would apply to packaging on products sold in stores, menus in restaurants, and promotional materials.

Similar legislation is now law in at least 11 other states including North Dakota and South Dakota and been introduced in at least a dozen other states including Iowa, Indiana, and Illinois.

SB 83, the truth in milk labeling bill, will ensure that the only products that can be labeled as “milk” come from a cow or other hooved or camelid mammal, such as a goat. Plant-based products would need to be labeled as “drink” or “beverage”. This bill is modeled after similar legislation in North Carolina and Maryland, both of which have passed milk labeling laws in the last two years.

To alleviate interstate commerce concerns and align with the North Carolina and Maryland laws, the milk labeling law would only go into effect after at least 10 out of a group of 15 states pass similar legislation by June 30, 2031. SB 81 includes the multi-state requirement for dairy product labeling, at the request of stakeholders.

I know these bills aren't a silver-bullet that will solve the problems for our ag-economy, but they are something we can do to protect and promote real agriculture products to consumers. These bills will also put pressure on the federal government to take action on existing food labeling regulations that aren't being enforced.

SB 81, SB 82, and SB 83 have broad support from agriculture groups across the state including the Wisconsin Farm Bureau Federation, the Dairy Business Association, the Wisconsin Cheese Makers Association, the Wisconsin Cattlemen's Association, and the Wisconsin Pork Association. Thank you again to the committee for hearing this proposal, and your timely action on the bill.



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Testimony in Favor of "Truth in Food Labeling" Bills (SB 81 and 83)

Thank you, Chair Ballweg and committee members for taking the time to hold a hearing on this important package of bills related to "Truth in Food Labeling" today.

It's no secret that our state's farmers have experienced many challenges over the past five or six years. Too often, we've heard stories of family dairy farms going out of business because they are no longer able to sustain a profitable farming operation. This common-sense package of bills will help consumers know what's in the food they are buying and ultimately help farmers be more successful in the marketplace.

The first bill I would like to discuss is **Senate Bill 81**, relating to the labeling of dairy products such as ice cream, yogurt, butter, and cheese. If a product is labeled as a dairy product, the bill requires that it actually contain dairy in the product. This important legislation will help clear up confusion among consumers, while making sure our state supports its \$46 billion dollar dairy industry. A recent study found that nearly half of consumers thought that imitation, plant-based cheese, was actually real cheese! As a dairy farmer, this was extremely concerning to learn. Not only are consumers unaware of what they are eating, but farmers are struggling to compete with fake, plant-based imitation products. This bill will help provide clarity and transparency to the marketplace.

The second bill I would like to talk about is **Senate Bill 83**, concerning the labeling of milk products. This legislation will require that the only products which can be labeled as "milk," come from a real cow, or other hooved or camelid animal. All plant-based products will have to be labeled "drink" or "beverage." This legislation will help to ease confusion among consumers, while aiding our state's dairy farmers. North Carolina and Maryland have passed comparable legislation to protect their consumers.

Overall, both of these bills will benefit consumers and farmers immensely. The legislation is a simple and common-sense way to help support Wisconsin's dairy industry. To address interstate commerce concerns, Senate Bills 81 and 83 also require that at least 10 other states out of a group of 15, listed in the bill, pass similar legislation by June 30, 2031, before the law becomes enforceable.

Struggling family farms in Wisconsin should not have to compete with deceptively labeled products, and consumers should know exactly what it is they are purchasing. I would like to thank co-author Senator Marklein for his leadership in getting this legislation moving forward this session. It's my hope that the members of this committee will strongly support the "Truth in Food Labeling" bill package. Thank you for taking the time to consider these bills.



State of Wisconsin
Governor Tony Evers

Department of Agriculture, Trade and Consumer Protection
Secretary-designee Randy Romanski

February 9, 2021

FROM: Bradford Steine, Legislative Liaison
Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP)

TO: Senate Committee on Agriculture and Tourism

RE: **Senate Bill 68 Relating to: farmland preservation implementation grants, agreements, and tax credits and making an appropriation.**

Chair Ballweg and members of the Senate Committee on Agriculture and Tourism:

Thank you for the opportunity to submit written testimony in support of Senate Bill 68 (SB 68) relating to farmland preservation implementation grants, agreements, and tax credits. I appreciate the chance to share more information with you on how DATCP works to help preserve this valuable part of our state's heritage and economic well-being.

Overall, DATCP is excited about the many proposals currently circulating in support of Wisconsin agriculture. The Governor's announcement of his agricultural initiatives in the upcoming budget last week was certainly welcome news. The items before the committee today, paired with the Governor's proposed investments in meat processing, local and international markets, soil and water conservation, and farmer mental health programming will further strengthen Wisconsin's agricultural economy. The department looks forward to working with members of this committee and the legislature on the many bi-partisan issues currently before us.

Background:

Wisconsin's farmland preservation program was established in the 1970s. It is administered by DATCP and provides land use tools to help ensure the availability and viability of farmland for current and future generations of farmers. The FPP also protects soil and water by requiring that landowners meet state conservation standards if they wish to claim the annual tax credit. The program also encourages farmers and local governments to work together to promote their local agricultural economy.

County conservation departments play an integral role in the success of Wisconsin's farmland preservation program. Each year, in addition to the statutory obligation to conduct soil and water conservation compliance checks each year, these departments support local efforts to certify new farmland preservation zoning districts and designate new Agricultural Enterprise Areas (AEAs). The increased number of zoning districts and AEAs opens the door for more farmland owners to participate in the farmland preservation program.

Throughout the years, there have been many conversations on how to improve our state's farmland preservation program. The most recent changes were adopted by 2009 Act 28. That law established the current framework of the program by creating a three-tiered system of tax credits:

1. \$5 per acre if land is covered by a farmland preservation agreement and is in an AEA,
2. \$7.50 per acre if land is in a certified farmland preservation zoning district, and
3. \$10 per acre for land that is covered by a farmland preservation agreement, is in an AEA, and a farmland preservation zoning district.

In 2010, approximately 15,700 participants and 2.9 million acres were enrolled in the Farmland Preservation Program. By 2020, these numbers had dropped to under 11,300 participants and 2.2 million acres. In 2018, DATCP distributed a survey to landowners in 14 counties to try to capture individual attitudes about the farmland preservation program. Approximately 84% of survey respondents agreed with the statement “Wisconsin is losing too much farmland to nonfarm development each year.” Despite these responses and the recent declines in participation, survey responses indicate that the farmland preservation program is still valuable for Wisconsin.

Key Program Changes in SB 68:

In an effort to strengthen farmland preservation in Wisconsin and help address landowner concerns, SB 68 would:

- Decrease the minimum required length of a farmland preservation agreement between the department and a farmland owner from 15 years to 10 years.
- Increase the per acre tax credits from \$5 and \$7.50 per acre to \$10 per acre for lands that are covered by a zoning district or in a farmland preservation agreement.
- Increase the per acre tax credit from \$10 per acre to \$12.50 for acres covered by a farmland preservation agreement, is located in an AEA, and in a certified farmland preservation zoning district.
- Add a new category of farmland that qualifies for a \$10 per acre tax credit if that land is located in a farmland preservation plan area, but only for acres covered by an agriculture conservation easement purchased under s. 93.73, Wis. Stats. This provision applies to 17 easements located around the state.
- Allow the per acre tax credit dollars to adjust for inflation over time.
- Allow the department greater flexibility in awarding farmland preservation grants.
 - Currently, the department is only allowed to award planning grants. SB 68 would allow the department to use existing funds not used for planning grants for the purpose of program implementation for entities such as county land and water departments. Program implementation activities include certifying a farmland preservation ordinance for the first time, entering into farmland preservation agreements, designating an Agricultural Enterprise Area, developing a project to facilitate preservation and economic development, monitoring conservation compliance, or targeted program outreach.
 - This provision was also included in DATCP’s September 15, 2020 budget submission. We look forward to working with the committee and members of the legislature this session, and during the budget process on this proposal.

DATCP believes these proposed changes to the farmland preservation program will increase interest in the program, protect our state's farmland, and promote investment in Wisconsin agriculture. We look forward to working with the bill author, members of the committee and the legislature this session.

DATCP is also supportive of the following bills before the committee today:

- [Senate Bill 81](#) relating to: labeling food as a type of dairy product or as a dairy ingredient
- Senate Bill 82 relating to: labeling a food product as meat
- Senate Bill 83 relating to: labeling a food product as a type of milk

Thank you again for the opportunity to testify in support of SB 68. Feel free to reach out to me at (608) 224-5024 or Bradford.Steine1@legis.wisconsin.gov if you have any questions.

Sincerely,

Bradford Steine
Legislative Liaison
Wisconsin Department of Agriculture, Trade and Consumer Protection

DATE: February 9, 2021

TO: Chairperson Ballweg and
Members of the Senate Committee on Agriculture and Tourism

FROM: Debi Towns, Sr. Director of Government Relations
WI Farm Bureau Federation

RE: Support for Senate Bills 81, 82, & 83 – Truth in labeling for Dairy Products, Meat
and Milk

Good morning and thank you for this opportunity to speak on Senate Bills 81, 82, and 83 relating to the labeling of Dairy Products, Meat and Milk, respectively. I will talk about all three in this testimony as the Wisconsin Farm Bureau Federation is supporting all three bills and our rationale is the same for all three bills.

As food producers in an international marketplace, many of our members strive very hard to provide high-quality products which are recognized by that market. Among these products are fluid milk, dairy products originating from milk and meat.

Over decades, Wisconsin farmers have established a reputation in the marketplace, both domestically and internationally, for their products using the accepted definitions of “milk, dairy and meat”. The consumer could rely on these accepted definitions and confidently know that if they were purchasing “milk” it was produced by a mammal and that the label “dairy” meant the product originated with milk. Consumers also knew that if they purchased a product identified as “meat”, it originated from the flesh of animal. Consumers also know these terms are identified with quality & safety but most of all nutritional value.

At Farm Bureau, we are well aware that food product labeling is governed overall at the federal level by the Food & Drug Administration (FDA). The purpose for bringing these bills before the Wisconsin legislature at this time is to encourage Wisconsin to recognize the value of the marketplace trust our farmers have spent years building and join with other states whose food producers also rely on the accepted terminology in the markets as they currently discuss this same issue. We are anticipating that the FDA will need to take up this issue at some point in the future, and when that happens, we would like Wisconsin agriculture to be positioned to join with those who stand to protect the food markets we have worked so hard to establish.



Tuesday, February 9, 2021

Senate Committee on Agriculture & Tourism

Re: Senate Bill 81 - labeling food as a type of dairy product or as a dairy ingredient and granting rule-making authority.

Nick Levendofsky – Government Relations Director, Wisconsin Farmers Union

Chair Ballweg and members of the committees, thank you for the opportunity to submit testimony in support of Senate Bill 81.

Wisconsin Farmers Union's grassroots, member-driven policy reads:

“Wisconsin Farmers Union supports all manufacturer efforts to provide transparency of any and all products and practices along the supply chain, in response to the demand of consumers. The Wisconsin Farmers Union opposes any efforts to deny consumers access to such information or any regulatory efforts to conceal or confuse at any point along the supply chain,” and

“Wisconsin Farmers Union opposes any changes in the FDA definition of milk, cheese or other products made with milk. Wisconsin Farmers Union opposes the use of the word milk to designate any product not derived from mammals.”

Thank you for this opportunity to share Wisconsin Farmers Union's thoughts on this issue.

If you have any questions or concerns, please email me at nick@wisconsinfarmersunion.com or call 608-514-4541.

*Founded in 1930, Wisconsin Farmers Union is member-driver organization that is committed to enhancing the quality of life for family farmers, rural communities and all people through education, cooperation, and legislation.
Learn more at www.wisconsinfarmersunion.com*



February 9, 2021

Senate Committee on Agriculture and Tourism
Testimony in Favor of SB 81, SB 82, SB 83

Good morning. My name is Chad Zuleger and I am associate director of government affairs for the Dairy Business Association. Thank you, Chairwoman Ballweg, Ranking Member Pfaff and committee members, for holding this hearing. DBA supports these bills and appreciates leadership shown by Sen. Marklein, Rep. Tranel and Rep. Moses in authoring this legislation. Additionally, we are grateful for everyone who signed on as co-sponsors.

DBA represents all aspects of the dairy community. Our membership includes dairy farmers, dairy processors and a variety of other businesses that help to make farmers and processors successful in our state. Together, our members produce milk and other dairy products and, of course, every dairy farmer is also a beef producer. This means DBA members are keenly interested in all three of these bills.

The "Truth in Food Labeling" package is meant to promote fairness in the marketplace and ensure that customers have correct information needed to make informed buying decisions. We are not seeking to remove the offending products from the shelves. These products have a certain market share. We do, however, object to allowing them to build their market share by misusing the good name of wholesome and nutritious products that our producers have spent years promoting, while paying into the Milk Marketing Board for this promotion. In jurisdictions that have enforced sensible labeling protections, we have seen that plant-based products continue to do well. For example, in Canada, you will not have a problem finding almond beverages in your local grocery store and, they sell just fine without misappropriating the name milk.

Giving customers good information starts by accurately labeling food products. It is not too much to ask that food products meet the standards of identity reflected by the product's name. Indeed, that seems like the very least we can do. Milk is already very clearly defined in federal law as: "the lacteal secretion, practically free from colostrum, obtained by the complete milking of one or more healthy cows." Imitation products that do not meet this definition should not be allowed to be labeled as "milk." Yet, the federal government has refused to enforce existing law. The problem is similar for other dairy products. For example, existing federal law contains a standard of identity for cheese and it is clear that cheese should be made from milk. However, non-dairy products that label themselves cheese, mozzarella, cheddar and the like are finding their way into grocery stores.

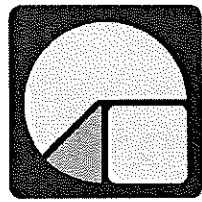
This failure to enforce labeling requirements has gone on far too long. The dairy community has repeatedly voiced concerns, but the Food and Drug Administration has not acted. Customers agree that clarity is needed. According to a 2018 National Tracking Poll, respondents said "milk" should not be used to market non-dairy beverages by over a 2-to-1 ratio. A subsequent survey conducted by IPSOS, a global market research and consulting firm, found that 80 percent of

people believe plant-based beverages should not be labeled as milk. Even a majority of those customers who buy plant-based beverages agreed. People want honest and accurate information on the food they purchase. They need it to make healthy and nutritionally sound food-purchasing decisions for their families. The IPSOS survey also found that more than one-third of customers incorrectly believed that plant-based beverages have the same or more protein than milk when milk actually contains up to eight times as much protein as imitation products.

DBA's affiliated co-op, Edge Dairy Farmer Cooperative, partnered with the Wisconsin Cheese Makers Association and Dairy Farmers of Wisconsin to commission a survey specifically looking at plant-based foods that are meant to mimic cheese. It found that consumer confusion over what these products contain and how they compare nutritionally to real dairy is even greater than in the beverage space. Nearly one-quarter of those surveyed thought the plant-based products contained milk. About half of those shown products meant to imitate mozzarella and cheddar cheese thought the products were real cheese.

When it comes to comparing nutritional value, customers who were surveyed struggled. More than a third thought a plant-based product that imitated mozzarella slices contained protein and calcium. The product actually contains neither. Dairy foods are well-known as an important part of a healthy diet, with milk, cheese and yogurt providing nine key nutrients. The 2015-2020 Dietary Guidelines for Americans concluded that most Americans under-consume dairy and do not get enough of several nutrients, including vitamin D, calcium and potassium.

I urge your support for these bills. They will help protect our dairy and meat industries from being unfairly undermined by misleading labeling practices. They will also help Wisconsinites make informed nutritional choices at the grocery store when faced with a proliferation of imitation products that do not have the same nutrients as those items they attempt to mimic. The federal government's failure to enforce existing standards of identity for milk and other dairy products has made it necessary for states like Wisconsin to act. Their failure to stand up for proper labeling of dairy products also raises concerns about how well they will be able to handle emerging labeling concerns about plant-based products that imitate meat as well as lab-grown cultured tissue. Hopefully, by states taking action regarding meat labeling now, we can prevent the abject failure to protect farmers, processors and customers that has already occurred in the dairy space.



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CHEESE MAKERS
ASSOCIATION**

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**Testimony on Senate Bills 81 and 83
Senate Committee on Agriculture and Tourism
Tuesday, February 9, 2021 | 9:00 a.m.**

Good morning. I am John Umhoefer and I am executive director of the Wisconsin Cheese Makers Association.

For nearly 130 years, WCMA has served as the voice of cheese and dairy manufacturers, processors, and marketers. Today, our organization represents 110 dairy processing companies and cooperatives operating across the United States and around the world, backed by more than 575 companies that supply equipment and services to the industry.

My thanks go to Chairwoman Ballweg, and to the members of the committee for today hearing testimony on Senate Bills 81 and 83 today.

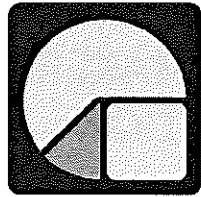
These proposals would ban the labeling of products as milk or as a dairy product or ingredient, if the food is not made from the milk of a cow, sheep, goat, or other mammals.

Words have meaning, and – in the marketplace – they carry weight with consumers.

The U.S. Food and Drug Administration, or FDA, is charged with upholding honesty and fair dealing in the interest of consumers.

And the Food, Drug and Cosmetic Act that FDA enforces requires that labels on packaged food products sold nationwide not be false or misleading in any way.

If a food fails to meet a federal standard of identity – such as those laid out for “mozzarella” or “cheddar”, according to the FDA’s own regulations, it should be prohibited from introduction into interstate commerce.



WISCONSIN CHEESE MAKERS ASSOCIATION

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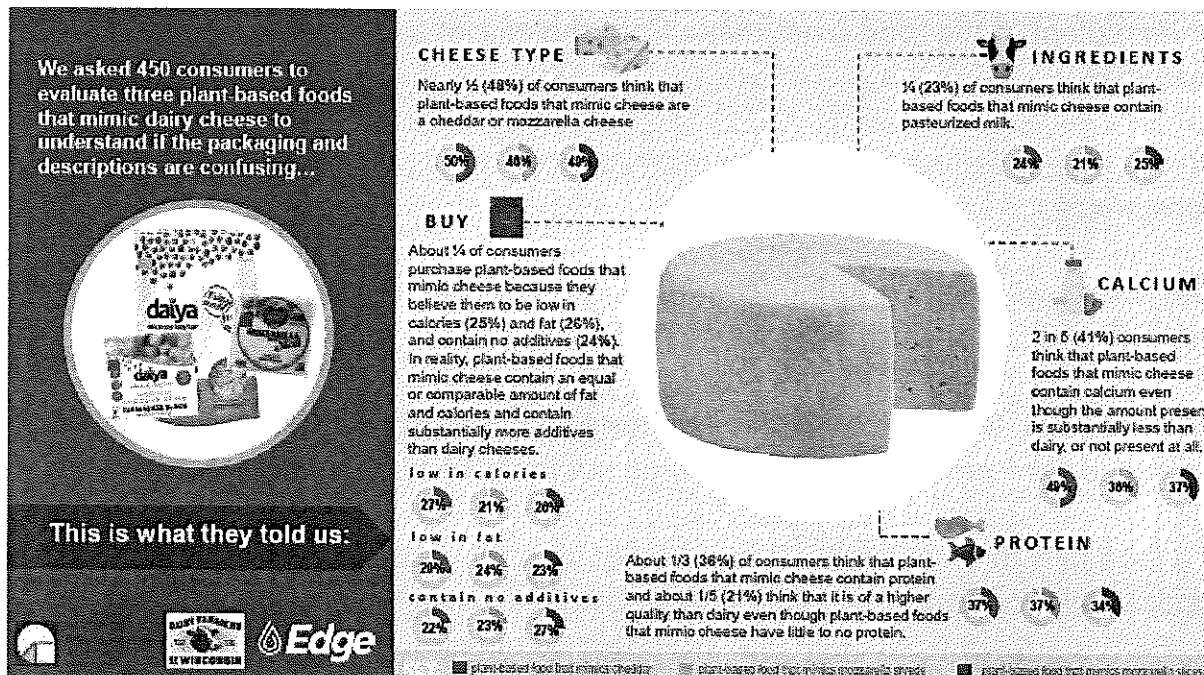
But, the FDA has, thus far, failed to live up to its identity, its role.

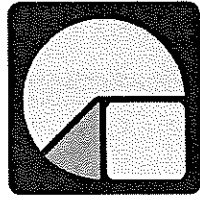
We are grateful that Senator Marklein, Representative Tranel, and so many of you who are leading the charge on protecting the true meaning of words like milk and cheddar and butter as dairy-derived foods.

WCMA members want to be clear - we do not oppose the existence or the sale of plant-based imitations, but as these bills do, we insist that these imitations not be allowed to mislead consumers through false labeling.

Make no mistake, the labels are false and they are misleading.

Wisconsin Cheese Makers Association, Edge Dairy Farmer Cooperative and Dairy Farmers of Wisconsin recently partnered on a consumer research study examining this subject. National consumer research experts at Ravel surveyed 450 consumers identified as purchasers of dairy products, purchasers of plant-based foods that mimic dairy, or buyers of both.





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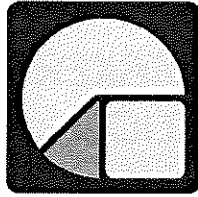
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They asked these consumers about ingredients in real cheese vs. these plant-based products, about nutrients, protein content, overall nutrition, naturalness and buying habits.

What did the study find? Consumers are confused by these plant-based foods that borrow standardized words like cheddar and mozzarella, and display terms like cheese alternative. Consumers are confused about what they're buying, about the nutrition they're expecting and ingredients they never anticipated.

Diving a bit deeper, Ravel reported:

- One quarter of consumers mistakenly indicated that pasteurized milk was present in plant-based foods that mimic cheese and one quarter didn't know what ingredients are in these mimics. The high prevalence of "don't know" and mistaken responses indicates that the use of traditional dairy names such as cheddar and mozzarella confuse consumers, leading to the selection of dairy ingredients in these plant-based foods.
- About one-third of consumers said they "don't know" or they think that the plant-based cheese has higher quality protein, even though the plant-based foods that mimic cheese that these consumers were shown have little to no protein content.
- Significantly more consumers indicate that they would buy one of the plant-based foods that mimic cheese because they are low in calories, low in fat, and contain no additives. In actuality, plant-based foods that mimic cheese contain an equal or comparable amount of fat and calories to dairy cheeses and contain substantially more additives than dairy cheeses.
- About half of consumers say plant-based foods that mimic cheese are actually cheddar or mozzarella cheese. And compared to the dairy cheeses, a significantly higher percentage "don't know" if the plant-based foods are cheddar or mozzarella cheese. Together, these answers indicate more than



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half of consumers surveyed mistook a plant-based food mimicking cheddar or mozzarella to be traditional cheddar or mozzarella or were unclear about applying these traditional cheese names to plant-based foods.

Wisconsin Cheese Makers Association submitted this data to FDA in 2019, imploring the agency to fulfill its statutory requirement to regulate honesty and fair dealing in foods and examine this misuse of standardized dairy names.

As yet, FDA has not acted to enforce its own regulations, and to protect consumers. And so, we ask you to take action.

The bills before you move us toward consumer clarity, and enforcement of dairy names.

They are bipartisan – approved by the Senate Committee on Agriculture and, on a unanimous voice vote, by the full Wisconsin State Assembly in the last legislative cycle.

We welcome that cooperation. We welcome clarity and enforcement. And we welcome this message of leadership from America's Dairyland, the State of Wisconsin. Thank you.

Nasonville Dairy Testimony | Kim Heiman
Senate Committee on Agriculture and Tourism
Tuesday, February 9, 2021 | 9:00 a.m.

Thank you for the opportunity to speak today in support of Senate Bills 81 and 83, to ensure clarity in milk and dairy product labeling.

I am Kim Heiman and, together with my family, I own and operate Nasonville Dairy in Marshfield, Wisconsin.

About Our Businesses

Our family's history in Wisconsin's dairy industry began in 1904, when Peter and Elizabeth Weber began farming in Wood County.

Generations of work led to business growth. My brothers now have 500 Holstein cows at their farm.

Some of their milk is transported to Weber's Farm Store for processing, and the rest is shipped to Nasonville Dairy to be made into cheese.

We also purchase milk from more than 200 other farmers.

Nasonville Dairy produces more than 160,000 pounds of award-winning cheese each day, shipping Cheddar, Colby, Monterey Jack, Asiago, and Feta across the country and around the world.

Need for Labeling Clarity

I am proud to be a Wisconsin cheesemaker, and proud of the products that my colleagues and I make.

Milk and cheese are packed with protein to build muscles, calcium to keep your bones and teeth strong, and essential vitamins and minerals, especially for infants and older adults. These benefits are naturally occurring in cow's milk.

When consumers reach for milk or cheese, they're expecting not only a delicious product, but a nutritious, natural one, as well.

Unfortunately, that's what many of them think when they choose a dairy imitator called "milk" or "cheese" too.

You heard the results of WCMA's study: one-quarter of people buying a dairy imitator think that it contains real dairy milk. Of course, that's not the case. And the products are not delivering the same nutrition.

Plant-based imitators may be fortified in processing, but most cannot come close to comparing, when it comes to protein.

Plant-based imitators often add sugars, to mask off flavors.

Senate Bills 81 and 83

I believe that the U.S. Food and Drug Administration should enforce existing labeling requirements to protect consumers from confusion in the dairy aisle.

Absent action on the federal level, states should intercede.

The bills proposed by Senator Marklein and Representative Tranel shine a light on the issue of consumer confusion and lay out a reasonable plan of action.

I encourage you to approve SB 81 and 83, so that they might be considered by the Senate and Assembly this session.

Thank you.

Klondike Cheese Testimony | Dave Buholzer
Senate Committee on Agriculture and Tourism
Tuesday, February 9, 2021 | 9:00 a.m.

Madam Chair and Members - thank you for the opportunity to speak in support of Senate Bills 81 and 83.

My name is Dave Buholzer, and along with my brothers, I own Klondike Cheese Company in Monroe, Wisconsin. I am a Wisconsin Master Cheesemaker.

It's also my honor to serve as President of the Wisconsin Cheese Makers Association.

About Klondike Cheese Company

Klondike Cheese Company has been making award-winning dairy products in Green County since the late 1800's.

We're known for our Feta, Brick, Muenster, and Havarti, as well as our line of Greek yogurts and yogurt-based dips. You'll find our products commercially available under the Odyssey and Buholzer Brothers brands, and we also market heavily to foodservice and private label businesses.

We've grown steadily through the years, and in 2018, completed a major expansion of our plant facility, with an investment of millions of dollars into the business.

We employ approximately 250 people, and purchase milk from dozens of local farms.

All of our products contain real dairy milk, and we're proud of it.

Real Dairy vs. Plant-Based Imitators

Real, dairy cheese is not only delicious – but also an outstanding source of protein, calcium, vitamins A and B-12, zinc, phosphorus, and riboflavin.

Almond, potato and tapioca starch-based dairy imitators contain little to no protein and can only offer some of those other nutritional benefits if processors include additives.

Make no mistake – these imitators would like for you to think their products are healthier. To some extent, their tactics are working.

WCMA studied this topic, along with Edge Dairy Farmer Cooperative and Dairy Farmers of Wisconsin, and we found that a third of consumers believe plant-based dairy imitators contain protein.

We also learned that 40 percent of consumers believe plant-based products with “cheese” on the label contain calcium – even when they don’t.

Action Needed

In 2018, the U.S. Food and Drug Administration issued a release noting it “has concerns that the labeling of some plant-based products may lead consumers to believe that those products have the same key nutritional attributes as dairy products, even though these products can vary widely in their nutritional content.”

The agency also outlined how this confusion can lead to significant health consequences – contributing to under consumption of key nutrients.

But, the FDA has yet to act, to enforce existing regulations related to the standards of identity for cheese and dairy ingredients.

These proposals, coming from “America’s Dairyland,” stand to send a message to FDA and spark action on the federal level, and to protect consumers in the meantime.

Please join me in supporting Sen. Marklein’s dairy labeling legislation – and in looking closely at the nutritional facts on the products you’re purchasing in the dairy aisle. Thank you.

Kranner, Benjamin

From: Scott Weathers <scottw@gfi.org>
Sent: Monday, February 8, 2021 5:08 PM
To: Sen.Ballweg
Cc: Graham, Amanda; Karbowski, Ben; Rasmussen, Bethany; Specht-Boardman, David
Subject: Testimony on SB 81, 82, and 83

Senator Ballweg,

Please find below GFI's written testimony for SB 81, 82, and 83, which will be heard in the Senate Agriculture & Tourism Committee. Thank you for your time. Please let me know if there is any more information that I can provide.

Sincerely,
Scott Weathers
Senior Policy Specialist, The Good Food Institute

Good morning. I'm Scott Weathers and I represent The Good Food Institute, a nonprofit organization dedicated to using markets and innovation to promote a healthy and sustainable food system. I'm here today to respectfully oppose Senate Bills 81, 82, and 83 and any amended versions of these bills that may appear.

These bills prohibit two kinds of product labels: those that use meat and dairy terms on plant-based products, such as almond milk and veggie burgers, and those that use meat terms on meat grown directly from animal cells, commonly called "cultivated meat."

We oppose these bills for three main reasons. In short, they're unnecessary, they're unconstitutional, and they're bad for businesses and consumers here in Wisconsin. Let me go into detail on each of those points.

First, these bills are solutions in search of a problem. Despite what some might say, consumers aren't confused by plant-based foods. According to the International Food Information Council, over 90% of consumers understand that plant-based milks don't come from cows. People buy products like almond milk and black bean burgers because they know what they are — not because they believe they're something else. It's just common sense. In fact, federal law already prohibits false and misleading food labels, and anybody who's unclear about a product can easily flip the package over and read the ingredient list. It's right there in black and white. These bills suggest that consumers aren't smart enough to know what they're buying, but science and common sense say otherwise.

Second, these bills violate the Constitution. Three states that have passed similar laws have been sued on First Amendment grounds. In 2019, a federal court issued a preliminary injunction preventing enforcement of Arkansas' label censorship law — which sought to limit usage of meat terms on plant-based food labels — because it likely violates the First Amendment. The judge wrote that the plaintiff would "likely prevail" on First Amendment grounds. Simply put, governments cannot restrict commercial speech unless the restriction directly advances a substantial government interest. Here, there's no evidence of consumer confusion, and federal law already requires that the ingredients be listed on the label. Consumer choice — not censorship — should determine winners and losers in the marketplace.

Finally, cultivated meat is indeed meat. Prohibiting the use of meat terms to describe the true nature of the product is misleading and dangerous. A consumer with a beef allergy will react the same way to eating a cultivated beef burger as if he or she ate conventional beef. From a consumer safety standpoint, not describing cultivated meat as “meat” on the label is a non-starter and would put these future consumers at significant risk. The USDA has announced that it will exercise its authority over the labels of cultivated meat. USDA will approve and inspect all cultivated meat labels before any product reaches a store shelf.

Variety is the spice of life, and I believe that there’s room on the plate for both traditional and innovative products here in Wisconsin. With no confusion around almond milk, veggie burgers, or any other plant-based food, and robust federal law on labeling, there’s no need for government restrictions that would both hurt businesses and put consumers in harm’s way. If you pass these labeling laws, which industry will be next to ask you to censor their competitors? I’m sure Barnes & Noble would like a word about “e-books.”

I urge you to vote “No” on Senate Bills 81, 82, and 83 and any amended bills that may appear. Thank you for your consideration.

--
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Stay abreast of all the developments in the alternative protein landscape with GFI’s State of the Industry reports and other market research in our [resource library](#).



To: Members of the Wisconsin State Assembly
Fr: Plant Based Foods Association
Date: February 8, 2021
Re: **Opposition to Wisconsin Senate Bills 81, 82, and 83**

On behalf of the Plant Based Foods Association (PBFA), the trade association representing the plant-based food industry, we submit comments in opposition to Wisconsin Senate Bills 81, 82, and 83, which would restrict plant-based food companies' rights to use commonly understood terms for plant-based alternatives to animal products. As presently drafted, each bill presents a misguided attack on innovation and all food producers' free speech rights to use words and phrases that consumers understand.

PBFA was founded in 2016 to represent a rapidly growing industry comprised of companies producing plant-based meat, egg, and dairy. The association has quickly grown to include more than 180 members, ranging from small start-up food companies to established national brands to ingredient suppliers and restaurants. Many PBFA members make and sell plant-based dairy, including plant-based milks, cheeses, yogurts, and ice cream.

SB 81, SB 82, and SB 83 are unnecessary, unconstitutional, and misguided. Each bill presents an attempt to impose new restrictions on how plant-based companies communicate with their customers, infringing on their First Amendment rights to label their foods with clear, non-misleading terms.

Companies selling plant-based foods use easy-to-understand, clear, and descriptive language on their labels, including words such as "yogurt," "milk," and "sausage" with well-understood qualifiers. Plant-based milk and dairy use qualifiers such as "non-dairy" and "dairy-free," while plant-based meats use language including "meatless" and "meat-free." All segments of the plant-based market can utilize the term "plant-based" to make their labels clear to consumers.

SB 81, SB 82, and SB 83 each present a solution in search of a problem:

- Under SB 81: *"no person may label a food product as, or sell or offer for sale a food product that is labeled as, a type of dairy product, such as cream, yogurt, or cheese, unless the food product is a dairy product."* **SB 81 is an unnecessary and unconstitutional restriction on plant-based dairy products.**
- Under SB 82: *no person may label a food product as, or sell or offer for sale a food product that is labeled as, any type of meat product or "meat" unless the food product is derived from an edible part of the flesh of an animal or any part of an insect and does not include cultured animal tissue that is produced from animal cell cultures.* **SB 82 is an unnecessary and unconstitutional restriction on plant-based meat products.**
- Under SB 83: *"no person may label a food product as, or sell or offer for sale a food product that is labeled as, any type of milk unless the food product is cow's milk or hooved or camelid mammal's milk or a type of milk that meets certain specifications under federal law."* **SB 83 is an unnecessary and unconstitutional restriction on plant-based milk.**

Unnecessary

Consumers are not confused about plant-based foods. They purposefully seek out plant-based options for various personal reasons, including taste, health benefits, environmental impact, and animal welfare.

Consumers buy these products specifically because they are **not** traditional milk, dairy, or meat. Accordingly, these bills are unnecessary and would inject confusion into the marketplace by requiring changes to labels that consumers have long understood. The bill would ultimately harm consumers by causing disruption and fewer options in the market at a time when consumer tastes are rapidly changing.

PBFA and its members are committed to clear labels for their foods; labels that make it easy for Wisconsin consumers to identify and choose the foods they are seeking. PBFA has an active Standards Committee, which has released voluntary labeling guidelines for plant-based milks, meats, and yogurt. The association is currently working on similar standards for other dairy categories such as cheese.

In addition, PBFA maintains a robust third-party certification with NSF for food companies to obtain the “Certified Plant Based” stamp. Compliance with this program ensures that products are free of any animal ingredients. Dozens of products made by PBFA members and non-members alike have already either been certified or are currently going through the process of getting approved. PBFA has also incorporated our voluntary standards into the Certified Plant Based assessment. In other words, all relevant products that are approved for the Certified Plant Based seal will also need to comply with PBFA’s voluntary standards for the relevant category.

Unconstitutional

Our members are in full compliance with current FDA requirements. Attempts to impose new restrictions such as these run afoul of First Amendment protections allowing companies to label their foods with clear, non-misleading terms. Because the First Amendment prevents the government from restricting the free flow information to consumers except in extremely narrow circumstances, laws such as proposed in SB 81, 82, and 83 are unlikely to withstand constitutional scrutiny.

For example, an Ohio law that precluded use of word “butter” in labeling or advertising any product that was made in imitation of or substitute for butter, without regard to whether such use was misleading, was ruled unconstitutional. *Lever Bros. Co. v. Maurer*, 712 F. Supp. 645 (S.D. Ohio 1989). Likewise, a Washington law prohibiting use of dairy terms in advertising margarine was deemed *per se* violative of the First Amendment. *Anderson, Clayton & Co. v. Washington State Dep’t of Agric.*, 402 F. Supp. 1253 (W.D. Wash. 1975). In recent years, the Supreme Court has affirmed and re-affirmed that these types of restrictions are unconstitutional.

As such, each recent instance of such speech-restrictive legislation has been subject to legal challenge by a coalition of plaintiffs including some combination of PBFA, PBFA company members, the American Civil Liberties Union, the Institute for Justice, and the Good Food Institute.

To the mitigate risk of litigation, at minimum, instead of banning terms outright, SB 81, 82, and 83 should be amended to allow use of qualifying terms – consistent with the above mentioned PBFA labeling standards for plant-based meat and dairy – as several states have recently done.

For example:

- In 2019, the Wyoming legislature added this language to their resulting law: “... *shall ... clearly label plant based products as "vegetarian", "veggie", "vegan", "plant based" or other similar term indicating that the product is plant based.*”



- In 2018, the Missouri Department of Agriculture released the following guidance describing how the agency will accept the labeling of plant-based meat alternatives: “*Prominent statement on the front of the package, immediately before or immediately after the product name, that the product is “plant-based,” “veggie,” or a comparable qualifier...*”.
- In September 2019, Mississippi Department of Agriculture enacted regulations that state in part: “...one or more of the following terms, or a comparable qualifier, is prominently displayed on the front of the package: “meat free,” “meatless,” “plant-based,” “veggie based,” “made from plants,” “vegetarian,” or “vegan.”

Misguided

Finally, and unfortunately, this bill does nothing to help Wisconsin. Plant-based food companies present a tremendous opportunity for American farmers. By working to rig the system against the plant-based foods industry, these bills hinder the potential for farmers to benefit from this exponentially growing segment. While it may be easy to blame the problems farmers face on the plant-based foods industry, it is neither helpful nor accurate and a disservice to farmers.

Competing industries must not be allowed to stifle the exponential growth of plant-based food to further their agendas. It is time for the meat and dairy lobby to move on and address the real, fundamental structural and economic problems facing America’s farmers.

The Wisconsin Senate should reject Senate Bills 81, 82, and 83 on the grounds that they are not sound public policy; instead, the bills put the government in the position of picking winners and losers in the market. Each bill is a direct attack on our members’ First Amendment rights to communicate using terms that have been accepted as the common and usual names for more than 30 years without confusion.

APBI

THE ALLIANCE FOR PLANT BASED INCLUSION

February 8, 2021

To: Members of the Senate Committee on Agriculture & Tourism

Re: Opposition to SB 81, SB 82, SB 83

The Alliance for Plant Based Inclusion (APBI) must oppose the legislation noted above. These bills as drafted would unfairly and unnecessarily restrict how the makers of plant-based foods use common and usual terms to describe their products.

APBI, a coalition of the world's largest plant-based food companies is focused on ensuring policies around plant-based foods afford consumers the greatest choice, clarity, and flexibility in the marketplace. APBI supports clear and transparent marketing and labeling for plant-based foods, including allowing the use of traditional meat, dairy and seafood terms and indicators, as long as the products are clearly labeled as plant-based, or with a similar easily understood reference.

The Alliance opposes these bills because they are solutions in search of problems and will only serve to confuse rather than inform. Our companies already clearly indicate on their labels that their alternative dairy and meat products are plant-based, vegan, vegetarian, or they utilize other equivalent terms that have been understood and commonly accepted by consumers for more than 30 years. Alliance member companies want to make it clear to shoppers what it is they are buying because their successes are built upon years of trust between their brands and consumers.

Some states have enacted legislation addressing labeling of alternative protein products. However, in nearly every case, those states made allowances for the use of qualifying terms to identify them and the legislation was passed without opposition from plant-based food manufacturers.

We believe there is room in the market for everyone and that governments should not be in the position of picking winners and losers within an industry. Alliance members feel strongly that labels using terms that consumers understand is the best way to inform them while avoiding the need for government intervention.

We must respectfully oppose SB 81, SB 82 and SB 83 as introduced.

We would be happy to discuss this with the members of the Agriculture & Tourism Committee, please feel free to contact Dan Colegrove at (202) 329 – 6242 or at dc@prismgroup.global.



TO: Members of the Wisconsin Senate Committee on Agriculture & Tourism
FROM: Upfield US, Inc.
DATE: February 9, 2021
RE: Senate Bill 081, relating to labeling as a type of dairy product or as a dairy ingredient and granting rule-making authority

On behalf of Upfield US, Inc., we are writing to respectfully express our opposition to the legislative proposal being heard today, SB-081, that would prohibit a food for offer or sale to be labeled as a type of dairy product unless the food product is a dairy product.

Upfield strongly believes that this proposal is not in the best interests of Wisconsin retailers or consumers who are increasingly embracing plant-based foods for health, dietary, sustainability and ethical reasons. Consumers are knowledgeable about plant-based foods and benefit from truthful labeling of plant-based foods with recognizable terms that gives them information to make clear choices. We moreover believe that this proposal is inconsistent with the right provided under the First Amendment to use dairy terms on plant-based food product labels, as long it is done in a consistently non-misleading way.

Upfield is the largest producer of plant-based spreads, plant butters and, most recently, vegan cheese, in the U.S., with iconic brands that include *Country Crock*®, *I Can't Believe It's Not Butter!*®, *Imperial*®, *Brummel & Brown*® and *Violife*®. We are committed to ensuring clear and accurate labeling of our products consistent with applicable federal and Wisconsin law.

Our comments reflect the fact that consumers today are seeking more plant-based foods. Consumers can read and understand product labels that identify the basic nature and function of foods derived from plants, and that clear labeling has promoted honesty and fair dealing in the best interests of consumers.

Plant-based alternatives to traditional dairy-based butter and milk have long existed in the marketplace to provide consumers with products similar to traditional dairy-based products in taste, texture, and function, but without the dairy. This appeals to consumers

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who may struggle with allergies or other dietary restrictions, and these products often provide a different dietary profile in regard to calories and saturated fat.

Companies ranging from start-ups to larger corporations with long-standing plant-based alternatives are increasingly entering the market with various types of plant-based alternatives to traditional dairy-based butter to satisfy consumer demand. Upfield's plant-based products include our traditional vegetable oil spreads and newer plant butters that come in both stick and tub formats made with a variety of plant-based oils such as soybean oil, coconut oil, canola oil, avocado oil, olive oil, and sunflower oil.

The food industry today is evolving and continuously innovating. New production capabilities, ingredient accessibility, and food science innovation have put more new foods derived from and supporting agricultural products such as plants, nuts, fruits, seeds, and beans on store shelves and in homes as consumers expand their dietary choices and food preferences to include more plant-based options.¹ Recent surveys of plant-based food trends show increased mainstream adoption. For example, a 2017 Nielsen Homescan survey found that 39% of Americans are actively trying to eat more plant-based foods.

Consumers can now readily choose plant butter, plant milks and vegan cheese products that do not contain any animal-derived ingredients. We believe that these products can be described in truthful and non-misleading ways including as "plant-based spread" or "plant butter" and "vegan cheese", clearly distinguishing them from the traditional dairy product.

Upfield believes that plant-based food products can lawfully be labeled with names that use clear terms such as "plant-based," "plant," "vegan" and "dairy free" to modify traditional dairy terms such as "butter", "milk" and "cheese." We believe that such modified names clearly convey the nature of the product while distinguishing it from the traditional dairy-based product, leaving no likelihood of consumer confusion.

Wisconsin itself has recognized this proposition. Wisconsin Statute Secs.100.36 and 97.01(1r) have long supported the use of the term "butter" in association with the sale or exposure for sale or advertisement of any substance designed to be used as a

¹ A consumer survey conducted by the International Food Information Council (IFIC) showed that nearly 75% of consumers surveyed had heard of plant-based diets and nearly 50% of consumers surveyed stated they wanted to learn more about plant-based diets. IFIC, 2019 Food & Health Survey (May 2019), available at: <https://foodinsight.org/wp-content/uploads/2019/05/IFIC-Foundation-2019-Food-and-Health-Report-FINAL.pdf>.

substitute for butter, provided that the use of the dairy term, butter, be qualified so as to distinguish it from dairy butter.

Our goal at Upfield is to put products on shelves for consumers interested in a plant-based diet by helping them identify foods that are alternatives to the traditional food and making plant-based foods delicious, affordable, and recognizable.

For these reasons, we respectfully oppose SB-081. We are happy to answer questions or provide further detail about our position, our products, and our belief in the power of plant-based food.

Sincerely,

Kyra Lindemann

Kyra Lindemann
Head, Corporate Affairs and Communications
Upfield North America



Ravel

CLARITY FROM CHAOS

STUDY ON DAIRY CHEESE AND PLANT-BASED FOODS THAT MIMIC CHEESE

QUANTITATIVE REPORT | JANUARY 17, 2019
Privileged and Confidential

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BACKGROUND

Three dairy industry organizations, Wisconsin Cheese Makers Association, Edge Dairy Farmer Cooperative (representing dairy farmers and processors from across the Midwest) and Dairy Farmers of Wisconsin (the Dairy Groups) would like to understand how consumers perceive plant-based foods that mimic dairy products. These organizations represent dairy farmers and processors from across the Midwest.

The prevalence of plant-based foods that mimic dairy products continues to increase. Some of these plant-based foods use terms such as milk, cheese alternative, cheddar/gouda-style, etc. that may be misleading to the consumer. Further, natural cheeses have traditional names with federal standards of identity which describe ingredients and preparation processes that plant-based foods cannot adhere to (i.e. a plant-based food cannot meet the milkfat required in cheddar cheese). To ensure consumers understand the products they are purchasing and consuming, it is important to understand how they currently perceive plant-based foods that mimic dairy products, and what labeling modifications can or should be made to ensure consumers understand the products they are purchasing and consuming.

OBJECTIVES

The Dairy Groups want to understand:

- Why consumers purchase plant-based foods that mimic cheese.
- What consumers believe the ingredients of plant-based foods that mimic cheese are, and if that is influenced by the terminology/labeling (i.e. 'milk', 'cheese', 'cheddar-style').
- Consumer perception of the nutritional value of plant-based foods that mimic cheese compared to dairy, and if perceptions are influenced by the terminology/labeling (i.e. 'milk', 'cheese', 'cheddar-style').
- How consumers perceive plant-based foods that mimic cheese perform in various eating and cooking tasks (vs. dairy).

METHODOLOGY

A 15-minute online survey was completed among a national U.S. sample of consumers ages 18 and older.

- Respondents who reported that they purchased a dairy product (cheese, milk, or yogurt) and/or a plant-based food that mimics dairy (plant-based cheese made without dairy, plant-based milk, or plant-based yogurt made without dairy milk) within the last 4 weeks qualified for the study. This purchase history is available in Appendix Table A.
- Consumers determined to be employed in a competitive industry were excluded from the study. These industries included: consumer packaged goods; food manufacturer, retailer, wholesaler, retailer, or advocacy organization; marketing, market research, advertising, or public relations; regulatory agency related to food (e.g. FDA, USDA, FTC); and agriculture.
- Ravel, LLC programmed the survey and hosted the data collection using Confront software tools.



- Ravel, LLC partners with select, proven national online panels to provide quality targeted samples.
- Data collection period was December 21, 2018 through December 30, 2018 and paused for the holiday on December 24 and December 25.
- Ravel, LLC promoted data quality by ensuring that questions were reasonable and engaging for respondents.
- At the completion of the survey, data cleaning steps were employed to reduce sampling error:
 - Eliminated respondents who stated they could not see the images
 - Eliminated respondents who fell outside of time completion parameters (i.e. completed the survey too quickly).

PRODUCTS EVALUATED

DAIRY CHEESES



Dairy Cheddar



Dairy Mozzarella Shreds



Dairy Mozzarella Slices

PLANT-BASED FOODS THAT MIMIC CHEESE



Plant-based food that mimics cheddar



Plant-based food that mimics mozzarella shreds



Plant-based food that mimics mozzarella slices



EXECUTIVE SUMMARY

Ingredients

Over one-quarter of consumers indicated that they don't know what ingredients are in the plant-based foods that mimic cheese (Table A). Furthermore, about one-quarter mistakenly indicated that pasteurized milk was present. The high prevalence of 'don't know' and mistaken responses perhaps indicates that the use of traditional dairy names such as cheddar and mozzarella confuse consumers, leading to the selection of dairy ingredients in these plant-based foods.

Nutrients

About one-third of consumers indicate that the plant-based food that mimics mozzarella slices has protein (34%) and calcium (37%), when in actuality it does not contain either of these nutrients (Table B).

A significantly greater percentage of consumers indicate that they don't know which nutrients are in the plant-based foods, perhaps indicating that the front labeling does not clearly reveal the product nutrients (Table B).

Cheese Type

About half of consumers say plant-based foods that mimic cheese are actually cheddar or mozzarella cheese (Table C). And compared to the dairy cheeses, a significantly higher percentage don't know if the plant-based foods are cheddar or mozzarella cheese.

Together, these answers indicate more than half of consumers surveyed mistook a plant-based food mimicking cheddar or mozzarella to be traditional cheddar or mozzarella or were unclear about applying these traditional cheese names to plant-based foods.

Nutrition

A statistically greater percentage of all consumers surveyed believe that dairy cheese is more nutritious than plant-based food that mimics cheese, versus consumers who believe the opposite (Table D). However, this varies by food type purchased. Consumers who purchase plant-based foods that mimic cheese are significantly more likely to believe that these foods are more nutritious than dairy cheese (Table E).

Protein

About one-third of consumers don't know or think that the plant-based cheese has higher quality protein, even though plant-based foods that mimic cheese have little to no protein content (Table F). The prevalence of consumers who don't know or mistakenly identify the higher quality protein food may be an indication that the use of traditional dairy names such as cheddar and mozzarella confuses consumers, leading to the expectation of significant amounts of high quality protein in these plant-based foods.

The percentage of consumers who indicate that the plant-based foods have higher quality protein is significantly greater among plant-based food purchasers (Table G), perhaps indicating



that they believe their food choice is providing an adequate protein source, when in actuality plant-based foods that mimic cheese contain little to no protein.

Natural

A statistically greater percentage of consumers believe that dairy cheese is more natural than plant-based foods that mimic cheese (Table H). However, this varies by food type purchased. Consumers who purchase plant-based foods that mimic cheese are significantly more likely to believe that these foods are more natural than dairy cheese (Table I).

Substitute

About one in five consumers do not believe that dairy cheese and plant-based food that mimics cheese are good substitutes for each other (Table J). Dairy cheese consumers are significantly more likely than plant-based dairy consumers to believe that plant-based foods that mimic cheese cannot be substituted for dairy cheese (Table K).

Buy

Almost one in five dairy purchasers said they would buy a plant-based food based on the front label, even though these consumers do not purchase plant-based dairy products (Table L). This may indicate that plant-based food labels do not clearly indicate the non-dairy nature of these foods, or the use of traditional dairy names such as cheddar and mozzarella confuses consumers, leading to the selection of these plant-based foods.

Some of the reasons consumers purchase plant-based foods that mimic cheese do not correlate with the product. Specifically, significantly more consumers indicate that they would buy one of the plant-based foods that mimic cheese because they are low in calories, low in fat, and contain no additives (Table M). In actuality, plant-based foods that mimic cheese contain an equal or comparable amount of fat and calories and contain substantially more additives than dairy cheeses.



INGREDIENTS

Consumers were asked to identify the ingredients of three dairy cheeses and three plant-based foods that mimic cheese based on the front packaging of the product. Options available to consumers included the most common ingredients of both dairy cheese and plant-based food that mimics cheese.

About one-quarter of consumers were able to correctly identify the ingredients of the plant-based foods that mimic cheese (Table A). However, over one-quarter of consumers, significantly more than in the dairy cheese products, indicated that they don't know what ingredients are in the plant-based foods that mimic cheese. Furthermore, about one-quarter mistakenly indicated that pasteurized milk was present. The high prevalence of 'don't know' and mistaken responses perhaps indicates that the use of traditional dairy names such as cheddar and mozzarella confuse consumers, leading to the selection of dairy ingredients in these plant-based foods.

Table A: INGREDIENTS

Based on what you see, which ingredients do you believe are included in this food?	Dairy cheddar	Dairy mozzarella shreds	Dairy mozzarella slices	Plant-based food that mimics cheddar	Plant-based food that mimics mozzarella shreds	Plant-based food that mimics mozzarella slices
	n=450 A (%)	n=450 B (%)	n=450 C (%)	n=450 D (%)	n=450 E (%)	n=450 F (%)
DAIRY CHEESE INGREDIENTS						
Pasteurized milk	68 DEF	69 DEF	69 DEF	24	21	25
Cheese culture	62 DEF	63 DEF	62 DEF	31	30	32
Enzymes	27 EF	28 EF	27 EF	24	22	22
PLANT-BASED INGREDIENTS						
Filtered water	23	24	24	26	29 ABC	27
Modified Food Starch	18	15	16	19	21 BC	20 B
Canola and/or Safflower oil	14	12	12	22 ABC	19 ABC	20 ABC
Potato Starch	10	9	9	18 ABC	18 ABC	18 ABC
Pea protein	10	9	8	18 ABC	20 ABC	17 ABC
Coconut oil	9	9	10	17 ABC	17 ABC	16 ABC
Tapioca	6	6	7	11 ABC	13 ABC	12 ABC
OTHER						
Salt	52 BDEF	47 DEF	50 DEF	38	37	38
Other	0	1	0	1	1	1
Don't know	8	9	9	26 ABC	27 ABC	27 ABC

Notes:
Data in each column may not add up to 100% as consumers could choose more than one response.
A/B/C/D/E/F indicates significance, significance is tested at the 95% confidence level.



NUTRIENTS

Consumers were asked to identify the nutrients contained in three dairy cheeses and three plant-based foods that mimic cheese, based on the front packaging of the product. Options available to consumers included macronutrients (i.e. fat, carbohydrate, protein) and the micronutrients listed on the ingredient label of the products.

Dairy cheese and plant-based food that mimic cheese tend to have similar nutrients which primarily include fat, carbohydrates, proteins, and calcium. However, the quantity of these nutrients varies by product. Generally, dairy cheese is higher in fat, protein and calcium and plant-based food that mimics cheese is higher in carbohydrates.

The percentage of consumers who expect these nutrients to be present varies by food type and by nutrient (Table B). A significantly greater percentage of consumers indicated that the dairy cheeses contain protein and calcium. However, about one-third of consumers indicated that the plant-based food that mimics mozzarella slices has protein (34%) and calcium (37%) when in actuality it does not contain either of these nutrients.

The plant-based foods that mimic cheddar and mozzarella shreds do contain protein (1g), but at a much lower level than dairy cheddar (6g) and dairy mozzarella shreds (7g). The plant-based food that mimics mozzarella shreds has a much lower level of calcium (2% DV) than dairy mozzarella shreds (15% DV), and the plant-based food that mimics cheddar contains 10% DV calcium (from tricalcium phosphate) vs. 15 % DV natural-occurring calcium in dairy cheddar.

A significantly greater percentage of consumers indicated they don't know which nutrients are in the plant-based foods, perhaps indicating that the front labeling does not clearly reveal the product nutrients.

Table B: NUTRIENTS

Based on what you see, which <u>nutrients</u> do you believe are included in this food?	Dairy cheddar	Dairy mozzarella shreds	Dairy mozzarella slices	Plant-based food that mimics cheddar	Plant-based food that mimics mozzarella shreds	Plant-based food that mimics mozzarella slices
	n=450 A (%)	n=450 B (%)	n=450 C (%)	n=450 D (%)	n=450 E (%)	n=450 F (%)
Calcium	65 DEF	65 DEF	64 DEF	49 EF	36	37
Vitamin D	47 DEF	48 DEF	49 DEF	30	31	32
Protein	47 DEF	46 DEF	44 DEF	37	37	34
Carbohydrate	25 D	25 D	23	20	21	21
Fat	44 BDEF	38 DEF	42 BDEF	27 E	23	26
Vitamin A	27 EF	27 EF	26	24	22	23
Vitamin C	25 DE	23	26 DEF	20	20	21
Iron	22 DEF	21 E	20 E	18	16	18
Potassium	21 D	19	21 F	19	18	17
Don't know	10	11	11	23 ABC	30 ABCD	30 ABCD

Notes:
Data in each column may not add up to 100% as consumers could choose more than one response.
A/B/C/D/E/F indicates significance, significance is tested at the 95% confidence level.



CHEESE TYPE

Consumers were asked if the food they evaluated is a cheddar or mozzarella cheese based on the front packaging of the product and the most relevant cheese type.

Nine in ten consumers correctly identify the dairy cheeses as a cheddar or mozzarella cheese (Table C; 91% dairy cheddar, 90% dairy mozzarella shreds, 92% dairy mozzarella slices).

About half of consumers identify the plant-based foods that mimic cheese as a cheddar or mozzarella cheese. And, a significantly higher percentage, versus the dairy cheeses, don't know. Together, these answers indicate more than half of consumers surveyed mistook a plant based food mimicking cheddar or mozzarella to be traditional cheddar or mozzarella or were unclear about applying these traditional cheese names to plant-based foods.

Table C: Cheese Type

Is this a cheddar/mozzarella cheese?	Dairy cheddar	Dairy mozzarella shreds	Dairy mozzarella slices	Plant-based food that mimics cheddar	Plant-based food that mimics mozzarella shreds	Plant-based food that mimics mozzarella slices
	n=450 A (%)	n=450 B (%)	n=450 C (%)	n=450 D (%)	n=450 E (%)	n=450 F (%)
Yes	91 DEF	90 DEF	92 DEF	50 E	46	49
No	4	4	4	42 ABC	45 ABCDF	42 ABC
Don't know	5	6	4	8 AC	8 AC	9 ABC

Notes:
Data in each column may not add up to 100% due to rounding.
A/B/C/D/E/F indicates significance, significance is tested at the 95% confidence level.



NUTRITION

Consumers were asked if the food they evaluated is more nutritious, less nutritious, or equally as nutritious as the corresponding food (i.e., paired together were dairy cheddar and plant-based food that mimics cheddar; dairy mozzarella shreds and plant-based food that mimics mozzarella shreds; and dairy mozzarella slices and plant-based food that mimics mozzarella slices). The food shown first was randomized to minimize potential bias.

A statistically greater percentage of all consumers surveyed believe that dairy cheese is more nutritious than plant-based food that mimics cheese (Table D). However, this varies by food type purchased. Consumers who purchase plant-based foods that mimic cheese are significantly more likely to believe that these foods are more nutritious than dairy cheese (Table E).

Table D: NUTRITION

Based on what you see, do you believe Food A is more nutritious, less nutritious, or equally as nutritious as Food B?	Dairy cheese is more nutritious	Equally nutritious	Plant-based food is more nutritious
	n=450 A (%)	n=450 B (%)	n=450 C (%)
Cheddar	37 C	38 C	25
Mozzarella shreds	37 C	43 C	20
Mozzarella slices	33 C	44 AC	23

Notes:

Data in each row may not add up to 100% due to rounding.
A/B/C indicates significance, significance is tested at the 95% confidence level.



Table E: NUTRITION BY FOOD GROUP

Based on what you see, do you believe Food A is more nutritious, less nutritious, or equally as nutritious as Food B?	Total Sample n=450 (%)	Dairy Purchasers n=250 A (%)	Dairy and plant-based food purchaser n=150 B (%)	Plant-based food purchaser n=50* C (%)
CHEDDAR				
Dairy cheese is more nutritious	37	42 C	33	26
Equally nutritious	38	39 C	43 C	20
Plant-based food is more nutritious	25	19	24	54 AB
MOZZARELLA SHREDS				
Dairy cheese is more nutritious	37	44 BC	33 C	18
Equally nutritious	43	43	47	36
Plant-based food is more nutritious	20	14	21	46 AB
MOZZARELLA SLICES				
Dairy cheese is more nutritious	33	40 BC	25	20
Equally nutritious	44	43	49 C	30
Plant-based food is more nutritious	23	17	25 A	50 AB

Notes:

Data in each column may not add up to 100% due to rounding.

*Indicates small sample size.

A/B/C indicates significance, significance is tested at the 95% confidence level.



PROTEIN

Consumers were asked which of two corresponding foods (i.e., paired together were dairy cheddar and plant-based food that mimics cheddar; dairy mozzarella shreds and plant-based food that mimics mozzarella shreds; and dairy mozzarella slices and plant-based food that mimics mozzarella slices) they expect to have a higher quality protein content. The food shown first was randomized to minimize potential bias.

A statistically greater percentage of consumers believe that dairy cheese has a higher quality protein content than plant-based food that mimics cheese (Table F).

About one-third of consumers don't know or think that the plant-based food has higher quality protein, even though plant-based foods that mimic cheese have little to no protein content. The prevalence of consumers who don't know or mistakenly identify the higher quality protein food may be an indication that the front labeling of the plant-based foods does not clearly indicate the non-dairy nature of these foods, or the use of traditional dairy names such as cheddar and mozzarella confuses consumers, leading to the expectation of significant amounts of high quality protein in these plant-based foods.

The percentage of consumers who indicate that the plant-based foods have higher quality protein is significantly greater among plant-based food purchasers (Table G), perhaps indicating they believe their food choice is providing an adequate protein source, when in actuality plant-based foods that mimic cheese contain little to no protein.

Table F: PROTEIN

Proteins may vary in nutritional quality. Based on what you see, how do you expect the protein in Food A to compare to the protein in Food B?	Dairy cheese has higher quality protein	The protein is of the same quality	Plant-based food has higher quality protein	Don't know
	n=450 A (%)	n=450 B (%)	n=450 C (%)	n=450 D (%)
Cheddar	34 CD	31 CD	21 D	14
Mozzarella shreds	32 CD	34 CD	20	15
Mozzarella slices	32 CD	33 CD	21 D	14

Notes:
Data in each row may not add up to 100% due to rounding.
A/B/C/D indicates significance, significance is tested at the 95% confidence level.



Table G: PROTEIN BY FOOD GROUP

Proteins may vary in nutritional quality. Based on what you see, how do you expect the protein in Food A to compare to the protein in Food B?	Total Sample n=450 (%)	Dairy Purchasers n=250 A (%)	Dairy and plant-based food purchaser n=150 B (%)	Plant-based food purchaser n=50* C (%)
CHEDDAR				
Dairy cheese has higher quality protein	34	39 C	31	20
The protein is of the same quality	31	28	35	32
Plant-based food has higher quality protein	21	16	23	38 A
Don't know	14	18 B	10	10
MOZZARELLA SHREDS				
Dairy cheese has higher quality protein	32	36 C	33 C	12
The protein is of the same quality	34	33	36	30
Plant-based food has higher quality protein	20	13	23 A	42 AB
Don't know	15	18 B	8	16
MOZZARELLA SLICES				
Dairy cheese has higher quality protein	32	35 C	31	20
The protein is of the same quality	33	31	38	28
Plant-based food has higher quality protein	21	16	24 A	42 AB
Don't know	14	19 B	7	10

Notes:

Data in each column may not add up to 100% due to rounding.

*Indicates small sample size.

A/B/C indicates significance, significance is tested at the 95% confidence level.



NATURAL

Consumers were asked if the food they evaluated is more natural, less natural, or equally as natural as the corresponding food (i.e. paired together were dairy cheddar and plant-based food that mimics cheddar; dairy mozzarella shreds and plant-based food that mimics mozzarella shreds; and dairy mozzarella slices and plant-based food that mimics mozzarella). The food shown first was randomized to minimize potential bias.

A statistically greater percentage of consumers believe that dairy cheese is more natural than plant-based foods that mimic cheese (Table H). However, this varies by food type purchased. Consumers who purchase plant-based foods that mimic cheese are significantly more likely to believe that these foods are more natural than dairy cheese (Table I).

Table H: NATURAL

Looking at the labels of Food A and Food B, would you consider Food A more natural, less natural, or equally natural as Food B?	Dairy cheese is more natural	Equally natural	Plant-based food is more natural
	n=450 A (%)	n=450 B (%)	n=450 C (%)
Cheddar	38 C	36 C	26
Mozzarella shreds	40 C	38 C	22
Mozzarella slices	37 C	38 C	25

Notes:
Data in each row may not add up to 100% due to rounding.
A/B/C indicates significance, significance is tested at the 95% confidence level.



Table I: NATURAL BY FOOD GROUP

Looking at the labels of Food A and Food B, would you consider Food A more natural, less natural, or equally natural as Food B?	Total Sample n=450 (%)	Dairy Purchasers n=250 A (%)	Dairy and plant-based food purchaser n=150 B (%)	Plant-based food purchaser n=50* C (%)
CHEDDAR				
Dairy cheese is more natural	38	47 BC	30	22
Equally natural	36	33	41	34
Plant-based food is more natural	26	20	29	44 A
MOZZARELLA SHREDS				
Dairy cheese is more natural	40	50 BC	27	28
Equally natural	38	38	41	28
Plant-based food is more natural	22	12	31 A	44 A
MOZZARELLA SLICES				
Dairy cheese is more natural	37	46 BC	29	22
Equally natural	38	34	43	38
Plant-based food is more natural	25	20	28	40 A

Notes:

Data in each column may not add up to 100% due to rounding.

*Indicates small sample size.

A/B/C indicates significance, significance is tested at the 95% confidence level.



SUBSTITUTE

Consumers were asked if the food they evaluated is a good substitute for the corresponding food (i.e. paired together were dairy cheddar and plant-based food that mimics cheddar; dairy mozzarella shreds and plant-based food that mimics mozzarella shreds; and dairy mozzarella slices and plant-based food that mimics mozzarella slices). Approximately half of consumers were asked if a dairy cheese is a good substitute for a plant-based food that mimics cheese, and the other half were asked if a plant-based food that mimics cheese is a good substitute for dairy cheese.

About one in five consumers do not believe dairy cheese and plant-based food that mimics cheese are good substitutes for each other (Table J). Dairy cheese consumers are significantly more likely than plant-based dairy consumers to disagree with the statement that plant-based food that mimics cheese is a good substitute for dairy cheese (Table K).

Table J: SUBSTITUTE

Looking at the labels of Food A and Food B, do you agree or disagree with the following statement: Food A is a good substitute for Food B?	Dairy cheddar	Dairy mozzarella shreds	Dairy mozzarella slices	Plant-based food that mimics cheddar	Plant-based food that mimics mozzarella shreds	Plant-based food that mimics mozzarella slices
	n=226 A (%)	n=231 B (%)	n=228 C (%)	n=224 D (%)	n=219 E (%)	n=222 F (%)
Strongly/Somewhat agree that this food can be substituted	50	54	51	54	49	51
Neither agree or disagree	31	29	31 D	24	32 DF	25
Strongly/Somewhat disagree that this food can be substituted	19	16	18	22	19	24

Notes:
Data in each column may not add up to 100% due to rounding.
A/B/C/D/E/F indicates significance, significance is tested at the 95% confidence level.



Table K: SUBSTITUTE BY FOOD GROUP

Looking at the labels of Food A and Food B, do you agree or disagree with the following statement: Food A is a good substitute for Food B?	Total Sample n=>219*** (%)	Dairy Purchasers n=>109 A (%)	Dairy and plant-based food purchaser n=>68* B (%)	Plant-based food purchaser n=>21** C (%)
DISAGREE THAT DAIRY CHEESE CAN BE SUBSTITUTED				
Cheddar	19	21	14	27
Mozzarella shreds	16	18	12	23
Mozzarella slices	18	16	15	33
DISAGREE THAT PLANT-BASED FOODS CAN BE SUBSTITUTED				
Cheddar	22	33 B	14	0
Mozzarella shreds	19	27 B	9	18
Mozzarella slices	24	32 B	13	17

Notes:

*/**Indicates small/very sample size.

***Sample size varies due to randomization.

A/B/C indicates significance, significance is tested at the 95% confidence level.



BUY

Consumers were asked which of two corresponding foods (i.e. dairy cheddar and plant-based food that mimics cheddar; dairy mozzarella shreds and plant-based food that mimics mozzarella shreds; and dairy mozzarella slices and plant-based food that mimics mozzarella slices) they would be more likely to buy. The order of the foods was randomized to eliminate potential placement bias. Consumers were then asked why they would purchase the food they selected.

As to be expected, dairy purchasers were significantly more likely than plant-based food purchasers to select a dairy cheese and vice versa (Table L). However, about 18 percent of dairy purchasers selected a plant-based food, even though these are consumers that do not purchase plant-based dairy products. This may indicate that plant-based food labels do not clearly indicate the non-dairy nature of these foods, or the use of traditional dairy names such as cheddar and mozzarella confuses consumers, leading to the selection of these plant-based foods.

Significantly more consumers indicate that they are likely to buy dairy cheese versus plant-based foods that mimic cheese because it tastes good, it is flavorful, it is a good source of calcium, habit, and it has a good texture (Table M). Consumers also noted several 'other' reasons they would purchase a dairy cheese including: it's real cheese, contains dairy, and trust the brand.

Significantly more consumers indicate that they are likely to buy plant-based foods that mimic cheese because it is healthy, it is all natural, it contains no artificial ingredients, it contains no additives, it is low in fat, it comes from a sustainable food source, it is lactose free, it is low in calories, it contains no added sugar, and it is produced in an environmentally friendly way (Table M).

Interestingly, some of the reasons consumers purchase plant-based foods that mimic cheese do not correlate with the product. Specifically, significantly more consumers indicate that they would buy plant-based foods that mimic cheese because they are low in calories, low in fat, and contain no additives. In actuality, plant-based foods that mimic cheese contain an equal or comparable amount of fat and calories and contain substantially more additives than dairy cheeses.



Table L: BUY

Based on the label, which food are you more likely to buy?	Total Sample n=450 (%)	Dairy Purchasers n=250 A (%)	Dairy and plant-based food purchaser n=150 B (%)	Plant-based food purchaser n=50* C (%)
Dairy				
Cheddar	71	78 BC	67 C	50
Mozzarella shreds	75	86 BC	68 C	44
Mozzarella slices	70	82 BC	61 C	38
Plant-based foods				
Cheddar	29	22	33 A	50 AB
Mozzarella shreds	25	14	32 A	56 AB
Mozzarella slices	30	18	39 A	62 AB

Notes:

Data in each column may not add up to 100% due to rounding.

*Indicates small sample size.

A/B/C indicates significance, significance is tested at the 95% confidence level.



Table M: WHY BUY

Why are you more likely to buy _____?	Dairy cheddar n=321 A (%)	Dairy mozzarella shreds n=338 B (%)	Dairy mozzarella slices n=315 C (%)	Plant-based food that mimics cheddar n=129 D (%)	Plant-based food that mimics mozzarella shreds n=112 E (%)	Plant-based food that mimics mozzarella slices n=135 F (%)
It tastes good	53 DEF	54 DEF	49 DEF	22	22	36 DE
It is flavorful	40 DEF	41 DEF	39 DEF	19	20	17
It is a good source of calcium	30 D	34 D	33 D	21	25	26
It is nutritious	28	28	27	32	36	37 C
It is a good source of protein	27	29	28	27	26	25
Habit, I always buy this type of product	27 DEF	28 DEF	25 DEF	7	16 D	12
It is safe to consume	26 C	22	19	22	22	27 C
It has a good texture	26 DE	23	21	16	17	19
It is healthy	23	23	20	42 ABC	39 ABC	41 ABC
It is all natural	23	20	22	33 ABC	31 B	37 ABC
It is a good source of vitamins and minerals	21	21	19	19	21	21
It contains no artificial ingredients	11	14	12	20 A	19	24 ABC
It contains no additives	11	9	10	22 ABC	27 ABC	23 ABC
It is low in fat	10	12	11	29 ABC	23 ABC	24 ABC
It has a limited number of ingredients	10	11	10	15	17	16
It comes from a sustainable food source	10	12	8	18 AC	18 AC	17 AC
It is lactose free	9	10	11	22 ABC	16	25 ABC
It is low in calories	8	8	6	27 ABC	26 ABC	21 ABC
Manufacturers are transparent about how it is produced	7	10	8	17 AC	17 AC	19 ABC
It is low in cholesterol	7	9	7	21 ABC	29 ABC	24 ABC
It contains no added sugar	7	9	7	22 ABC	17 ABC	15 AC
It is produced in an environmentally responsible way	4	7	6	16 ABC	18 ABC	16 ABC
It is good for someone with milk allergies*	-	-	-	20	25	21
Animals are not used in their production*	-	-	-	18	17	21
Other	9 DF	10 DF	11 DF	2	0	1

Notes:

Data in each column may not add up to 100% as consumers could choose more than one option.

A/B/C/D/E/F indicates significance, significance is tested at the 95% confidence level.

*Asked only of plant-based foods



Appendix



SHOPPING HISTORY

Consumers who reported that they purchased a dairy product (cheese, milk, or yogurt) and/or a plant-based food that mimics dairy (plant-based milk, plant-based cheese made without dairy, or plant-based yogurt made without dairy milk) within the last 4 weeks qualified for this study. To mask the purpose of the study a list of common foods was presented for consumers to choose from.

Appendix Table A: SHOPPING HISTORY

Which of these foods have you purchased in the <u>last 4 weeks</u> ?	Total Sample	Dairy Purchasers	Dairy and plant-based food purchaser	Plant-based food purchaser
	n=450 (%)	n=250 A (%)	n=150 B (%)	n=50* C (%)
Bread	81	86 C	83 C	46
Eggs	80	85 C	84 C	44
Fresh fruit	80	80 C	89 AC	52
Dairy milk	75	88 C	79	-
Dairy cheese	74	84	84	-
Pasta	65	64 C	75 AC	38
Frozen vegetables	62	58	74 AC	48
Baking ingredients (e.g. flour, sugar)	62	57	75 AC	46
Dairy yogurt	55	50	82 AC	-
Plant-based milk (e.g. almond, soy, rice)	38	-	87	76
Gluten-free bread or pasta	17	6	31 A	28 A
Plant-based cheese made without dairy milk	17	-	37	40
Plant-based yogurt made without dairy milk	16	-	35	40
Egg substitutes	14	2	31 A	22 A

Notes:

Data in each column may not add up to 100% as consumers could choose more than one option.

*Indicates small sample size

A/B/C indicates significance, significance is tested at the 95% confidence level.



Appendix Table B: Demographics Table 1

	Total Sample n=450 (%)	Dairy Purchasers n=250 A (%)	Dairy and plant-based food purchaser n=150 B (%)	Plant-based food purchaser n=50* C (%)
GENDER				
Female	42	42	37	60 AB
Male	58	58 C	63 C	40
AGE				
18 to 24	16	14	18	20
25 to 34	16	9	21 A	32 A
35 to 44	16	13	19	18
45 to 54	20	19	23	14
55 to 64	16	22 BC	9	8
65 or older	17	23 BC	10	8
GEOGRAPHIC RESIDENCE				
South	36	35	39	32
West	24	22	22	36
Northeast	21	22	20	22
Midwest	19	21 C	19	10
HOUSEHOLD INCOME				
Under \$25,000	16	16	17	10
\$25,000 - \$49,999	24	21	23	38 AB
\$50,000 - \$74,999	21	25 B	16	18
\$75,000 - \$99,999	16	13	25 AC	10
\$100,000 - \$149,999	13	14	9	20
\$150,000 - \$199,999	5	5	7	2
\$200,000 or more	4	5	4	2
NUMBER IN HOUSEHOLD				
1	24	27 B	15	36 B
2	34	42 B	23	30
3	19	16	25 A	16
4	16	11	24 A	16
5	5	4	8	-
6 or more	2	2	4	2
CHILDREN IN HOUSEHOLD				
Yes	36	25	57 AC	32
No	64	75 B	43	68 B

Notes:

Data in each column may not add up to 100% due to rounding.

*Indicates small sample size

A/B/C indicates significance, significance is tested at the 95% confidence level.



Appendix Table C: Demographics Table 2

	Total Sample n=450 (%)	Dairy Purchasers n=250 A (%)	Dairy and plant-based food purchaser n=150 B (%)	Plant-based food purchaser n=50* C (%)
EDUCATION				
Some schooling completed, no high school diploma	1	1	3	0
High school graduate or equivalent (GED)	19	19	17	22
Some college credit, no degree	19	21	18	12
Associate's degree	11	12	10	6
Bachelor's degree	30	28	30	34
Post-graduate work, no degree	4	4	3	6
Master's degree	12	12	12	16
Professional/Doctorate degree	5	3	7	4
ETHNICITY**				
White/Caucasian	78	82 C	78 C	60
Black/African American	10	10	6	24 AB
Hispanic/Non-white	7	6	9	10
Asian/Pacific Islander	5	3	8 A	6
Native American/Aleutian Eskimo	1	1	1	-
Other	1	-	2	2
EMPLOYMENT STATUS				
Employed full-time	46	38	54 A	62 A
Employed part-time	11	10	13	10
Self-employed	7	8	6	8
Student	4	3	5	4
Retired	21	27 BC	13	10
Homemaker	5	6	5	2
Unemployed/not currently working	6	8	4	4

Notes:

Data in each column may not add up to 100% due to rounding.

*Indicates small sample size

**Respondents could select all that apply.

A/B/C indicates significance, significance is tested at the 95% confidence level.