## SUPERIOR COURT OF THE DISTRICT OF COLUMBIA CIVIL DIVISION

ORGANIC CONSUMERS ASSOCIATION, 6771 South Silver Hill Drive, Finland, MN 55603, and GMO FREE USA d/b/a TOXIN FREE USA, P.O. Box 458, Unionville, CT 06085,

Case No.

Plaintiffs,

**COMPLAINT** 

v.

**DEMAND FOR JURY TRIAL** 

PERFECT DAY, INC., 740 Heinz Avenue, Berkeley, CA, 94710,

Defendant.

#### **PREAMBLE**

Plaintiffs Organic Consumers Association ("OCA") and GMO Free USA d/b/a Toxin Free USA ("TFUSA") bring this action against Defendant Perfect Day, Inc. ("Perfect Day") and allege the following based on personal knowledge, information, and belief. This Complaint is on behalf of the general public of the District of Columbia, which comprises District of Columbia consumers, and is brought under the District of Columbia Consumer Protection Procedures Act ("CPPA"), D.C. Code §§ 28-3901–13. This is not a class action, and no class certification or money damages will be sought. OCA and TFUSA seek to represent the general public of the District of Columbia, and not their members specifically.

#### INTRODUCTION

1. This case seeks to ensure that D.C. consumers have complete, and not misleading, information about genetically bioengineered, synthetic "dairy" foods currently available in the District.

- 2. With animal welfare concerns, potential global food shortages, and rising prices, synthetic food is a burgeoning industry. New companies are arising that purport to offer consumers the food products they love without the negative consequences.
- 3. Perfect Day supplies retail and commercial partners with a synthetic, bioengineered protein product, which Perfect Day and those partners refer to as "whey protein" or "milk-identical" protein, to create purportedly "animal-free" dairy. Perfect Day states, and D.C. consumers reasonably believe, that the resulting bioengineered protein product is identical to cowderived whey protein and creates milk that is identical to cow's milk.
- 4. Contrary to the belief Perfect Day creates in consumers, Perfect Day's protein product is not equivalent to cow-derived whey protein. Nor does it produce milk identical to cow's milk. Advanced testing reveals that 86.6% of the product consists of fungal proteins secreted during the production process.
- 5. Upon information and belief, Perfect Day has represented to the United States Food and Drug Administration ("FDA") that its synthetic, bioengineered protein product contains only 6.7% fungal protein. This misrepresentation to the FDA is not at issue in this case, but as a fact matter underlies Perfect Day's assertion to D.C. consumers that the product is safe for human consumption.<sup>1</sup>
- 6. Perfect Day's protein product also contains approximately 93 fungal compounds that are waste byproducts of the fermentation process. These waste products are remains of the dead fungal microorganism used in fermentation—in this case, Trichoderma reesei, also called T. reesei.

<sup>&</sup>lt;sup>1</sup> This litigation does not challenge Perfect Day's actions before the FDA. The information is provided as background to the misrepresentations Perfect Day lobs at D.C. consumers.

- 7. Most of these fungal proteins and compounds are not known in scientific literature and have never before been studied as part of the human diet. Their toxicity, allergenicity, effect on nutrition and microbiome function, and safety for human consumption are unknown.
- 8. Additionally, the genetic modification process, as well as the resulting exposure to unstudied byproducts, may have unintended negative consequences for both the environment and human health.
- 9. The risks related to making and consuming the protein product have not been disclosed to consumers. Instead, Perfect Day markets its protein product as safe, environmentally-friendly, and identical to cow-derived whey—and encourages other brands to market the protein that way in their products, to Perfect Day's profit and benefit.
- 10. The CPPA gives D.C. consumers the right to truthful marketing about the qualities, properties, and manufacturing of the products marketed to them.

#### **NATURE OF THE ACTION**

- 11. On behalf of the general public, and in the interest of consumers, OCA and TFUSA bring this action against Perfect Day for false and deceptive marketing representations and material omissions concerning Perfect Day's synthetic bioengineered protein product, ProFerm<sup>2</sup> (herein referred to as "ProFerm").<sup>3</sup> Perfect Day markets ProFerm as safe, environmentally friendly, identical to cow-derived whey protein, capable of creating milk identical to cow's milk—including its nutritional profile—and as free from genetically modified organisms ("GMOs").
- 12. The reality is markedly different. ProFerm is synthetic, composed primarily of fungal proteins not found in cow's milk, and includes fungal waste byproducts from the

<sup>&</sup>lt;sup>2</sup> Protein done better, Perfect Day, https://perfectday.com/proferm/ (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>3</sup> For ease of reference, this complaint refers to "ProFerm," but it encompasses any protein product manufactured by Perfect Day, regardless of whether it is specifically branded as ProFerm.

fermentation process. ProFerm is used to produce a beverage with amino acid sequences that differ significantly from those in cow's milk and contains only a fraction of cow's milk's nutritional value. Many of the fungal proteins and compounds have not been adequately studied for human consumption, and ProFerm's production process itself may pose environmental risks. Furthermore, ProFerm's GRAS (Generally Recognized as Safe) status, self-affirmed by Perfect Day in its own interest, was not blocked by regulators due to Perfect Day's misrepresentation of key facts about ProFerm.<sup>4</sup> None of this information has been disclosed to consumers.

13. This false and deceptive marketing, and the associated material omissions, give rise to this suit for declaratory and injunctive relief.

#### **SUMMARY OF FACTS**

- 14. Consumers care about their own health and the environment.<sup>5</sup>
- 15. Consumers seek to purchase products that align with their health and environmental concerns.<sup>6</sup>
- 16. For health and/or ethical reasons, many consumers want the pleasure of milk products without the associated negative consequences.<sup>7</sup>
- 17. Consumers rely on labeling and marketing to understand the nature of the products they purchase and whether those products align with their particular concerns.
- 18. Perfect Day's engineered protein is produced through synthetic biology (herein called "SynBio").

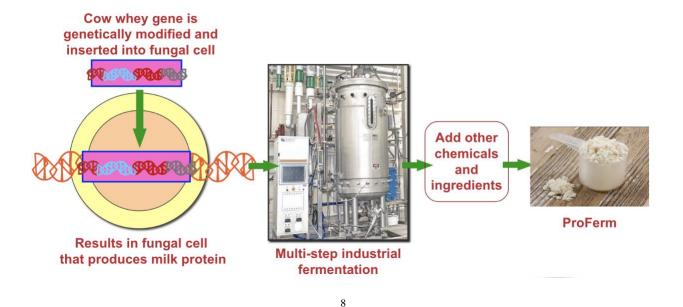
<sup>&</sup>lt;sup>4</sup> This action does not challenge Perfect Day's interactions with federal regulators, but instead how Perfect Day has represented and continues to represent itself to D.C. consumers.

<sup>&</sup>lt;sup>5</sup> How the COVID-19 Pandemic Has Impacted Consumer Attitudes About the Environment, Priceless Planet Coalition (2021), https://www.mastercard.com/news/media/qdvnaedh/consumer-attitudes-to-the-environment-2021.pdf.

<sup>6</sup> *Id*.

<sup>&</sup>lt;sup>7</sup> Lacey Bourassa, *Vegan and Plant-Based Diet Statistics for 2023*, Plant Proteins (Jan. 9, 2023), https://www.plantproteins.co/vegan-plant-based-diet-statistics/.

- 19. SynBio is a multidisciplinary field that combines principles from genetic engineering, biology, and biotechnology to design, construct, and modify biological entities and processes. SynBio aims to develop new biological parts, devices, and systems, or to redesign existing natural biological systems, for various applications, including medicine, agriculture, food production, and energy.
- 20. Perfect Day uses what it calls "precision fermentation" to make ProFerm. In this process, as illustrated below, Perfect Day takes the natural gene for cow whey protein, beta-lactoglobulin ("β-lactoglobulin"), genetically modifies it, inserts the genetically modified gene into the genome of a fungus cell, and uses an industrial fermentation process to propagate large amounts of the fungal cells containing the modified whey gene. To the resulting substance, Perfect Day adds other chemicals, then dehydrates the package to create ProFerm. This SynBio fermentation process is illustrated in the graphic below.



<sup>&</sup>lt;sup>8</sup> These images are generic and used for explanation only and may not reflect precisely the equipment in Perfect Day's facilities, which will become known through discovery.

- 21. Based on independent laboratory testing, ProFerm is not biologically identical to the whey protein found in cow's milk, despite affirmative representations by Perfect Day that ProFerm is the same as cow-derived whey protein.
- 22. The fermentation process used by Perfect Day results in the presence of various waste byproducts within ProFerm, *i.e.*, contaminants not found in traditional cow's milk.
- 23. A significant source of residual contaminants in ProFerm is excreted fungal proteins. During fermentation, genetically engineered fungal cells produce whey protein but also secrete large amounts of fungal proteins. Testing indicates that for every gram of whey protein generated, approximately seven grams of fungal protein are also released. Consequently, ProFerm contains seven times more fungal protein than whey protein. Laboratory analyses have revealed that 86.6% of ProFerm consists of fungal proteins—an important fact that raises significant questions about the GRAS status of Perfect Day's protein product.
- 24. Another group of waste byproducts in ProFerm consists of fungal compounds. ProFerm contains approximately 93 smaller compounds, which are likely byproducts and metabolites produced by the genetically modified organisms during fermentation. These waste products are essentially remnants of the dead fungal microorganisms used in production—in this case, T. reesei.
- 25. The majority of these proteins and compounds have no prior history of human consumption, and their effects on human health and the environment remain uncertain.
- 26. Testing has also shown that the amino acid composition—and, thus, the nutritional profile—of ProFerm differs significantly from that of cow-derived whey. As a result, the "milk" beverage made with ProFerm is also markedly different nutritionally from cow's milk.

- 27. The genetic modification process itself, along with the resulting exposure to unstudied byproducts, may have unintended negative consequences for both the environment and human health.
- 28. Contrary to Perfect Day's representations, the synthetic bioengineered product is neither identical to cow-derived whey nor proven safe nor environmentally friendly.
- 29. Perfect Day's false, unfair, and deceptive marketing, including material omissions, violates the CPPA.
- 30. OCA and TFUSA bring this case on behalf of themselves and the general public, seeking declaratory relief and an injunction to stop the deceptive marketing of ProFerm in the District.
- 31. OCA and TFUSA seek no money damages and do not bring this suit as a class action. No class certification will be sought.

#### **PARTIES**

- 32. Plaintiff OCA is an Internal Revenue Code § 501(c)(3) organization that focuses on consumer information and promoting organic agriculture, food safety, environmental sustainability, and social justice. Founded in 1998, the OCA advocates for consumer rights and transparency in food labeling.<sup>9</sup>
- 33. OCA campaigns against practices that can compromise food safety, such as the use of synthetic additives or GMOs. OCA aims to empower consumers to demand healthier, ethically produced food options. OCA engages in educational campaigns, public policy initiatives, and litigation to promote food system transparency and reform.
  - 34. OCA is a nonprofit organization pursuant to D.C. Code § 28-3901(14) and a public

<sup>&</sup>lt;sup>9</sup> About the OCA, Organic Consumers Association, https://organicconsumers.org/about/ (last visited Jan. 2, 2025).

interest organization pursuant to D.C. Code § 28-3901(15). OCA performs its work and advocates for consumers throughout the United States, including in the District of Columbia.

- 35. Plaintiff TFUSA is an Internal Revenue Code § 501(c)(3) organization whose mission is to harness independent science and agroecology concepts to advocate for clean and healthy food and ecological systems. TFUSA educates consumers about the potential hazards of synthetic ingredients, pesticides and biocides, and genetically engineered organisms ("GMOs").
- 36. TFUSA is a nonprofit organization pursuant to D.C. Code § 28-3901(14) and a public interest organization pursuant to D.C. Code § 28-3901(15). TFUSA performs its work and advocates for consumers throughout the United States, including in the District of Columbia.
- 37. Toxin Free USA's website, publications, public education, research, network building, and mobilization activities provide an important service to consumers and community activists every month.
- 38. Defendant Perfect Day Inc. is a SynBio food technology company based in Berkeley, California. Perfect Day is incorporated in Delaware.
- 39. Perfect Day partners with other companies or licenses ProFerm to companies that incorporate ProFerm into their own brands and then market and sell the bioengineered "dairy" substance to consumers. Companies use ProFerm to create ice cream, protein powders, cream cheese, non-dairy milk, baked goods, snacks, and smoothies.
- 40. The appeal of brands incorporating ProFerm lies in offering a non-dairy food or beverage that mimics the taste and texture of real dairy but without the concerns of animal welfare or environmental impact.
  - 41. Some examples<sup>10</sup> of foods and beverages that incorporate Perfect Day's

 $<sup>^{10}</sup>$  These limited examples are a small subset of the products on the market now incorporating Perfect Day's "whey protein."

bioengineered ProFerm include Tomorrow Farms' "Bored Cow" beverage; MyProtein's "Whey Forward" powder; Unico Nutrition Inc.'s "APOLLO Protein" powder; Strive Nutrition's "FREEMILK" beverage; and Villa Dolce's animal-free dairy gelato. All of these products are available for sale to consumers in the District, via the company interactive websites or otherwise.

42. Perfect Day makes marketing representations about ProFerm, which intentionally reach D.C. consumers via Perfect Day's website, <sup>16</sup> Instagram, <sup>17</sup> X (previously Twitter), <sup>18</sup> and via the companies using ProFerm to manufacture food products. With Perfect Day's knowledge and encouragement, these companies echo Perfect Day's representations when selling those products to D.C. consumers, generally displaying Perfect Day's logo on their packaging. <sup>19</sup>



43. The example below illustrates how Perfect Day's representations are conveyed to

<sup>&</sup>lt;sup>11</sup> Bored Cow, Tomorrow Farms, https://tryboredcow.com/ (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>12</sup> Whey Forward, MyProtein, https://us.myprotein.com/sports-nutrition/whey-forward/13625704.html (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>13</sup> Apollo Protein, Unico, https://uniconutrition.com/shop/apollo-protein-chocolate (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>14</sup> Freemilk, Strive, https://striveforbetter.com/products/strive-freemilk-whole (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>15</sup> Villa Dolce x Perfect Day Gelato Sample Kit, Villa Dolce, https://villadolcegelato.com/perfect-day-sample-kit/ (last visited Jan. 2, 2025).

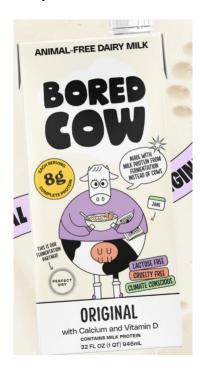
<sup>&</sup>lt;sup>16</sup> Kinder, greener protein through fermentation, Perfect Day, https://perfectday.com/animal-free-milk-protein/ (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>17</sup> Perfect Day (@perfectdayfoods), Instagram, https://www.instagram.com/perfectdayfoods/?hl=en (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>18</sup> Perfect Day (@perfectdayfoods), X, https://x.com/perfectdayfoods (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>19</sup> Perfect Day Accelerates Next Chapter of Impact with Pre-Series E of up to \$90 Million and Leadership Updates, Perfect Day (Jan. 5, 2024), https://perfectday.com/newsroom/perfect-day-accelerates-next-chapter-of-impact-with-pre-series-e-of-up-to-90-million-and-leadership-updates/.

consumers, with the Perfect Day brand prominently displayed on the packaging alongside claims of "milk protein" and "animal-free dairy milk." <sup>20</sup>



44. Bored Cow's website, including in the snapshots reproduced below, makes additional claims, stating that the beverage contains "real dairy," has "a fraction of the environmental impact of conventional dairy milk," and includes a reference to Perfect Day.<sup>21</sup>

#### WHAT IS BORED COW?



Bored Cow is a new kind of milk alternative made with milk protein from fermentation instead of cows.

It looks, feels, tastes, and acts just like real dairy, because it is real dairy. The difference?

Bored Cow is made without animal cruelty, and with a fraction of the environmental impact of conventional dairy milk.

<sup>&</sup>lt;sup>20</sup> Bored Cow, Tomorrow Farms, https://tryboredcow.com/ (last visited Jan. 2, 2025).

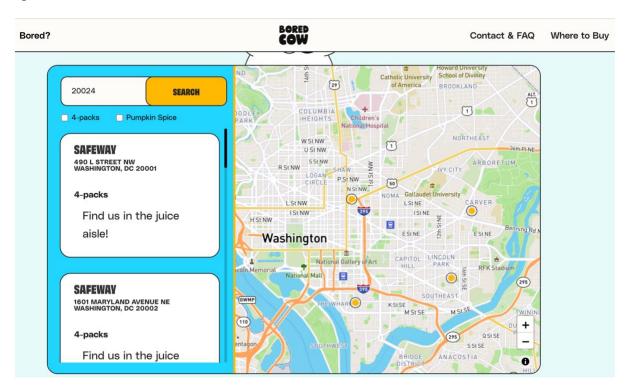
<sup>&</sup>lt;sup>21</sup> Bored Cow 101, Tomorrow Farms, https://tryboredcow.com/pages/contact#faqs (last visited Jan. 2, 2025).

#### WHO IS PERFECT DAY?



Perfect Day is our fermentation partner. They make the milk protein that makes Bored Cow so special, and they do it without cows!

45. Bored Cow is available for sale in Safeway stores in the District. <sup>22</sup> Shown below is a screenshot from the Bored Cow website highlighting D.C. store locations where Bored Cow can be purchased. <sup>23</sup>

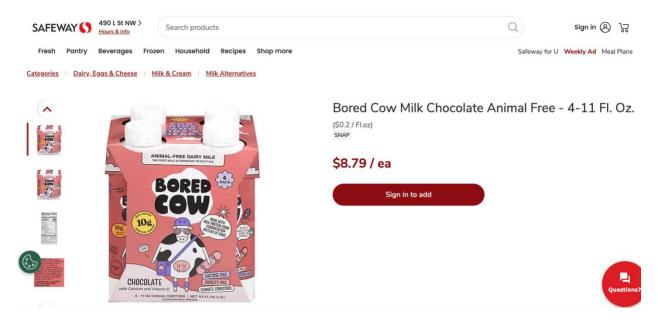


46. Shown below is a screenshot of Bored Cow available for purchase at a District Safeway.<sup>24</sup>

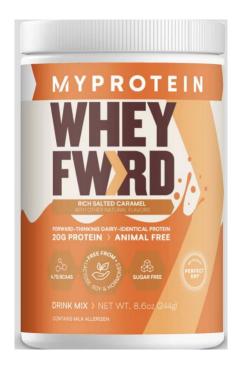
<sup>&</sup>lt;sup>22</sup> E.g., Safeway, 490 L Street NW Washington, DC 20001.

<sup>&</sup>lt;sup>23</sup> Find My Cow, Bored Cow, https://tryboredcow.com/pages/store-locator (last visited Jan. 2, 2024).

<sup>&</sup>lt;sup>24</sup> Bored Cow Milk Chocolate Animal Free - 4-11 Fl. Oz., Safeway, https://www.safeway.com/shop/product-details.970784657.html (last visited Jan. 2, 2025).



47. Another example, reproduced below, shows Perfect Day's representations reaching consumers through other companies, with "dairy-identical protein" and "Perfect Day" branding on the packaging.<sup>25</sup>



48. MyProtein's website pledges "we've produced protein that's identical to traditional

<sup>&</sup>lt;sup>25</sup> Whey Forward, supra note 12.

whey," and "it's the most sustainable whey protein around" that "delivers the same nutritional benefits as regular whey" and is "environmentally friendly."<sup>26</sup>

49. Perfect Day's milk protein is incorporated and sold, with Perfect Day's encouragement and representations, through other companies in stores within the District (such as Safeway, for the Bored Cow beverage). Additionally, these third-party products incorporating Perfect Day's ProFerm and marketing representations are available for purchase online by consumers in the District.

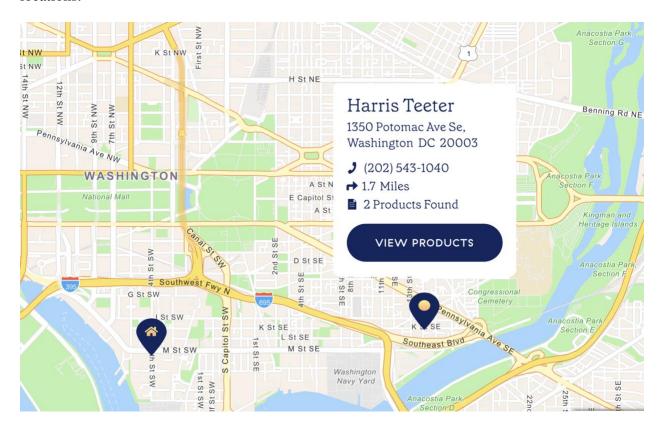
#### **JURISDICTION AND VENUE**

- 50. This court has personal jurisdiction over the parties in this case.
- 51. OCA and TFUSA, by filing this Complaint, consents to this Court having personal jurisdiction over them.
- 52. This Court has personal jurisdiction over Perfect Day pursuant to D.C. Code § 13-423. Perfect Day has sufficient minimum contacts with the District of Columbia to establish personal jurisdiction of this Court over them because, *inter alia*, Perfect Day engages in deceptive schemes and acts directed at persons residing in, located in, or doing business in the District of Columbia, and otherwise purposefully avails itself of the laws of the District through partnering with brands to market and sell ProFerm in their products in the District, and through placing ProFerm into the stream of commerce with intent that it reach consumers in the District.
- 53. Through the scope of the Consumer Protection Procedures Act, the District has a clearly articulated public policy of seeing its law applied to District consumers' interaction with marketing, advertising, and product sales available to them within the District. Perfect Day, based on its contacts with the District, is aware or should be aware that the CPPA governs its conduct

<sup>&</sup>lt;sup>26</sup> *Id*.

within the District, and that the clearly articulated policy of the District would be frustrated if the CPPA were not applied to Perfect Day's marketing to District consumers.

54. Perfect Day ensures that its representations effectively reach consumers in the District of Columbia through a comprehensive marketing strategy. This campaign includes a dedicated website and active social media presence on platforms such as Instagram<sup>27</sup> and X (formerly known as Twitter).<sup>28</sup> Perfect Day's website contains numerous misleading representations about ProFerm and specifically targets D.C. consumers by featuring a store locator page designed to guide local residents to retailers within the District where "dairy" products using ProFerm are available. Reproduced below is a screenshot of the website highlighting D.C. store locations.<sup>29</sup>



<sup>&</sup>lt;sup>27</sup> Perfect Day (@perfectdayfoods), *supra* note 17.

<sup>&</sup>lt;sup>28</sup> Perfect Day (@perfectdayfoods), *supra* note 18.

<sup>&</sup>lt;sup>29</sup> Where to Find Our Planet-Positive Partner Products, Perfect Day, https://perfectday.com/where-to-find-us/ (last visited Jan. 2, 2025).

- 55. As suggested by this image, products that incorporate ProFerm are available for purchase at stores in the District, including Harris Teeter on Potomac Avenue and Safeway locations.<sup>30</sup>
- 56. Upon information and belief, Perfect Day engages with multiple companies, with the intention that these companies will sell products containing ProFerm within the District. Upon Perfect Day's encouragement or direction, most of these products display the Perfect Day logo as well as Perfect Day's representations about ProFerm and "milk" produced using ProFerm. These partnerships and resulting sales in the District provide Perfect Day with financial gain and enhance its brand presence and market reach.
- 57. Perfect Day makes its representations with the intention that they reach D.C. consumers. When brands incorporating ProFerm repeat those representations, as designed and intended by Perfect Day, it is effectively equivalent to Perfect Day directly making the representations to D.C. consumers.
- 58. Upon information and belief, Perfect Day benefits financially from sales by companies incorporating ProFerm in multiple ways. Perfect Day generates revenue through the sale of ProFerm to manufacturers who rely on this innovative ingredient to create their own products. By providing a specialized and proprietary ingredient, Perfect Day positions itself as an indispensable supplier in the production chain, securing consistent income from licensing, supply agreements, or direct sales.
- 59. Perfect Day benefits indirectly from the success of the products that feature ProFerm. As consumer demand grows for items labeled as environmentally friendly, plant-based, or containing Perfect Day's advanced fermentation technology, the market visibility and reputation

<sup>&</sup>lt;sup>30</sup> Bored Cow milk beverage is sold in Safeway stores, including, for example, the Safeway store located at 490 L Street NW Washington, DC 20001.

of relationships and increased adoption of ProFerm by other companies further amplifies their financial returns.

- 60. Perfect Day engages in strategic marketing partnerships with brands that use ProFerm, sharing in promotional efforts or benefiting from co-branding opportunities. This dual benefit not only boosts Perfect Day's sales but also positions its technology as a marketable feature in the competitive plant-based and sustainable food industry. These cascading benefits underscore how Perfect Day's business model leverages the success of products containing ProFerm to enhance its profitability and market influence.
- 61. The Court has subject matter jurisdiction over this action pursuant to D.C. Code § 28-3905(k)(2).
- 62. Venue is proper in this Court under D.C. Code § 28-3905(k)(2) because Perfect Day directs its marketing and advertising efforts toward consumers in the District of Columbia through multiple channels. These efforts include Perfect Day's own website and ensuring that companies incorporating ProFerm communicate Perfect Day's representations about the products directly to District consumers. This strategy utilizes interactive websites, such as Bored Cow, which facilitate direct sales to District residents, as well as product packaging that prominently features Perfect Day's representations, thereby ensuring these claims reach and influence the local market. Perfect Day actively ensures its representations about ProFerm are conveyed to D.C. consumers. Upon information and belief, Perfect Day aims to establish a direct connection with District consumers purchasing products containing ProFerm and has designed its marketing structure to achieve that goal.

#### STATUTORY FRAMEWORK

- 63. This action is brought under the District of Columbia Consumer Protection Procedures Act, D.C. Code §§ 28-3901 through 28-3913.
  - 64. The CPPA makes it a violation for "any person" to, *inter alia*:

Represent that goods or services have a source, sponsorship, approval, certification, accessories, characteristics, ingredients, uses, benefits, or quantities that they do not have:

Represent that goods or services are of a particular standard, quality, grade, style, or model, if in fact they are of another;

Misrepresent as to a material fact which has a tendency to mislead;

Fail to state a material fact if such failure tends to mislead;

Use innuendo or ambiguity as to a material fact, which has a tendency to mislead; or

Advertise or offer goods or services without the intent to sell them or without the intent to sell them as advertised or offered.

D.C. Code § 28-3904(a), (d), (e), (f), (f-1), (h).

- 65. A violation occurs regardless of "whether or not any consumer is in fact misled, deceived or damaged thereby." *Id*.
- 66. The CPPA "establishes an enforceable right to truthful information from merchants about consumer goods and services that are or would be purchased, leased, or received in the District of Columbia." *Id.* § 28-3901(c). The CPPA "shall be construed and applied liberally to promote its purpose." *Id.*
- 67. Under the statute, a "merchant" is defined as "a person, whether organized or operating for profit or for a nonprofit purpose, who in the ordinary course of business does or would sell, lease (to), or transfer, either directly or indirectly, consumer goods or services, or a

person who in the ordinary course of business does or would supply the goods or services which are or would be the subject matter of a trade practice." *Id.* § 28-3901(a)(3).

- 68. Perfect Day qualifies as a "merchant" under the CPPA because it supplies the ProFerm that is incorporated in goods sold, with Perfect Day's intention and encouragement, to consumers in the District and engages in trade practices involving those goods.
- 69. Perfect Day produces and supplies ProFerm to third-party entities that incorporate it into products such as milk or ice cream, which are then sold to consumers in the District. By providing this key component, Perfect Day facilitates the sale of consumer goods that contain its ProFerm. Consequently, Perfect Day is involved in the supply chain that results in the sale of consumer goods, thereby, engaging in the transfer of consumer products within the meaning of the CPPA.
- 70. Moreover, Perfect Day's role extends beyond production; it actively markets and represents ProFerm as a dairy-identical protein product to consumers and business partners. The representations made by Perfect Day contribute to the marketing narrative used by third-party companies that sell these products directly to consumers, solidifying Perfect Day's role as a participant in the trade practices involving these goods. This satisfies the statutory requirements, positioning Perfect Day within the regulatory scope intended by the CPPA.
- 71. Because OCA and TFUSA are public interest organizations, they may act on behalf of the general public, *i.e.*, D.C. consumers, including in order to bring any action that an individual consumer would be entitled to bring:
  - [A] public interest organization may, on behalf of the interests of a consumer or a class of consumers, bring an action seeking relief from the use by any person of a trade practice in violation of a law of the District if the consumer or class could bring an action under subparagraph (A) of this paragraph for relief from such use by such person of such trade practice.

- *Id.* § 28-3905(k)(1)(D)(i). Subparagraph (A) provides: "A consumer may bring an action seeking relief from the use of a trade practice in violation of a law of the District."
- 72. A public interest organization, even one whose own interests are not specifically financially impacted, may act on behalf of consumers, *i.e.*, the general public of the District of Columbia, so long as the organization has a "sufficient nexus to the interests involved of the consumer or class to adequately represent those interests." *Id.* § 28-3905(k)(1)(D)(ii).
- 73. As set forth in this Complaint, *see supra*, OCA and TFUSA are active in D.C. advocating for food safety, consumer rights, and transparency in food labeling. These plaintiff organizations use education, policy initiatives, and litigation to promote food system reform. OCA and TFUSA each have a sufficient nexus to D.C. consumers to represent their interests adequately.
- 74. This is not a class action, or an action brought on behalf of any specific consumer, but an action brought by OCA and TFUSA on behalf of itself and the general public, *i.e.*, D.C. consumers generally. No class certification will be requested.
- 75. This action does not seek money damages. Instead, OCA and TFUSA seek to end the unlawful conduct directed at D.C. consumers. Remedies available under the CPPA include "[a]n injunction against the use of the unlawful trade practice." *Id.* § 28-3905(k)(2)(D). OCA and TFUSA also seek declaratory relief in the form of an order holding Perfect Day's conduct to be unlawful.

#### **CORE ALLEGATIONS**

76. The Health Research Institute ("HRI") was established in 2017. It is an Internal Revenue Code § 501(c)(3) nonprofit laboratory that offers research, education, and testing services. HRI employs technology, as described below, to determine the molecular composition

of food products.<sup>31</sup>

- 77. HRI has been approved as a High Complexity Clinical Laboratory under the Clinical Laboratory Improvement Amendment ("CLIA") program and as an ISO/IEC 17025:2017-accredited analytical laboratory.<sup>32</sup> A laboratory that holds both High Complexity CLIA approval and ISO/IEC 17025:2017 accreditation is recognized for its operational and technical competence in clinical testing and analytical laboratory services. This dual recognition signifies a high level of quality, reliability, and competence in the laboratory's testing processes and results.
- 78. HRI was asked to analyze the composition of Perfect Day's ProFerm and a "milk" produced using it, comparing these to actual cow's whey and milk. Specifically, HRI tested Tomorrow Farms' Bored Cow "milk" beverage. As Perfect Day's ProFerm is the sole protein source in Bored Cow's milk, with no additional proteins added (according to the packaging and website), the protein composition of Bored Cow milk reflects that of ProFerm itself. Consequently, testing Bored Cow's milk provided insights into both the "milk" made with ProFerm and ProFerm itself.
- 79. In order to do this, HRI used Ultra-High Performance Liquid Chromatography ("UHPLC") linked to a Quadrupole Time of Flight Mass Spectrometer to achieve Full Spectrum Molecular Analysis of Perfect Day's bioengineered milk. These tools capture data representing the molecules that comprise at least 95% of the mass of the sample.
- 80. HRI also analyzed the molecular composition of Churchtown Dairy Whole Raw Biodynamic Milk and Radiance Dairy Whole Organic Milk using the same technology and methods.

<sup>&</sup>lt;sup>31</sup> Making the Invisible Visible, Health Research Institute, https://hrilabs.org/ (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>32</sup> *Id*.

81. HRI's findings illustrate that Perfect Day's representation that ProFerm is "identical to traditional milk" is false and misleading to consumers.

#### I. HRI's Findings About the True Nature of Perfect Day's ProFerm.

- 82. Contrary to what Perfect Day says, ProFerm and the milk it produces are not bioidentical, nor even remotely similar to cow's whey or milk.
- 83. Cow's milk consists of various proteins, with approximately 80% comprising casein and the remaining 20% made up of whey protein.<sup>33</sup>
- 84. Whey protein in cow's milk is composed primarily of several key proteins, each contributing a specific portion of the total 20% whey protein content.<sup>34</sup> The largest component is β-lactoglobulin, comprising about 58% of the whey protein, followed by alpha-lactalbumin at approximately 20%.<sup>35</sup> The remaining proteins, including bovine serum albumin, immunoglobulins, and lactoferrin, make up smaller percentages.<sup>36</sup>
- 85. HRI found that, unlike the natural protein structure of cow's whey, ProFerm contains only about 13.4% β-lactoglobulin, rather than the typical 58%. The remaining 44.6% of what should be β-lactoglobulin consists of fungal protein. Similarly, the 42% of whey protein normally made up of other whey proteins is also replaced by fungal protein. As a result, 86.6% of the proteins in ProFerm are fungal proteins likely produced through the fermentation process.<sup>37</sup>
  - 86. HRI also discovered that ProFerm as tested contained an additional approximately

<sup>&</sup>lt;sup>33</sup> Ana R Madureira, et. al., *Bovine Whey Proteins – Overview on their Main Biological Properties*, 40 Food Research International 1197–1211 (2007), https://pmc.ncbi.nlm.nih.gov/articles/PMC7126817/pdf/main.pdf.

<sup>&</sup>lt;sup>34</sup> *Id*.

<sup>&</sup>lt;sup>35</sup> *Id*.

<sup>&</sup>lt;sup>36</sup> *Id*.

<sup>&</sup>lt;sup>37</sup> While β-lactoglobulin typically constitutes around 58% of the whey protein in traditional cow's milk, it makes up only 13.4% of the ProFerm. When formulated into a milk beverage, β-lactoglobulin remains at 13.4% of the total protein, as the final protein composition reflects only Perfect Day's protein component, excluding caseins and other whey proteins in cow's milk. As detailed in Section IV, *infra*, Perfect Day claims to have produced a whey protein that is over 90% β-lactoglobulin, which would theoretically yield a "milk" beverage with a similar composition. In reality, however, the protein contains only 13.4% β-lactoglobulin, resulting in a "milk" beverage with the same limited 13.4% β-lactoglobulin content.

- 93 fungal compounds, which are likely waste byproducts and metabolites resulting from the genetically modified organisms during the fermentation process. These waste byproducts are the remains of the dead fungal microorganism used in fermentation—in this case, T. reesei.
- 87. HRI determined that most of these fungal compounds and proteins have unknown properties and functions, have not been documented in scientific literature to date, and have not been tested for safety for human consumption.
- 88. By HRI's assessment, these compounds and proteins could be or could become toxic, allergenic, disruptive to nutrition and biome function, and cause of dysbiosis, <sup>38</sup> making them potentially unsafe for human consumption.
- 89. HRI's analysis further found that using ProFerm results in a "milk" beverage with an amino acid composition—and, therefore, a protein composition—that is markedly different from that of cow's milk. HRI analyzed the amino acid composition of proteins in cow's milk and compared it to that of "milk" made from ProFerm. The differences between SynBio milk and cow's milk were substantial, as illustrated in the table below.

<sup>&</sup>lt;sup>38</sup> Dysbiosis is a term used to describe an imbalance or disruption in the normal microbiota, often in the gut, which can lead to health issues such as gastrointestinal problems, weakened immune response, inflammation, and other metabolic disorders.

Average Percent Deviation in Amino Acid Sequence Between Cow's Whey and SynBio Whey			
SynBio vs Biodynamic	35		
SynBio vs Biodynamic	35		
SynBio vs Biodynamic	35		
Biodynamic vs Organic	4		
Biodynamic vs Conventional	4		
Organic vs Conventional	5		

- 90. The mere fact that a milk beverage developed using ProFerm contains no caseins—while caseins account for 80% of the protein in cow's milk—means that the amino acid composition of SynBio milk will diverge significantly from that of cow's milk, resulting in fundamentally different milk products.
- 91. The deviation in amino acid composition between the proteins in these milks also impacts their nutritional value. Amino acid composition is fundamental to nutrition, as proteins are built from amino acids, and their nutritional value depends on this composition. Given the substantial differences in amino acid sequences between ProFerm and cow-derived milk protein, the resulting product cannot and does not mirror the nutrition of cow's milk, contrary to Perfect Day's assertions.
- 92. Furthermore, HRI found that many important nutrients present in cow's milk are not present at significant levels in "milk" created using ProFerm.
- 93. Cow's milk contains nutrients such as lipids, vitamins, fatty acid-carnitines (which facilitate burning of fatty acids for energy), intermediary metabolites, and compounds like glycerol-phosphocholine and hippuric acid (which have biosynthetic and regulatory roles). HRI

found that most of these compounds were absent in the bioengineered milk beverage using ProFerm. The few compounds that were present registered as mere traces.

94. The chart below highlights a comparison of a selection of these compounds.

Nutritional Compounds in SynBio Milk vs. Cow's Milk				
Compound Name	SynBio	Biodynamic	Organic	
DG(39:3)	0.05	1.84	2.66	
Linoleic acid	0.81	1.88	1.84	
Glu-Met	0.00	1.91	1.42	
cis-9-Hexadecenoic acid	0.13	2.11	2.55	
Deoxycytidine	0.17	2.35	5.12	
Perifosine	0.00	2.86	3.97	
Asp-His	0.20	3.13	2.99	
N-Cinnamoylglycine	0.00	3.14	2.80	
4-Hydroxyhippuric acid	0.02	3.17	0.59	
LPE(18:2)	0.03	3.86	5.88	
Elaidic acid	1.34	4.54	5.58	
N-Cinnamoylglycine	0.00	4.79	3.57	
DG(31:2)	0.28	5.15	1.65	
α-Tocopherol	0.00	5.22	7.34	
2-Hydroxyhippuric acid	0.05	5.50	0.93	
Benzyl alcohol Deriv.	0.02	8.82	0.88	
phenylchroman-4-one Deriv.	2.26	9.18	5.96	
Adrenosterone	0.05	9.39	7.58	
L-Carnitine	0.14	10.20	14.48	
Phenylacetylglycine	0.04	10.27	12.19	
GIn-His-Arg	0.04	10.69	5.78	
Inosinic acid	0.11	11.02	1.87	
Choline cation	0.83	13.20	15.47	
Pantothenic acid	0.09	13.40	13.76	
Hydroxy-eicosenoic acid	0.06	17.83	19.80	
Alpha-Linolenic	1.26	17.96	10.22	
Creatine	0.04	19.38	18.47	
SM(d39:1)	0.00	0.43	23.22	
Isobutyryl-L-carnitine	0.10	23.82	23.94	
Eremantholide A	0.05	25.16	2.00	
MG(18:2)	0.06	25.69	29.77	
DG(31:1)	0.04	10.17	40.15	
MG(14:0)	0.53	34.47	12.82	
4-(Phenylamino)phenol	0.05	39.15	9.98	
Glycerophosphocholine	0.03	43.76	52.38	
(-)-Riboflavin	11.51	44.91	25.02	
MG(18:0)	0.03	46.08	18.95	
Isovaleryl-L-carnitine	0.09	47.10	53.50	
Hippuric acid	0.14	52.69	35.48	
Farnesyl pyrophosphate	25.73	409.27	408.49	

95. HRI's findings illustrate substantial differences in protein composition, amino acid profile, and overall nutritional value between ProFerm and the milk beverage it produces, compared to cow's whey and milk.

#### II. Risks Identified with SynBio Food Products.

- 96. Apart from the concerns laid out above by HRI, other potential risks have been identified with SynBio products, including those produced by methods similar to Perfect Day's.
  - 97. Other biotech companies similar to Perfect Day have warned of the risks.<sup>39</sup>
- 98. For example, Ginkgo Bioworks Holdings ("Ginkgo") is a biotech company that specializes in using genetic engineering to produce bacteria with industrial applications for other biotech companies, including meat and milk companies, similar to Perfect Day. In 2021, Ginkgo disclosed the following risks to the Securities and Exchange Commission:

The genetically engineered organisms and materials that we develop may have significantly altered characteristics compared to those found in the wild, and the full effects of deployment or release of our genetically engineered organisms and materials into uncontrolled environments may be unknown. In particular, such deployment or release, including an unauthorized release, could impact the environment or community generally or the health and safety of our employees, our customers' employees, and the consumers of our customers' products.<sup>40</sup>

#### 99. Other noted concerns included:

- working with biological and chemical materials that produce hazardous and biological waste products and could be hazardous to human, animal, or plant health;
- biosecurity breaches or unauthorized releases of biological agents; and
- third-party misuse or negligent use of the engineered cell materials, organisms, and production processes.<sup>41</sup>

<sup>&</sup>lt;sup>39</sup> *See*, *e.g.*, U.S. Securities & Exchange Commission, Zymergen Inc., Form 10-Q (June 30, 2022), https://www.sec.gov/ix?doc=/Archives/edgar/data/0001645842/00016458422000114/zy-20220630.htm.

<sup>40</sup> U.S. Securities & Exchange Commission, Ginkgo Bioworks Holdings, Inc., Form 10-Q, 59-61 (Sept. 30, 2021), https://www.sec.gov/ix?doc=/Archives/edgar/data/1830214/000095017021004636/dna-20210930.htm#risk factors.

<sup>&</sup>lt;sup>41</sup> *Id*.

- 100. Numerous articles, which are known to the scientific community but likely not to consumers targeted by Perfect Day, explain the risks of bioengineered products, including human health concerns, toxicity, and negative environmental impact.<sup>42</sup>
- 101. Upon information and belief, Perfect's Day's processes present the same risks as Ginkgo.<sup>43</sup> Perfect Day's process relies on genetic modification and fermentation of genetically modified organisms, which generates waste products requiring careful handling and disposal. The use of genetic modification in this process inherently poses risks to the environment that cannot be fully mitigated, contradicting Perfect Day's claims of environmental friendliness.
- 102. No matter how careful a company and its processes are, synthetically engineered food poses risks to human and environmental health.

#### III. Perfect Day's False and Misleading Representations About ProFerm.

- 103. Perfect Day makes false and misleading representations to consumers in the District about ProFerm. The misleading representations include these:
  - "We've invented the world's first real milk proteins made without animals, so you can enjoy the real taste, texture, and nutrition of dairy made sustainably, without lactose, hormones, or antibiotics";
  - ProFerm "is the same whey protein found in cow's milk";
  - "our non-animal whey protein is the same as the whey protein from cow's milk";
  - ProFerm makes "dairy that is identical to traditional milk";
  - has the "same nutritional profile and culinary functionality as whey protein from cow's milk";
  - is "safe";

<sup>&</sup>lt;sup>42</sup> See, e.g., Ramila Cristiane Rodrigues et al., *Understanding the Emerging Potential of Synthetic Biology for Food Science: Achievements, Applications and Safety Considerations*, 3 Food Chem. Advances 100476, 7 (Dec. 2023), https://www.sciencedirect.com/science/article/pii/S2772753X23002976?via%3Dihub; Xiaomei Zeng et al., *Regulation and Management of the Biosecurity for Synthetic Biology*, 7 Synthetic & Sys. Biotech. 784-90 (Mar. 25, 2022), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8958255/.

<sup>&</sup>lt;sup>43</sup> Perfect Day has never made a disclosure like Ginkgo's, which is in itself a material omission.

- is "whey protein";
- "milk protein";
- "milk-identical protein";
- "proven";
- "natural";
- "animal-free dairy"; and
- "environmentally friendly.

104. Perfect Day falsely represents that ProFerm "is the same whey protein found in cow's milk."<sup>44</sup> Similar representations include—as depicted in the image reproduced below—that "our non-animal whey protein is the same as the whey protein from cow's milk"<sup>45</sup> and that ProFerm is a "milk-identical protein."<sup>46</sup> The HRI investigation found that the product contains only 13.4% of a cow's whey equivalent, β-lactoglobulin. While ProFerm may contain a small amount of cow's whey protein, describing it as equal to cow's whey is misleading, as the majority of the product is composed of fungal proteins. Additionally, ProFerm includes approximately 90 unknown compounds that are absent from cow's whey protein.

Our non-animal whey protein is produced by fermentation and does not contain casein. Because our non-animal whey protein is the same as the whey protein from cow's milk, if you have a milk allergy, we recommend taking the same precautions with products made with Perfect Day protein as you would with traditional dairy protein.

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105. Perfect Day also falsely claims that ProFerm produces dairy that is "identical to traditional milk," as depicted in the image reproduced below. HRI's investigation established that milk made from ProFerm is significantly different from cow's milk, revealing notable disparities

<sup>&</sup>lt;sup>44</sup> ProFerm, our premium protein done better, https://perfectday.com/ (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>45</sup> FAQS, Perfect Day, https://perfectday.com/faqs/ (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>46</sup> A healthier way now has a seat at the table, Perfect Day, https://perfectday.com/health/ (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>47</sup> FAQS, supra note 45.

in amino acid sequences between ProFerm-derived milk and cow's milk, as well as a lack of essential nutrients found in cow's milk.

Our animal-free milk from flora is the first of its kind, using whey protein <u>made by microflora</u>, not cows, to make dairy that's identical to traditional milk. Yes, we said identical.

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106. Perfect Day's assertion that ProFerm has the "same nutritional profile and culinary functionality as whey protein from cow's milk" is misleading. Even if the  $\beta$ -lactoglobulin in ProFerm is identical to that found in cow's milk, ProFerm is deficient in other critical whey proteins that contribute to the nutritional value of cow's whey. Moreover, the predominant protein content of ProFerm comprises fungal proteins rather than  $\beta$ -lactoglobulin or other whey proteins typically found in cow's milk. Consequently, consumers would not be receiving the same nutritional benefits as they would from authentic cow's whey.

107. Representations like the one below, which claim that consuming ProFerm provides the "real nutrition" of dairy, are misleading. They imply that a dairy product made with ProFerm offers the same nutritional value as cow's milk. As HRI's investigation has shown (*see supra*, Section I), a dairy product made from ProFerm contains only a fraction of the nutritional value found in cow-derived milk.

## What is animal-free dairy protein?

We've invented the world's first real milk proteins made without animals, so you can enjoy the real taste, texture, and nutrition of dairy made sustainably, without lactose, hormones, or antibiotics.

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<sup>&</sup>lt;sup>48</sup> Kinder, greener protein through fermentation, supra note 16.

<sup>&</sup>lt;sup>49</sup> FAQS, supra note 45.

<sup>&</sup>lt;sup>50</sup> *Id*.

- 108. Representations that ProFerm creates "milk," or that products made with ProFerm are "animal-free dairy" and contain "milk protein," are misleading due to the differences between cow's milk and milk produced with ProFerm.
- 109. Upon information and belief, the FDA, concerned about potential consumer deception, cautioned Perfect Day against labeling ProFerm as "milk" or claiming that it creates "identical" cow's milk. Despite this, Perfect Day has failed to disclose the FDA's concerns to consumers, leaving them unaware of regulatory apprehensions regarding the accuracy of the product's labeling and claims.
- 110. Perfect Day represents that ProFerm is "safe." To the contrary, as described in Section I, *supra*, ProFerm contains 86.6% fungal proteins and around 93 fungal compounds and additional small metabolites. Most of these fungal compounds and proteins have unknown properties and functions, have not been documented in scientific literature to date, and have not been tested for safety for human consumption. By HRI's assessment, these compounds and proteins could be or could become toxic, allergenic, disruptive to nutrition and biome function, and cause of dysbiosis, making them potentially unsafe for human consumption. At a minimum, the lack of analysis of these previously unknown proteins and compounds precludes ProFerm from being marketed as known to be "safe," and the failure to disclose potential risks is material omission. And as described in Section II, *supra*, SynBio food is recognized as inherently posing significant risks to human health and the environment, which Perfect Day should be disclosing to D.C. consumers.
- 111. Representations that the milk protein is "proven" and "natural"<sup>52</sup> are false as this is a synthetic, bioengineered product of genetically modified material, and most of the fungal

<sup>&</sup>lt;sup>51</sup> FAQS, supra note 45.

<sup>&</sup>lt;sup>52</sup> Kinder, greener protein through fermentation, supra note 16.

compounds and proteins present in ProFerm have never been tested for human consumption and safety.

112. Representations that ProFerm is "a greener way to make our favorite foods"<sup>53</sup> and "environmentally friendly"<sup>54</sup> are false and misleading based on the environmental risks associated with ProFerm identified above in Section II, *supra*. Perfect Day's process relies on genetic modification and fermentation of genetically modified organisms, which generates waste products requiring careful handling and disposal. The use of genetic modification in this process inherently poses risks to the environment that cannot be fully mitigated, contradicting Perfect Day's claims of environmental friendliness.

#### IV. Perfect Day's Material Omissions About ProFerm.

- 113. Perfect Day also fails to disclose the risks associated with ProFerm, which is a material omission.
- 114. Perfect Day fails to disclose that ProFerm contains fungal proteins and compounds that have not undergone safety testing for human consumption.
- 115. Perfect Day fails to inform consumers that ProFerm could be toxic, allergenic, disruptive to nutrition and biome function, and could cause dysbiosis.
- 116. Perfect Day describes ProFerm as free from GMOs as shown in the image reproduced below.<sup>55</sup>

<sup>&</sup>lt;sup>53</sup> A greener way to make our favorite foods, Perfect Day, https://perfectday.com/environment/ (last visited Jan. 2, 2025).

<sup>&</sup>lt;sup>54</sup> Protein done better, supra note 2.

<sup>&</sup>lt;sup>55</sup> *Id*.

### Does your protein contain GMOs?

No, animal-free protein does not contain GMOs.

The microflora we work with are really good at producing different kinds of protein naturally. We simply give them instructions for producing exactly the type of protein we want—in this case, the milk proteins casein and whey. We then filter out the flora, leaving only pure protein. In other words, genetic engineering is part of our process, but there's no detectable genetic material present in our protein.

117. To claim that ProFerm is non-GMO is misleading because of a significant omission: ProFerm itself is a product of a genetically modified gene. Consumers would not expect a product represented as non-GMO to be the product of a genetically modified organism.

# We help nature take its course.

Microflora ferment everywhere in nature—in soil, in plants, in a cow's stomach. The process helps forests flourish and keeps our guts healthy. It also makes our beer fizz, our yogurt thicken, our bread rise.

We place our microflora in a tank filled with broth made of water, nutrients, and sugar. And because they have the blueprints, when our microflora ferment the broth, they make a <u>pure animal protein</u> without ever touching an animal.

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as fermenting naturally occurring organisms, similar to brewing beer or making yogurt. This is misleading. In reality, Perfect Day genetically modifies a cow's milk whey protein gene and introduces that gene into a fungus cell, creating, thereby, a genetically engineered fungus. Perfect Day then uses that genetically modified organism in the fermentation process to synthesize its end

<sup>&</sup>lt;sup>56</sup>Partnering with nature to use less and make more, Perfect Day, https://perfectday.com/process/ (last visited Jan. 2, 2025).

protein product, ProFerm. Failing to disclose that the fermentation process, unlike brewing beer or making yogurt, starts with a genetically modified organism constitutes a material omission.

- 119. Reasonable consumers would not expect a product described as being made in a manner comparable to brewing beer or making yogurt to involve the fermentation of a genetically modified gene.
- 120. Perfect Day withholds material information about the risks that synthetically engineered food poses to human and environmental health. Such risks include that genetically engineered organisms and by-products of such materials have significantly altered characteristics compared to those found in the wild and the full effects of deployment or release of ProFerm into uncontrolled environments is unknown. Moreover, ProFerm could have toxic impacts on the environment and pose health and safety risks to those developing and consuming it.
- 121. Perfect Day withholds critical information about the basis for ProFerm's GRAS status. Perfect Day's representation is shown below.

## Is your protein safe?

Yes. Safety is of paramount interest to us and we have been working closely with regulatory agencies in multiple countries since our company was founded in 2014. Our animal-free protein has been confirmed as Generally Recognized as Safe (GRAS), and has received a "no-objections" letter from the United States Food & Drug Administration (FDA).

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122. While Perfect Day markets ProFerm as safe due to its GRAS status, it omits that this status was based on representations to the FDA claiming that ProFerm was composed of more than 90% β-lactoglobulin and only 6.7% residual fungal proteins from the fermentation of T. reesei—an assertion that, according to HRI's research, appears to be inaccurate. Those findings

<sup>&</sup>lt;sup>57</sup> FAQS, supra note 45.

demonstrate that the actual percentage of residual fungal protein in ProFerm is significantly higher than 6.7%, a discrepancy with substantial implications.

- 123. By asserting that ProFerm was predominantly β-lactoglobulin, Perfect Day argued that it was safe based on β-lactoglobulin's long and well-documented history of human consumption. Perfect Day also pointed to prior research indicating that T. reesei was safe in minimal amounts to support that residual fungal proteins in the amount of 6.7% were safe. But ProFerm contains 86.6% fungal protein, not the 6.7% claimed by Perfect Day, representing a much greater concentration of residual fungal proteins than has ever been evaluated for human consumption—approximately 25,900 to 389,000 times more than previous safety assessments.
- 124. By claiming that ProFerm is predominantly  $\beta$ -lactoglobulin, Perfect Day further asserted that  $\beta$ -lactoglobulin is a key component of cow's milk, which has historically been regarded as safe for human consumption.
- 125. By failing to disclose that the GRAS status was based on false data, or on its own assertions without adequate testing, Perfect Day misleads consumers into believing that the GRAS status ensures ProFerm's safety.
- 126. Upon information and belief, Perfect Day fails to disclose to consumers that ProFerm contains dangerously high levels of heavy metals, a critical omission that undermines the safety claims associated with the product.

#### V. Misleading Reasonable Consumers in the District.

127. Perfect Day's representations—including that ProFerm "is the same as the whey protein from cow's milk," "safe," "identical to traditional milk," "natural," having the "same nutritional profile" as cow's milk, "environmentally-friendly," and free from GMOs—are false

and, therefore, inherently misleading to D.C. consumers, who care about safe products for their families and communities.

- 128. Perfect Day's omissions of material facts about the composition, nature, risks, safety, and GRAS status of ProFerm mislead reasonable D.C. consumers.
- 129. Reasonable D.C. consumers encountering Perfect Day's representations would not expect ProFerm to be unnatural, potentially unsafe, or environmentally unfriendly.
- 130. For example, consumers believe "natural" means that a product is "healthy, safe, and better for the environment." Perfect Day's representations that ProFerm is safe, natural, and better for the environment are misleading. *See* Sections I and II, *supra*.
- 131. Regarding environmental claims in particular, the Federal Trade Commission ("FTC") has released "Green Guides" that "caution marketers not to make unqualified general environmental benefit claims because 'it is highly unlikely that marketers can substantiate all reasonable interpretations of these claims." Perfect Day cannot substantiate statements that ProFerm is sustainable and better for the environment in light of the facts establishing the threat synthetic biological food poses to our natural environment. These statements, therefore, mislead D.C. consumers to believe ProFerm is better for our environment than it truly is.
- 132. Nor would D.C. consumers expect to be consuming foods drastically divergent from real dairy. By labeling and marketing ProFerm as "animal-free dairy," "identical to dairy," the same as cow's whey, "safe," or "free from GMOs," Perfect Day gives D.C. consumers no cause or reason to be concerned with ProFerm. Cow's milk has been consumed by humans for thousands of years and is considered safe for human consumption.

<sup>&</sup>lt;sup>58</sup> Lu Ann Williams, *Consumers Associate Natural, Organic with Clean Label*, Prepared Foods (June 14, 2022), https://www.preparedfoods.com/articles/127006-consumers-associate-natural-organic-with-clean-label.

<sup>&</sup>lt;sup>59</sup> 16 C.F.R. § 260.4(b) (2012). Relatedly, the CPPA states that "when construing the term 'unfair or deceptive trade practice," deference should be given to "interpretation by the [FTC]." *See* D.C. Code § 28-3901(d).

- 133. Reasonable consumers are not in a position to access or use the sophisticated testing equipment necessary to discover the true nature of ProFerm. Consumers must, and do, rely on Perfect Day's marketing, which Perfect Day knows and uses to its advantage.
- 134. Nothing about the packaging, website, or other marketing materials of foods containing ProFerm would alert a reasonable D.C. consumer to the true properties of Perfect Day's SynBio "whey protein."
- 135. Perfect Day knows what representations it makes in marketing ProFerm, and that companies using Perfect Day's SynBio ProFerm in their own products pass those representations on to consumers, including D.C. consumers. Perfect Day also knows how ProFerm is produced. Perfect Day thus knows or should know the facts demonstrating that ProFerm is falsely represented to D.C. consumers, and that Perfect Day is responsible for the false representations to D.C. consumers.
- 136. Perfect Day is also aware of the growing consumer preference for safer food products. While this is not required to establish a CPPA claim, it is relevant to note that, in making the false, misleading, and deceptive representations and omissions at issue, Perfect Day acted with knowledge and intent to induce consumers to purchase products containing ProFerm. This strategy was designed to advance Perfect Day's private interest in increasing sales of its protein product.
- 137. D.C. consumers are at risk of real, immediate, and ongoing harm if Perfect Day continues to make misleading representations and omissions about ProFerm.

#### **CAUSE OF ACTION**

#### Violations of the District of Columbia Consumers Protection Procedures Act

138. OCA and TFUSA incorporate by reference all the allegations of the preceding paragraphs of this Complaint.

- 139. OCA and TFUSA are nonprofit, public interest organizations that bring this action on behalf of the general public and District consumers. *See* D.C. Code § 28-3905(k)(1)(D)(i).
- 140. Through D.C. Code § 28-3905(k)(1)(D)(i), the DC CPPA explicitly allows for public interest organizational standing even beyond that which is afforded pursuant to D.C. Code § 28-3905(k)(1)(C) and allows a public interest organization to stand in the shoes of a consumer to seek relief from any violation of the CPPA, which encompasses the presence of misleading marketing information in the District.
- 141. Perfect Day is a "person" and a "merchant" that provides and markets "goods" within the meaning of the CPPA. *See id.* § 28-3901(a)(1), (3), (7).
- 142. Perfect Day represents ProFerm as "the same whey protein found in cow's milk," "safe," creates milk that is "identical to traditional milk," "natural," creates milk with the "same nutritional profile" as cow's milk, "environmentally friendly," has GRAS status, and is free from GMOs. These and other misleading representations made by Perfect Day are detailed above.
- 143. In reality, ProFerm is synthetic, is produced from a genetically modified organism, creates milk that has a fraction of the nutritional value of cow's milk, is dramatically different biologically from natural cow's whey, and likely poses dangers to human health and the environment.
- 144. Perfect Day omits material information about ProFerm's nature, as well as about the safety and GRAS status of the ProFerm,, and warnings it has received. Perfect Day's material omissions are described *supra*.
- 145. Perfect Day has violated the CPPA by "represent[ing] that goods . . . have a source, sponsorship, approval, . . . [or] characteristics . . . that they do not have"; "represent[ing] that goods . . . are of a particular standard, quality, grade, style, or model, if in fact they are of another";

"misrepresent[ing] as to a material fact which has a tendency to mislead"; "fail[ing] to state a material fact if such failure tends to mislead"; "us[ing] innuendo or ambiguity as to a material fact, which has a tendency to mislead"; and "advertis[ing] . . . goods . . . without the intent to sell them as advertised." See *id*. § 28-3904(a), (d), (e), (f), (f-1), (h).

#### **JURY TRIAL DEMAND**

146. OCA and TFUSA hereby demand a trial by jury.

#### PRAYER FOR RELIEF

Wherefore, OCA and TFUSA pray for judgment against Perfect Day and request the following relief:

- A. A declaration that Perfect Day's conduct is in violation of the CPPA;
- B. An order enjoining Perfect Day's conduct found to be in violation of the CPPA;
- C. An order granting OCA and TFUSA's costs and disbursements, including reasonable attorneys' fees and expert fees, and prejudgment interest at the maximum rate allowable by law; and
- D. Any such other relief as the Court deems authorized, reasonable, and just.

DATED: January 3, 2025 Respectfully submitted,

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