

The Procter & Gamble Company**Febreze****Challenger:***S. C. Johnson & Son, Inc.***Product Type:***Household Products***Issues:***Comparative Performance Claims; Efficacy Claims; Establishment Claims; Health & Safety Claims; Implied Claims/Consumer Perception; Parity Claims; Performance Claims; Product Description; Superiority Claims***Disposition:***Modified/Discontinued***BBB NATIONAL PROGRAMS****NATIONAL ADVERTISING DIVISION**

S. C. JOHNSON & SON, INC.,
Challenger,

THE PROCTER & GAMBLE COMPANY,
Advertiser.

Case No. 6977

Closed 05/11/2022

FINAL DECISION

- A purely sensory test, which is intended to test only perception of odors, is not sufficient to support a claim of physical or chemical odor elimination because a sensory test evaluates only the perception of malodors, and not whether the odors have been physically or chemically eliminated.
- The Advertiser's testing was not a good fit for claims of sensory elimination (including instant and continuous elimination) due to the lack of evidence bridging the laboratory testing to real world conditions.

I. Basis of Inquiry

The advertising industry established the National Advertising Division ("NAD") and the National Advertising Review Board ("NARB") in 1971 as an independent system of self-regulation designed to build consumer trust in advertising. NAD reviews national advertising in all media in response to third-party challenges or through inquiries opened on its own initiative. Its decisions set consistent standards for advertising truth and accuracy, delivering meaningful protection to consumers and leveling the playing field for business. Challenger S. C. Johnson & Son, Inc. ("SCJ" or "Challenger") challenged express and implied claims made by Advertiser The Procter & Gamble Company ("P&G" or "Advertiser") for its Febreze line of products. The following are representative of the claims that served as the basis for this challenge:

A. Express Claims

- "Febreze safely eliminate[s] odors."
- OK, real talk: We aren't the first air freshener. But we are the first of its kind to actually eliminate stink...thanks in part to our OdorClear technology."
- "No cover up here – Febreze has the only lineup of air fresheners that truly clean away stink. So whether you're looking for an instant burst of "ahh" or continuous freshness, you know we've got

your back (and nose). Check out all the ways we can help keep your life guest-ready and odor-free.”

- “Febreze Air eliminates odors in an instant.”
- “Typical air fresheners just add another smell to the mix, but Air Effects actually eliminates airborne odors and leaves an instant burst of lightly scented freshness in its wake.”
- “Your go-to air freshener for any odors that arise: Air Effects doesn’t just mask stinky air, it instantly eliminates it.”
- “Want to eliminate odors without heavy overwhelming scents? We get it. Introducing Febreze Light. It eliminates odors with no heavy perfumes in light scents you’ll love.”
- Febreze Clothing is an ‘Odor Eliminator.’
- Febreze Fabric Refresher “eliminates sunk-in-stink with long-lasting freshness.”
- “Did you know the source of odor in your home could be all your soft surfaces? Odors get trapped in your home’s fabrics and resurface over time. Febreze Fabric Refresher eliminates odors. Its water-based formula safely penetrates fabrics where odors hide.”
- “Did you know that your nose gets used to the odors in your home? That’s right. You go noseblind, but others smell...this. [Visuals of pets, dirty socks, and dirty sports shoes.] Luckily, there’s Febreze Plug. It continuously eliminates lingering odors...”
- “Over time, you go noseblind, but others smell...this. [Visuals of pets, dirty socks, and dirty sports shoes.] That’s why Febreze Plug has two alternating scents, and it eliminates odor for 1200 hours.”
- Febreze Small Spaces is an “odor eliminator.”
- “Unlike the leading cone, [Febreze] Small Spaces continuously eliminates odor in the air and on surfaces so they don’t come back for 45 days. Just imagine what it can do with other odors.”
- “For bathroom odors that linger, try Febreze Small Spaces. Just press firmly and it continuously eliminates odors in the air and on soft surfaces for 45 days.”
- “Don’t forget all your favorite nooks and crannies: Small Spaces prevents lingering odors for up to 45 days.”
- “Strike a match on odor elimination. Shop Febreze Candles.”
- Febreze Wax Melts “eliminate[] odors & freshen[.]”
- Febreze Car Vent Clips are the “best car air fresheners to eliminate car odors for good.”
- “With two times the scent power of regular Febreze, Unstoppable Fabric finds, neutralizes, and eliminates tough odors trapped in hard to wash fabrics like couches or smelly sports equipment...Stop sneaky odors from lingering in your home with Febreze Unstoppables.”
- “Did you know that your nose gets used to the odors in your home? That’s right. You go noseblind, but others smell...this. [Visuals of pets, dirty socks, and dirty sports shoes.] Luckily, there’s Febreze Plug. It continuously eliminates lingering odors...”

B. Implied Claims

- Every Febreze product reduces odor to an olfactory level that is not detectable to the average consumer.
- Every Febreze product reduces all types of odor to an olfactory level that is not detectable to the average consumer.

During the course of the proceeding, the Advertiser informed NAD that, for reasons unrelated to this challenge, it was in the process of voluntarily discontinuing the Clothing form of its Febreze product, and all Clothing-specific advertising claims. NAD will treat these discontinued Clothing claims, for the

purposes of compliance, as though NAD recommended their discontinuance and the Advertiser agreed to comply.

II. Evidence Submitted

The Challenger submitted exhibits of the challenged advertising. In addition, to support its arguments it provided the following:

- Testing on whether Febreze Air products eliminate odors;
- Expert Reports of Rebecca N. Bleibaum explaining the Challenger's odor elimination testing of Febreze Air products and opining on the Advertiser's testing;
- Expert Report of Daniel M. Ennis opining on the Advertiser's testing;
- Expert Report of Michael A. McGinley opining on the Advertiser's testing;
- An article and video from Consumer Reports about prior Febreze claims;

The Advertiser submitted the following:

- Testing on whether Febreze products eliminate odors;
- Patents on Febreze's odor blocking technology;
- Declarations of Keith Cannon explaining the Advertiser's odor elimination testing and responding to the opinions of the Challenger's experts;
- Declarations of Steve Horenziak explaining Febreze's odor elimination technology and responding to the opinions of the Challenger's experts;
- Expert Report of Gail Vance Civile opining on the Challenger's testing;
- Expert Report of Edgar Chambers IV responding to the opinions of the Challenger's experts on the Advertiser's testing;
- Expert Reports of John Castura opining on the statistical analysis used in the Challenger's and the Advertiser's testing;
- A Letter responding to various supplemental questions posed by the NAD, along with supporting documentation.

III. Decision

A. Introduction and Background

The Advertiser and the Challenger manufacture two of the largest and most well-known brands in the home fragrance industry. The Challenger's Glade brand competes with the Advertiser's Febreze brand and they each produce an array of home fragrance products.

At issue in this challenge is whether P&G's odor elimination claims for Febreze products convey the message that the products eliminate odor at the molecular level or the message that the Febreze products eliminate odor at the olfactory level. SCJ challenged numerous "odor elimination" claims that P&G makes across the Febreze line of products, which include the Febreze Air, Light, Clothing, Fabric, Plug, Small Spaces, Candles, Wax Melts, Car, and Unstoppables products. SCJ argued that P&G's odor elimination claims distinguish its products from its competitors by claiming that its products do not just "mask" odor but rather eliminate it. P&G asserted that the challenged claims are substantiated by reliable evidence demonstrating that the Febreze products and the proprietary technologies they contain eliminate malodors to an olfactory level that is undetectable to consumers.

B. *The Challenged Advertising and the Messages Reasonably Conveyed*

An advertiser is responsible for all reasonable interpretations of its claims, not simply the messages it intended to convey.¹ In analyzing the messages conveyed by a particular advertisement, NAD typically reviews the net impression created by an advertisement as a whole, not merely words or phrases standing alone, and taking into consideration both the words and the visual images. In the absence of consumer perception evidence, NAD uses its own expertise to step into the shoes of the consumer to determine the messages reasonably conveyed by the challenged advertising.

The challenged claims appear in online advertisements, commercials and on the Febreze website promoting either the line of Febreze products or one of the individual product types in the Febreze line.

SCJ argued that P&G's advertising expressly conveys the unqualified message that Febreze products eliminate odor either at the molecular level or to an olfactory level that is not perceptible to consumers. P&G argued that its advertising conveys the supported message that Febreze eliminates the perception of malodor.

As there was no consumer perception evidence presented in connection with the challenged advertisements, NAD relied on its own expertise to determine the messages reasonably conveyed. NAD found that the challenged advertisements reasonably convey a message that the Febreze products are effective in eliminating perceptible malodor. NAD also determined that some challenged advertising conveys an odor elimination message through language or imagery, that Febreze eliminates odors at the molecular level.

The word "eliminate" in the challenged advertising conveys the message that the Febreze product reduces malodor to an olfactory level that is not detectable to the average consumer.² NAD has previously examined odor elimination claims and has found that "[U]nlike the phrases "helps control" or "reduce odors," unqualified promises to "neutralize," "control," "block" and "prevent" are absolute and consequently require stronger supporting evidence than odor reduction evidence."³ In *Pactiv Corporation*, NAD concluded that while the challenged odor reduction claims were sufficiently qualified and supported by evidence that demonstrated that the advertiser's OdorBlock technology reduced malodor but did not eliminate it, the evidence that the advertiser's technology reduced odor was insufficient to support the advertiser's claims that the product "neutralize[d] or control[led]" odors." In *Sherwin-Williams Company (Dutch Boy Refresh Paint, Inc)*, Report #5148, NAD/CARU Case Reports (March 2010), NAD determined that claims that the advertiser's Refresh paint "eliminates household odors" and "continuously eliminates odors day after day" convey the message that the advertiser's product did not merely reduce odors but rather reduced them "to an olfactory level that is not detectable to the average consumer during the useful life of the paint."

¹ See *Molekule Inc. (Molekule MHI Air Purifier)*, Report #6314, NAD/CARU Case Reports (October 2019); *White-Rodgers (a division of Emerson Electric Co) (Programmable Thermostats)*, Report #6118, NAD/CARU Case Reports (September 2017); *Spectrum Brands, Inc. (Rayovac Fusion AA Batteries)*, Report #6012, NAD/CARU Case Reports (October 2016); *Dole Packaged Foods, LLC (Dole Fruit Bowls)*, Report #5868, NAD/CARU Case Reports (July 2015).

² *Healthy Directions, LLC (Joint Advantage Gold Supplement)*, Report # 5512, NAD/CARU Case Reports (October 2012) ("Unqualified promises such as the one here that claims to 'eliminate' stiffness are absolute and consequently require stronger supporting evidence than is present in this record," which showed that the product reduced, but did not eliminate stiffness.").

³ *Pactiv Corporation (Hefty OdorBlock Trash Bags)*, Report #5105, NAD/CARU Case Reports (November 2009)

1. Febreze products physically and chemically eliminate odors on a molecular level

Certain commercials and statements on the Febreze website reasonably convey the message that Febreze products physically and chemically eliminate odors on a molecular level. For example, certain commercials include the animated imagery of the odor molecule being destroyed by the Febreze product. Other advertising touts the ability of Febreze to eliminate the source of odors by “cleaning” odors. The Febreze home page includes an image of the range of Febreze products with the text, “How does Febreze safely eliminate odors? Find out how.” with a link to a page with detailed information about the entire line of Febreze products, including text stating “OK. Real talk. We aren’t the first air freshener. But we *are* the first of its kind to develop technology that actually eliminates stink... thanks in part to our OdorClear technology.” Other text on the website reads, “Our formulas are designed to actually eliminate bad odors without just masking them.” Another line claim about all Febreze products on the website states, “No cover up here – Febreze has the only lineup of air fresheners that truly clean away stink, so whether you’re looking for an instant burst of “ahh” or continuous freshness, you know we’ve got your back (and nose). Check out all the ways we can help keep your life guest-ready and odor-free.”

Several of the challenged advertisements specifically tout the ability of Febreze fabric products, including Febreze Fabric Refresher and Febreze Unstoppable Fabric, to provide long-lasting odor elimination by attacking the source of odors and reasonably convey the message that the product physically and chemically eliminates odors on a molecular level. For example, the Febreze Fabric commercial states, “Did you know the source of odor in your home could be all your soft surfaces? Odors get trapped in your home’s fabrics and resurface over time. Febreze Fabric Refresher eliminates odors. Its water-based formula safely penetrates fabrics where odors hide.” The commercial also includes visual depictions of pet and dirty shoe odors and Febreze Fabric Refresher working at a molecular level on fabrics after being sprayed on furniture to eliminate the pet or dirty shoe odors.

NAD found that advertising that communicates the message that Febreze does more than traditional air fresheners to mask odors but “clean” the air and address the source of odors, convey the message that Febreze physically or chemically eliminates odor at the molecular level.

2. Febreze Products Eliminate the Perception of Malodor

Other challenged advertisements reasonably convey a message limited to the elimination of a perception of malodor, rather than a message that the products physically and chemically eliminate odors on a molecular level.

For example, the Febreze Light Air commercial states, “Want to eliminate odors without heavy overwhelming scents? We get it. Introducing Febreze Light. It eliminates odors with no heavy perfumes in light scents you’ll love.” In the commercial, a woman is depicted spraying Febreze Light Air into the air. NAD found that such advertising that does not convey a message about the product affecting the sources of odor or cleaning odors, reasonably conveys the message that Febreze products eliminate the perception of malodor.

C. *Standard of Review*

Advertisers must possess a “reasonable basis” for claims disseminated in advertising.⁴ What constitutes a “reasonable basis” depends on several factors, including the type of product, the type of claim, the consumer benefit from a truthful claim, the ease of developing substantiation for the claim, the consequences of a false claim, and the amount of substantiation experts in the field believe is reasonable.⁵

D. *The Advertiser’s Evidence*

To support the challenged claims, the Advertiser submitted declarations from Keith Cannon, Steve Horezniak, Gail Vance Civile, Edgar Chambers IV, and John Castura, who explained the mechanism behind Febreze’s odor elimination technology and the testing Febreze undertook to support its claims. In addition, the Advertiser submitted the results of sensory testing it conducted, known as Difference From Control (“DFC”) testing, to show that consumers could not smell malodors after treatment with Febreze.

Steve Horezniak, Research Fellow in the Research and Development Department of P&G’s Home Care business, explained that Febreze uses four key technologies to eliminate malodor on a molecular level: odor trappers, odor converters, odor neutralizers, and odor magnets. Odor trappers trap volatile organic compounds (“VOCs”), which form the majority of malodors and which are usually hydrophobic, in the hydrophobic core of a cyclodextrin molecule. Odor converters are reactive aldehydes that bind to VOCs to convert them into odorless molecular compounds. Odor neutralizers contain citric acid and sodium citrate to neutralize the pH of VOCs and convert them to salt forms with no odor. Odor magnets are polyamine polymers found only in Febreze Fabric sprays that attract malodors and extract them from fabrics. The Advertiser explained that at least one or more of these technologies are present in each Febreze product. Among other things, the Advertiser submitted patents P&G has held on its unique and proprietary expressions of the technologies in certain of its Febreze products, as well as evidence from scientific literature of how those technologies work to eliminate the perception of odorants from VOCs. P&G argued that the technologies used in the Febreze products work to physically or chemically alter or otherwise trap the malodor molecules so that the products “eliminate” malodors rather than merely mask them with a different fragrance.

In support of its elimination claims, the Advertiser relied on the DFC testing. P&G stated that it relied on guidelines from ASTM and HCPA (an industry trade association for chemical products companies formerly known as the Consumer Specialty Products Association (“CSPA”)) to develop this testing methodology.

The DFC testing used an expert panel of ten to sixteen non-P&G employees that was asked to assess the intensity of a malodor (e.g. bacon, bathroom, body odor, fish, garlic, mold, mildew and must, pet or smoke) in a test chamber that contains a product from each line of Febreze products (Air, Candle, Car, Fabric, Plug, Small Spaces and Wax Melts, with the testing of each product type called a “pillar” in the study). The panel was asked to compare the intensity of the malodor in a chamber with only the malodor and no Febreze to a test chamber with the malodor and Febreze. The test chambers used were 12.2 cubic

⁴ *Guardian Technologies, LLC (GermGuardian and PureGuardian Air Purifiers and Replacement Filters)*, Report #6319, NAD/CARU Case Reports (November 2019).

⁵ *Pfizer Inc.*, 81 F.T.C. 23 (1972). See also FTC, *Policy Statement Regarding Advertising Substantiation* (Nov. 23, 1984), <https://www.ftc.gov/public-statements/1984/11/ftc-policy-statement-regarding-advertising-substantiation>.

feet, with the exception of the test chamber for the fabric pillar, which was conducted in an 8-foot high glass-walled room.

In each test chamber with Febreze, a 3-second, 4-grams-weighted spray of product was used. The panelists conducted their test 30 minutes after the introduction of Febreze Air, 60 minutes after the introduction of each continuous use product (i.e., Candle, Car, Plug, Small Spaces or Wax Melts) and 120 minutes after introduction of the fabric pillar. After each test, the chambers were cleaned, vented and purged of all odors.

Panelists were asked to first smell an unblinded reference chamber containing malodor only and rate the intensity of odor on a scale of 0 to 100, with 100 being extremely strong and 0 being no malodor present. For all tests other than Febreze Fabric, the malodor dose introduced into the chamber was at least 65-75 intensity initially and then maintained at an intensity grade of 40 or higher for the duration of the test. Febreze Fabric was allowed to have an intensity grade lower than 40 and above 20 because the testing was performed after 2 hours in a room instead of a chamber.

The panelists were asked to compare the malodor intensity of one of three types of chambers against the reference: (a) malodor only (negative control), (b) Febreze only (positive control) or (c) malodor + Febreze. The panelists were then asked to rate the intensity of the malodor in each chamber on a scale of -7 to +7, with -7 to -3 being described as “much weaker than identified reference control,” -2 to +2 as “same as identified reference control,” and +3 to +7 as “much stronger than identified reference control.”

If the mean score for the malodor + Febreze test leg was both less than zero and within 2.5 points of the mean score assigned to the Product Only control, *i.e.* if the malodor intensity detected was less than that of the reference control and sufficiently statistically similar to that of the Product Only leg, then the Febreze pillar was deemed effective at eliminating malodor perception. Having a mean score below zero but not within 2.5 points of the mean score assigned to the Product Only control was interpreted as Febreze merely reducing, but not eliminating, malodor perception. The results of the DFC testing showed that for every pillar and for every type of odor, Febreze was considered to have “eliminated” the malodor.

1. The Relevance of Sensory Testing

The Challenger argued that the DFC sensory testing cannot support odor elimination claims at the molecular or chemical level. The Challenger’s expert, Dr. Daniel Ennis, explained that evaluating whether a product physically or chemically eliminates malodor on a molecular level requires analytical chemistry data and an assessment of the concentration of malodor after exposure to the product. A purely sensory test, which is intended to test only perception of odors, is not sufficient to support a claim of physical or chemical odor elimination because a sensory test evaluates only the perception of malodors, and not whether the odors have been physically or chemically eliminated. NAD agreed that the evidence submitted was limited to sensory testing and was not a good fit for implied claims that Febreze eliminates the source of odor at the molecular level. Although P&G provided evidence that certain of its odor elimination technologies are designed to address odor at the chemical or molecular level, there was no consumer relevant testing in the record that demonstrated Febreze products eliminate odor at its source.⁶

The Challenger also argued that P&G should have tested its odor elimination technology without the fragrance to properly evaluate whether Febreze products eliminate odor as opposed to merely masking it.

⁶ The Advertiser also argued that before it did DFC testing, it historically used “absolute testing,” which it claimed also supported its elimination claims. However, the Advertiser did not submit the details of this testing.

The Advertiser explained that it was impossible to separate the fragrance in its products from key odor elimination technologies, as these products were sold containing fragrance and that some of the technology used to chemically eliminate odors are contained in the fragrance itself. Further, the Advertiser argued that to test a fragrance-free product that is unavailable for sale would not be consumer relevant. NAD agreed with the Advertiser that testing a different product than that available for purchase limits the consumer relevance of the testing.⁷

2. The ASTM and CSPA Methodology

The Challenger also argued that the Advertiser's test methodology for the DFC study inappropriately relied on guidelines from ASTM and CSPA because neither standard is intended for claim substantiation. The Challenger argued that both standards were created to provide a framework for product development, quality control and formulation changes. For example, the Challenger pointed to ASTM's own description of its guidelines which states that "this guide is not intended to support claims."

In addition, the Challenger's expert Michael McGinley, former Vice-Chair of the CSPA Deodorization Committee and a primary author of the method that the Challenger used for its testing, explained that although it is possible to reach a conclusion using the CSPA methodology that a product eliminates the perception of malodor in a very limited and highly controlled set of circumstances, such circumstances would not be meaningful to how the product is used in real world conditions. Finally, the Challenger asserted that even if the CSPA and ASTM methodology was appropriate for claim substantiation, the Advertiser deviated from the methodology in key ways by, for example, using test chambers significantly smaller than those recommended by those methods.

The Advertiser explained that there is no established industry standard for sensory testing in support of odor elimination claims and that the ASTM and CSPA standards reflect best practices in the field of sensory science. The Advertiser argued that borrowing from these standards is therefore the appropriate course of action when designing a study to evaluate odor elimination claims. Further, the Advertiser argued that any deviations from the standards were appropriately tailored for claim substantiation.

Here, the issue is not whether the Advertiser properly adhered to ASTM and CSPA standards, but whether the Advertiser's substantiation was reliable and provided a reasonable basis for its claims. ASTM tests generally reflect industry consensus and provide a controlled, consistent and standardized way to test products that may be exposed to a variety of uses in the marketplace. The ASTM and CSPA standards provide reasonable guidance on reliable testing procedures. It was therefore appropriate for the Advertiser to look to industry standards as a starting point, NAD examined whether each aspect of the chosen methodology was reliable and whether any deviations from the standards were justified.

3. Test Chamber Size, Dosage and Activation Time

The Challenger argued that one fatal departure from the standards in the Advertiser's DFC test was the size of the test chambers.⁸ The Advertiser used test chambers of 12.2 cubic feet (roughly the size of a small refrigerator), but the ASTM and CSPA both recommend much larger chambers. The ASTM standards, for example, note that "air fresheners are generally intended for room air freshening and thus

⁷ The Advertiser also submitted results of DFC testing of a limited SKU version of its Fabric pillar that P&G offers to consumers in a fragrance-free version.

⁸ The exception is the Fabric pillar, which was conducted in a small room.

need a room-sized chamber” though it allowed some leeway to use a large jar if the product is small or intended for evaluation at close proximity. The CSPA standards are even more specific, stating that “[i]t is expected that chambers smaller than 60-ft³ will require small doses of malodor and fragrance that would be difficult to control in a reproducible way.”

The Challenger asserted that the use of undersized test chambers was even more problematic because of the high dosage of Febreze used (3 seconds or 4 grams) in each chamber along with the long activation time (30 minutes or more) that was allowed prior to testing. This combination of conditions meant that a highly concentrated dose of Febreze was allowed to sit in a small container and interact with malodors for thirty minutes or more before any panelist smelled the chamber—conditions that did not reflect actual consumer use. According to the Challenger, these conditions would be the equivalent of spraying Febreze for four straight minutes in a 1000 cubic feet room. The Challenger further argued that these errors were all compounded by the fact that the Advertiser only used malodors of moderate intensity into these chambers oversaturated with Febreze.

The Advertiser explained that it chose small test chambers because they were easier to clean and prevent contamination. The Advertiser stated that 4 grams of spray was appropriate due to consumer testing it had conducted, which concluded that 4 grams of spray was the typical amount of Febreze that consumers would use when spraying a small bathroom. Similarly, the Advertiser cited its consumer testing to support the 30-minute activation time.⁹ The Advertiser also explained that because it used a dose appropriate for a bathroom-sized room in a much smaller chamber, it increased the concentration of malodor accordingly. Finally, the Advertiser conducted two additional tests, both using Febreze Air, to confirm that its methodology was reliable. One test was conducted in an 800 cubic feet room, using 8.375 grams of product; the other test was conducted in the smaller chamber, but with an activation time of only 10 minutes rather than 30. In both cases, according to the Advertiser, the results supported an elimination claim.

The small test chambers here limit the reliability of the testing to demonstrate odor elimination in consumer relevant circumstances. Although both ASTM and CSPA contemplate using chambers smaller than rooms consumers would typically encounter in some circumstances, neither standard suggests chambers as small as 12.2 cubic feet (although as noted above ASTM did allow for testing in jars in very limited circumstances not applicable here). In fact, the CSPA especially cautioned against using chambers smaller than 60 cubic feet, as this would require reducing the dose of product and malodor to levels that would affect the reliability of the testing. Although departures from industry standard testing can be justified in some circumstances, the Advertiser’s test methodology was specifically disapproved and not justified by the difficulty of cleaning the larger chamber.

⁹ Consumer habits and practices data was gathered by P&G in a 2016 study that involved an online questionnaire completed by more than 3,000 consumers, of which roughly 2,500 were individuals who had used air care products within the past 6 months (“P6M users”). To the extent P6M users had used a given pillar within the past 6 months they were asked specific questions about the use of that pillar. P6M users were asked “About how long would you say each odor [recently experienced un your home] would last in your home if you did not treat it?” Across all odors 31% of P6M users who used aerosols reported that the odors would last up to 30 minutes. With respect to bathroom malodor specifically 56% of P6M users reported that bathroom odor would last up to 30 minutes in their homes if not treated. Because bathroom malodor was the number one malodor that consumers using aerosols reported and because 56% of P6M users of aerosols reported that bathroom malodor lasts up to 30 minutes if not treated P&G deemed it appropriate to judge and set the air pillar’s success criteria at the 30-minute evaluation time point.

The size of the test chambers is particularly problematic when considering the dosage used. Although the Advertiser used data from consumer testing to determine the amount of product to use, the use of a test dosage typically used in rooms the size of a bathroom in a test chamber the size of a refrigerator concentrates the product in ways that are not consumer relevant.

Further, although the Advertiser claimed that an activation time of 30 minutes (or longer) reflected actual consumer habits from consumer testing it had done, it was unclear how it was determined that 30 minutes was the optimal time. The Advertiser's consumer testing asked consumers how long odors would last in their homes if untreated, with some of the responses indicating 30 minutes and others longer.¹⁰ The fact that some odors linger for 30 minutes, however, does not necessarily mean that 30 minutes is the optimal time to test the efficacy of a product in support of an elimination claim. Even if 30 minutes could have been appropriate for a larger room, there was no evidence showing that 30 minutes would still be appropriate for a 12.2 cubic foot chamber.¹¹ Further, many of the challenged claims tout the "instant" elimination of odors and a 30-minute activation time is not a good fit for claims that odor is instantly eliminated.

Although the Advertiser argued that it introduced a higher concentration of malodor to account for the smaller chamber size, it was not clear whether the increased concentration of malodor matched the heavy dose of product to represent meaningful consumer use. The Challenger maintained that high concentrations of both product and malodor, enclosed in a small chamber for thirty minutes or longer, give the product and malodor opportunities to interact in ways that do not reflect real world conditions.

In response to the criticisms noted above, the Advertiser conducted additional testing of the Febreze Air pillar in a larger room and, separately, in the same small test chamber but after only 10 minutes of activation time. The additional testing also found that Febreze Air eliminated malodors. This additional testing successfully overcame the Challenger's objections as to test chamber size and activation time, but only as to the pillar that received additional testing—Febreze Air. NAD therefore concluded that, with the exception of Febreze Air and Fabric (which was tested in a larger chamber to begin with), the DFC testing did not provide reliable results because the test chamber size, dosage and activation time were not consumer relevant.

NAD also questioned whether the testing in a sterile, isolated chamber was a good fit for advertisements that claim Febreze can eliminate odors that sink into surfaces and linger when the test chambers contained no such surfaces, creating an artificial environment that would not be encountered in typical consumer use. Although testing in these chambers allowed the Advertiser to control for environmental variables, and it is impractical for an Advertiser to test every combination of rooms with different furniture and surfaces, NAD would have liked to see evidence that bridged the gap between the laboratory testing and real-world use.

4. 2.5 Point Scale

P&G's testing measured successful odor elimination by setting a 2.5 point scale for chambers with malodor + product as compared to chambers with product only. SCJ argued that P&G's 2.5 Point

¹⁰ P&G used 60 minutes activation time for continuous-use products and 120 minute activation time for the fabric pillar.

¹¹ NAD noted that CSPA and ASTM Guidelines for assessing instant action aerosols, both reference 5 minutes of activation time prior to evaluation.

threshold for concluding that Febreze products eliminate odor does not demonstrate odor elimination, but odor reduction.

P&G's experts explained that they validated its malodor elimination efficacy methodology for consumer relevance by correlating its trained expert panelist results with results from testing with untrained consumers. P&G conducted product tests of several different malodor and fragrance combinations in which it asked consumers to evaluate relative malodor intensity under the same conditions and using the same scoring scale as experts. P&G found that scores reported by untrained consumers followed the same trend as expert panelists' scores but that trained sensory experts are more sensitive to odor overall and that consumers have trouble distinguishing differences when confronted with mixtures of malodor and fragrance. P&G asked consumers to rate malodor + product combinations on a pleasantness scale because they could better relate to it. P&G's statistical modeling revealed that experts rated the malodor + product chamber 2.5 to 3 points higher than consumers. Accordingly, P&G set the success criteria for malodor elimination efficacy in its DFC testing with expert panelists at a difference of 2.5 points or less.

Consumers were asked to rate odor on a scale of "pleasantness" while experts rated malodor intensity. Correlating the expert results on odor intensity to those of an untrained consumer on the pleasantness of an odor is not appropriate as experts and consumers are not rating the same quality. Assessing odor "pleasantness" does not measure whether consumers can detect malodor, but rather whether a certain odor is pleasing or not. For the foregoing reasons, NAD determined that the 2.5 scale P&G used to determine elimination of odor was not consumer relevant.

Additionally, even applying the Advertiser's own scale, the expert panel's responses indicate that malodor was not eliminated. The instructions given to the panelists indicate that only -7 on the scale was defined as the absence of "any malodor in the test chamber compared to the control chamber;" anything above -7 was merely "weaker" than the control. Only 20% of product + malodor test chambers were rated as -7, indicating that most panelists detected some malodor.¹² The Advertiser maintained that endpoint avoidance explains this result, as even trained panelists may be reluctant to select an endpoint on any scale. NAD recognized that there could be some endpoint bias, but that the testing revealed that many panelists detected malodors and, as a result, the test results are not consistent with a claim of odor elimination.

5. Blinding

SCJ argued that the Advertiser's testing was not properly blinded for all of the continuous action products (i.e. Candle, Wax, Small Spaces, Plug, Car) because the front wall of the test chambers was transparent, which allowed the evaluators to see which chambers contained a Febreze product. This provided panelists with critical information that could have impacted how they graded the aroma smelled in the test chambers. P&G's expert explained that continuous action products were left in the evaluation chambers because it is consistent with consumer use of those products. While such products are visible to expert panelists, P&G argued that the experts do not know whether the test chamber they are evaluating contains a product only or malodor + product, so the blinding would only affect the scoring of these two chambers and it would affect them equally. P&G submitted additional DFC testing of its continuous action products in which it placed a placebo or "dummy" product in each of the malodor only chambers

¹² Experts were instructed that if they do not smell any malodor in the chamber compared to the control chamber to rate it much weaker or a -7 on the scale, 22% of expert panelists rated the product + malodor as a -6, 20% as a -5, 15% as a -4 and 9% as a -3, 6% as a -2 and 3% as a -1.

to ensure all chambers featured the same visual cues.¹³ The additional testing demonstrated malodor elimination efficacy against all malodors tested.

When test results are entirely subjective, lack of blinding could affect even expert evaluators and introduce bias into the test. P&G's additional testing successfully overcame the Challenger's objections with respect to blinding for the continuous action products tested; however, NAD found that, in connection with the flaws in test chamber size and the 2.5 point scale discussed above, that P&G's DFC testing was not a good fit for the challenged claims.

E. The Challenger's Testing

NAD also reviewed the Challenger's testing.

The Challenger's testing was conducted by Rebecca Bleibaum, President and Chief Sensory Intelligence for Dragonfly SCI, Inc. The study tested whether Febreze Air Linen & Sky and Febreze Light Air Sea Spray eliminated malodor. The testing included three odor evaluation chambers that were between 610-640 cubic feet and followed conditions prescribed by ASTM's Standard Guidance. A microwave was placed in each chamber so that the study participants could not see the inside of the microwave. In two of the three chambers, three pieces of bacon were microwaved, after which the microwave door was left open and the bacon was left in the microwave. One of the Febreze products was sprayed in a circular motion for 3 seconds in one of the two chambers where the bacon was cooked and also in the chamber where bacon was not cooked.

Seventy consumers were asked to evaluate and rate the intensity of the bacon aroma by smelling the sniff port for each fragrance chamber in the following order: (1) Bacon Room: cooked bacon only; (2) Febreze Room: treated with Febreze or Febreze Light, no cooked bacon and (3) Febreze and Bacon Room: cooked bacon treated with Febreze or Febreze Light. Consumers used a score card to rate each sniff port on a 9-point intensity scale ranging from "No bacon aroma" on one end (1) to "very strong bacon aroma" at the other end (9). The Dragonfly testing found that Febreze Air and Febreze Air Light reduced bacon aroma but did not reduce it to a level that is undetectable to the average consumer.¹⁴

P&G's expert, Gail Vance Civile, founder & President of Sensory Spectrum, Inc. argued there were three main flaws in the Challenger's testing. First, no effort was made to randomize the order in which test subjects evaluated the testing chambers which can result in adaption error where subjects become less able to accurately rate their experience of aromas after smelling a given aroma. Second, the testing conditions were not consumer relevant because the cooked bacon strips were left in an open microwave while Febreze was sprayed and while the subject evaluated the odor. Finally, the test subjects' scoring of the Febreze only and Febreze Light only rooms at 2.0 and 2.1 on average for bacon aroma intensity indicates there are several flaws with the test methodology and protocols, such as contamination of the air outside the chambers, odors lingering in the chambers and use of consumers versus trained subjects.

¹³ P&G blinded the candle pillar by placing a screen on it that prevented panelists from seeing if the candle product was lit or not.

¹⁴ Febreze sessions were rated as follows: rooms with bacon only had a mean bacon aroma intensity of 7.7, a bacon chamber that was treated with Febreze had a mean bacon aroma intensity of 5.1, and rooms that were treated with Febreze only were rated 2.0. Febreze Light sessions were rated as follows: rooms with bacon only had a mean bacon aroma intensity of 7.3, a bacon chamber that was treated with Febreze Light had a mean bacon aroma intensity of 5.2 and rooms that were treated with Febreze only were rated 2.1.

Dragonfly, Inc. conducted additional testing in May 2021 to address P&G's criticisms of leaving bacon in the chamber and the order in which the chambers were evaluated by the consumers. This second round of testing was conducted on Febreze Air Linen & Sky and used two malodors – bacon and popcorn. This testing also showed that Febreze air Linen & Sky reduced the malodors in the room but did not eliminate them beyond perception.¹⁵

While the Challenger's testing used consumer evaluators instead of experts and tested only two types of malodors and only one Febreze product, it provided additional evidence and reinforces NAD concerns about whether the Advertiser testing supported its odor elimination claims.

F. Analysis and Recommendations

Having determined the messages reasonably conveyed in the challenged advertising and having assessed the evidence in the record, NAD considered its recommendations for the challenged advertising.

As set forth above, the challenged advertising conveys different messages: an odor elimination message at the molecular level or a message that perceptible odor is eliminated. The Advertiser submitted evidence of extensive testing along with reports from experts in relevant fields. However, NAD ultimately found that the Advertiser studies were not a good fit for the challenged claims.

First, NAD found that the Advertiser's evidence was a poor fit for the claims of physically or chemically eliminating malodor on a molecular level. The Advertiser's sensory testing focused entirely on perception and did not test whether malodor molecules were eliminated at a molecular level in a consumer relevant way. The sensory testing, by itself, is insufficient to support a non-sensory elimination claim.

Second, NAD found that the Advertiser's testing was also a poor fit for claims of sensory elimination (including instant and continuous elimination) due to the lack of evidence bridging the laboratory testing to real world conditions. The test chambers used to test were the size of a small refrigerator, but the amount of product used, as well as the activation time, was not proportionally adjusted to account for the small size. Although Febreze may have performed well in such conditions, this is not enough to prove that Febreze would be equally effective in larger rooms under consumer-relevant conditions.

Third, NAD found that the Advertiser did not show that its success criteria measured odor elimination. In determining, whether a product eliminated odors, the Advertiser took into account all panelist test cell responses indicating a final score within 2.5 points of the control. But according to the instructions, choosing a point other than -7 on the scale indicated merely a reduction, and not elimination of malodor.

Based on these concerns and the Challenger testing showing odor reduction on limited types of malodor and Febreze products, NAD concluded that the Advertiser has not substantiated a claim of sensory odor elimination. As a result, NAD recommended that the Advertiser discontinue the challenged express and implied claims:

- “Febreze safely eliminate[s] odors,”
- “OK, real talk: We aren't the first air freshener. But we are the first of its kind to actually eliminate stink...thanks in part to our OdorClear technology,”

¹⁵ The Bacon Room had a mean aroma intensity of 7.6 while the Bacon & Febreze Room had a mean bacon aroma of 4.9. The Popcorn Room had a mean intensity aroma of 7.4 while the Popcorn & Febreze Room has a mean bacon aroma of 4.6.

- “No cover up here – Febreze has the only lineup of air fresheners that truly clean away stink. So whether you’re looking for an instant burst of “ahh” or continuous freshness, you know we’ve got your back (and nose). Check out all the ways we can help keep your life guest-ready and odor-free,”
- “Febreze Air eliminates odors in an instant,”
- “Typical air fresheners just add another smell to the mix, but Air Effects actually eliminates airborne odors and leaves an instant burst of lightly scented freshness in its wake,”
- “Your go-to air freshener for any odors that arise: Air Effects doesn’t just mask stinky air, it instantly eliminates it,”
- “Want to eliminate odors without heavy overwhelming scents? We get it. Introducing Febreze Light. It eliminates odors with no heavy perfumes in light scents you’ll love,”
- “Febreze Fabric Refresher “eliminates sunk-in-stink with long-lasting freshness,”
- “Did you know the source of odor in your home could be all your soft surfaces? Odors get trapped in your home’s fabrics and resurface over time. Febreze Fabric Refresher eliminates odors. Its water-based formula safely penetrates fabrics where odors hide,”
- “Did you know that your nose gets used to the odors in your home? That’s right. You go noseblind, but others smell...this. Luckily, there’s Febreze Plug. It continuously eliminates lingering odors...,”
- “Over time, you go noseblind, but others smell...this. That’s why Febreze Plug has two alternating scents, and it eliminates odor for 1200 hours,”
- Febreze Small Spaces is an “odor eliminator,”
- “Unlike the leading cone, [Febreze] Small Spaces continuously eliminates odor in the air and on surfaces so they don’t come back for 45 days. Just imagine what it can do with other odors,”
- “For bathroom odors that linger, try Febreze Small Spaces. Just press firmly and it continuously eliminates odors in the air and on soft surfaces for 45 days,”
- “Don’t forget all your favorite nooks and crannies: Small Spaces prevents lingering odors for up to 45 days,”
- “Strike a match on odor elimination. Shop Febreze Candles,”
- “Febreze Wax Melts “eliminate[] odors & freshen[],”
- Febreze Car Vent Clips are the “best car air fresheners to eliminate car odors for good,”
- “With two times the scent power of regular Febreze, Unstoppable Fabric finds, neutralizes, and eliminates tough odors trapped in hard to wash fabrics like couches or smelly sports equipment...Stop sneaky odors from lingering in your home with Febreze Unstoppables,” and
- “Did you know that your nose gets used to the odors in your home? That’s right. You go noseblind, but others smell...this. Luckily, there’s Febreze Plug. It continuously eliminates lingering odors...”
- Every Febreze product reduces odor to an olfactory level that is not detectable to the average consumer.
- Every Febreze product reduces all types of odor to an olfactory level that is not detectable to the average consumer.

Nothing in this decision precludes the Advertiser from making truthful and non-misleading claims that Febreze products reduce the perception of malodor or that Febreze products physically and chemically affect malodor at the molecular level.

IV. Conclusion

During the course of the proceeding, the Advertiser informed NAD that, for reasons unrelated to this challenge, it was in the process of voluntarily discontinuing the Clothing form of its Febreze product, and all Clothing-specific advertising claims. NAD will treat these discontinued Clothing claims, for the purposes of compliance, as though NAD recommended their discontinuance and the Advertiser agreed to comply.

NAD recommended that the Advertiser discontinue the challenged express and implied claims:

- “Febreze safely eliminate[s] odors,”
- “OK, real talk: We aren’t the first air freshener. But we are the first of its kind to actually eliminate stink...thanks in part to our OdorClear technology,”
- “No cover up here – Febreze has the only lineup of air fresheners that truly clean away stink. So whether you’re looking for an instant burst of “ahh” or continuous freshness, you know we’ve got your back (and nose). Check out all the ways we can help keep your life guest-ready and odor-free,”
- “Febreze Air eliminates odors in an instant,”
- “Typical air fresheners just add another smell to the mix, but Air Effects actually eliminates airborne odors and leaves an instant burst of lightly scented freshness in its wake,”
- “Your go-to air freshener for any odors that arise: Air Effects doesn’t just mask stinky air, it instantly eliminates it,”
- “Want to eliminate odors without heavy overwhelming scents? We get it. Introducing Febreze Light. It eliminates odors with no heavy perfumes in light scents you’ll love,”
- “Febreze Fabric Refresher “eliminates sunk-in-stink with long-lasting freshness,”
- “Did you know the source of odor in your home could be all your soft surfaces? Odors get trapped in your home’s fabrics and resurface over time. Febreze Fabric Refresher eliminates odors. Its water-based formula safely penetrates fabrics where odors hide,”
- “Did you know that your nose gets used to the odors in your home? That’s right. You go noseblind, but others smell...this. Luckily, there’s Febreze Plug. It continuously eliminates lingering odors...,”
- “Over time, you go noseblind, but others smell...this. That’s why Febreze Plug has two alternating scents, and it eliminates odor for 1200 hours,”
- Febreze Small Spaces is an “odor eliminator,”
- “Unlike the leading cone, [Febreze] Small Spaces continuously eliminates odor in the air and on surfaces so they don’t come back for 45 days. Just imagine what it can do with other odors,”
- “For bathroom odors that linger, try Febreze Small Spaces. Just press firmly and it continuously eliminates odors in the air and on soft surfaces for 45 days,”
- “Don’t forget all your favorite nooks and crannies: Small Spaces prevents lingering odors for up to 45 days,”
- “Strike a match on odor elimination. Shop Febreze Candles,”
- “Febreze Wax Melts “eliminate[] odors & freshen[],”
- Febreze Car Vent Clips are the “best car air fresheners to eliminate car odors for good,”
- “With two times the scent power of regular Febreze, Unstoppable Fabric finds, neutralizes, and eliminates tough odors trapped in hard to wash fabrics like couches or smelly sports equipment...Stop sneaky odors from lingering in your home with Febreze Unstoppables,” and

- “Did you know that your nose gets used to the odors in your home? That’s right. You go noseblind, but others smell...this. Luckily, there’s Febreze Plug. It continuously eliminates lingering odors...”
- Every Febreze product reduces odor to an olfactory level that is not detectable to the average consumer.
- Every Febreze product reduces all types of odor to an olfactory level that is not detectable to the average consumer.

Nothing in this decision precludes the Advertiser from making truthful and non-misleading claims that Febreze products reduce the perception of malodor or that Febreze products physically and chemically affect malodor at the molecular level, including claims that the products work instantaneously or continuously.

V. Advertiser’s Statement

The Procter & Gamble Company (P&G) will appeal NAD’s decision. P&G is pleased that NAD found that certain testing P&G conducted in connection with this challenge rebutted the Challenger’s criticisms as to test chamber size, dosage, activation time, and blinding; that P&G appropriately relied on industry sensory evaluation standards as a starting point for its test methodology; and that P&G appropriately tested only Febreze products actually available for purchase by consumers. P&G fundamentally disagrees with the balance of NAD’s decision, including NAD’s ultimate conclusion that P&G has not substantiated any claim of sensory odor elimination. P&G maintains that the challenged claims are substantiated by robust and reliable data, including but not limited to the results of its Difference From Control testing. The record evidence demonstrates that all in-market Febreze products, and the proprietary OdorClear™ technologies they contain, in fact, eliminate malodor molecules to an olfactory level that is undetectable to consumers. Notwithstanding the need to appeal, P&G continues to have great respect for and continues to support the self-regulatory process. **(#6977 ZW, closed 05/11/2022)**