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The challenges of investigating derived psychoactive cannabis product brand quality: Using a popular brand as an example

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Abstract

With widely divergent state and federal regulations and a history of suspect brands and illicit markets, derived psychoactive cannabis products (DPCPs) face contested discourse as to their content, quality, and safety. We conducted exploratory research on public-health related factors related to brand quality including assessing potential counterfeit products, website and social media presence, third party laboratory testing, distribution practices, and consumer experiences on social media. Findings indicate the difficulty consumers face in finding information related to DPCP brands, and the questionable quality of popularly branded products. We recommend regulation and oversight to ensure product safety.

Keywords

brand, quality, derived psychoactive cannabis products, regulation, hemp-derived cannabinoids

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With widely divergent state and federal regulations and a history of suspect brands and illicit markets, derived psychoactive cannabis products (DPCPs) face contested discourse as to their content, quality, and safety. We conducted exploratory research on public-health related factors related to brand quality including assessing potential counterfeit products, website and social media presence, third party laboratory testing, distribution practices, and consumer experiences on social media. Findings indicate the difficulty consumers face in finding information related to DPCP brands, and the questionable quality of popularly branded products. We recommend regulation and oversight to ensure product safety.

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Background

Derived psychoactive cannabis products (DPCPs) (Rossheim et al., 2023) are assumed by many to be federally legal due to the 2018 Farm Bill, which defined *hemp* as cannabis products with <0.3% delta-9 THC (the most naturally prevalent intoxicating THC in the cannabis plant) by dry weight (LoParco et al., 2023; United States Congress, 2019). In the absence of federal regulations and inconsistent or missing state regulations, a rampant illicit market currently exists in which the content, quality, and safety of DPCPs are variable. Both products and brands alike are debated and contested by consumers and industry representatives through public discourse (Henry, 2022; Henry et al., 2023; LoParco et al., 2023; Reddit, 2022). Little scholarly research has examined this discourse.

Concerns regarding how DPCP brands enter the retail environment and are judged as legitimate formed the basis of our current exploration. We focused on the brand “Cake” as an example given its continued popularity and prevalence in retail establishments and online marketplaces, yet dubious history and seemingly questionable quality (Rossheim et al., 2024; Rossheim et al., 2022; Rossheim, 2024). For example, two prominent cannabinoid product review sites – Dabconnection (Dab Connection, 2022) and DailyCBD (DailyCBD, 2021) – reviewed Cake in 2021/2022 and concluded that Cake was “likely a scam company”. Criticisms revolved around the numerous counterfeit “Cake” products on the market, the availability of empty Cake-branded packaging for bulk purchase online, the brand’s lack of a centralized website, the lack of consistent lab testing documentation, and

poor consumer experiences (Dab Connection, 2022; DailyCBD, 2021).

Methods

Using the Cake brand as an example, we provide information on steps potential consumers may follow when assessing brand quality. We are not encouraging or promoting DPCP use. However, we acknowledge that DPCP use continues to rise, and product quality differs across brands. Thus, we have focused on *harm reduction*, including ways that potential consumers may make more informed decisions; findings may also serve as a guideline for brands to increase their product safety.

We conducted original research in November 2023 and May 2024 by 1) visiting product piracy websites and documenting Cake packaging, 2) utilizing the Westlaw database to conduct trademark, copyright, and intellectual property rights legal searches on Cake and on a company that owns several Cake-branded trademarks: AK Futures LLC, 3) conducting an Internet search using the term “Cake vape,” exploring the top websites, and attempting contact with the top three, 4) examining the top Instagram accounts featuring Cake, and attempting contact with the top three, 5) exploring the lab test results on the top Cake-branded website and attempting contact with the testing company, 6) conducting informal interviews with five vape distributors and shop employees, and 7) exploring Cake-related discussions from the past 12 months on Reddit.

Results

Product Piracy

The availability of empty branded packaging on various websites, including DHGate, CartsPackaging, and Made-in-

China, is one marker of brands that may have counterfeit products. Empty packaging available on these (or similar) websites allow non-regulated (illicit-market) individuals/companies not affiliated with the brand to effectively package whatever they themselves make or obtain and use the familiar brand or logo to increase sales. In the aforementioned reviews of the Cake brand, product piracy was noted (Dab Connection, 2022; DailyCBD, 2021); in our review we found packaging featuring the standard Cake logo and aesthetic only on 1 of the 3 counterfeit packaging sites. Importantly, between 2021 – 2023, AK Futures (Cake trademark owner) engaged in legal action against at least 4 distributors and manufacturers to protest use of their protected brand trademarks on inauthentic vaping products (Justia US Law, 2022). This indicates that some brands are making active efforts to reduce the number of counterfeit products using their branding.

Retail Website and Social Media

Visiting a website is one way consumers can find more information about a particular brand, as well as reach out to the brand directly to address any concerns they may have. In the reviews of the Cake brand in 2021/2022, one notable concern was the lack of an established online presence (Dab Connection, 2022; DailyCBD, 2021). We found numerous similar sites that suggest that this critique remains valid: “Cakebrand.com” (our top Google search hit), “Cakecartsdposables”, “Cakecartsstore”, “Cakeshehitsdifferent.com”, “Cakeproductsofficial.com”, etc., as well as other sites that all claim to sell Cake-branded products. In 2023, clicking on the “contact us” link on Cakebrand.com resulted in an error screen; by 2024, this was fixed, and the website listed both an email and phone number for contact. However, when we

reached to seek more information about the brand we received no response.

One webpage, “Cakeproductsofficial.com”, appears on the surface to be affiliated with the Cake brand, indicating “*At Cake Products, we are not just creators; we are storytellers, crafting experiences that blend creativity, quality, and a touch of indulgence... innovation is at the heart of everything we do. Our team of designers and creators work tirelessly to bring you products that not only taste incredible but also look like works of art.*” Yet, under their “legal” information is a disclaimer: “*This website is operated by an independent company and is not associated with Cake Products or its products... we do not sell Cake Products directly through this platform.*”

In addition to a website, potential consumers can also learn more about a brand or attempt contact via social media. However, we observed multiple accounts related to the Cake brand, with no clarity on which account was “real”. Among the accounts with the most followers, the ones that sold products directly or linked to sellers were: @CakeHitsDifferent (18K followers), @OfficialCakeBrand (14K followers), and @_Cake_Disposable_ (3K followers).

Laboratory Testing

Given research indicating DPCPs may be contaminated with pesticides, heavy metals, or solvents (Johnson, 2021; Meehan-Atrash & Rahman, 2021), it is important for potential consumers to assess if a product has undergone laboratory testing. A variety of factors are involved in this including where the testing took place (i.e., if the laboratory was accredited), how often testing occurs, and what is being tested for (i.e., potency, contaminants). However, given notable reports of labs testing at multiple facilities and choosing the ‘cleanest’ results or

fabricating results (LoParco et al., 2023), consumers should be conscious when examining this information, and potentially reach out to testing facilities themselves to confirm results.

The previous Cake reviews noted that their products did not undergo third-party lab testing (Dab Connection, 2022; DailyCBD, 2021). When we visited “Cakebrand.com”, we did see that many (but not all) of their products now undergo third-party lab testing. When reviewing the lab reports, we found some progression of testing protocol. For example, products tested between April and May of 2022 were only tested for THC levels; however, this changed in September 2022 to include other contaminants such as mold and pesticides. Reports also included the laboratory name and sample/batch numbers. In February 2023, the testing lab changed from Accurate Test Labs to ACS Laboratories, which has an ISO/IEC accreditation, a DEA registration number, and a Clinical Laboratory Improvement Amendments (CLIA) license. While the former two offered no registry through which to verify credentials, we verified the CLIA license. We also reached out to ACS laboratory via phone and email to determine the authenticity of these tests. While they did confirm that the product, report, and findings we asked about matched their records, they were unable to provide us contact information for the product manufacturer.

Distribution

Consumers may also talk directly to retailers at point-of-sale and ask them about their experiences with the brand and how it is distributed. However, we were unable to trace Cake-branded product distribution networks back to a particular manufacturer. When we reached out to online distributors, they either did not respond to us or answered, “*We’re not willing to share our supplier,*

sorry.” One answered cryptically, *“We’re no longer purchasing these products and are currently liquidating their inventory from our shelves.”* When we sought more information as to why this would be, they stopped responding to us. Likewise, retail gas station and vape store employees claimed not to know their distributors or deferred to owners who were repeatedly not on site.

Reddit

Individuals can also get information from peers via platforms like Reddit, which has been used in public health research as an important data source to understand how consumers experience, think about, and report acting on issues that affect their health (Henry et al., 2023; Meacham et al., 2019; Sowles et al., 2017; Szczypka, 2022). However, this information is anecdotal, thus potential consumers should consider it with caution. There are numerous active cannabis-consumption sub-Reddits, such as r/trees, r/cleancarts, r/delta8, and r/altcannabinoids.

A search on the terms “Cake vapes” limited to posts over the past year (as of March 2024) found an overarching negative opinion about both Cake products and the brand. For example, one Redditor asked *“What do you all think about the Cake carts 2.0 for sale at the gas stations that are supposed to be Delta-10?”* Replies ranged from *“The Cake brand is really fake,”* to *“it’s probably not going to kill you, but their stuff is not regulated by anyone”* to *“I haven’t personally had a good product from a gas station before. They all tasted metallic and made my stomach hurt,”* to *“they made me cough something fierce. My lungs felt like they were being shredded up by shrapnel. I did some asking around and discovered a lot of places had stopped carrying them, and now I’m hearing no such company actually exists.”* Similarly, a post from April 2023 said *“I bought a 2 gram Cake disposable*

delta 8 a few weeks ago for 40 bucks, and it was honestly trash; I’d hit the cart and feel a burning sensation in my throat for about 20-30 mins, barely even got high off of it, it was a very rough cart to hit and enjoy, the flavor was also trash too, so through my little adventure to see a good brand for the delta variants of THC, I’m gonna have to scratch off Cake as one of the worst for the delta 8 game.” Another replied, *“Cakes have been known to put people in hospitals. 99% are fake.”*

Conclusion and Implications for Health Behavior Research

Our investigation points to the difficulty that DPCP consumers face in attempting to assess product quality, content, and legitimacy. Using the brand “Cake” as an example, we presented how to assess a variety of information including potential counterfeit packaging/piracy sources, online and social media presence, legal proceedings, lab tests, distribution networks, and peer information. We used Cake as an example, but there are many other similar brands, including Cookies, Cart Toon Carts, FRYDS, Runtz, etc. - all of which are commonly questioned in consumer discourse as being “legitimate” or not (Blaze, 2019; Heidelbaugh, 2024; Reddit, 2022).

Because of the numerous impasses we faced, we make no pretense that the average consumer would investigate Cake products as thoroughly as we attempted. That difficulty is precisely our point: if 2 PhDs and a MA student with university library access cannot find clear answers about who creates, distributes, and sells a particular group of products that are inhaled or ingested, imagine the difficulty the average consumer faces in trying to find legitimate products that can safely deliver the kinds of outcomes they seek. In the case of another unwanted health event similar to the EVALI epidemic, who

would then bear responsibility for tainted products? New blockchain technology claims to be able to track cannabis products from point of creation to point of sale (Coner, 2023). If true, this could dramatically enhance DPCP transparency, safety, quality, and accountability. Market regulation is key to maintaining comprehensive standards across the DPCP marketplace.

Discussion Questions

What level of research do you think the average DPCP consumer undergoes before using a product? Do you think this differs by their experience (with DPCPs and traditional cannabis)?

What are some feasible regulations we can implement to increase the safety of these products? Should these products be banned or regulated?

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