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## Switching Stories: User testimonials on [juul.com](https://www.juul.com) continue to contradict JUUL’s switch cessation narrative

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### Abstract

**Background:** In January 2019, ENDS market leader JUUL Labs (JUUL) launched an advertising campaign encouraging adult smokers to “make the switch” from combustible cigarettes to JUUL. Our primary aim was to describe *consumer perceptions* of JUUL as communicated by members of JUUL’s online social community via testimonials promoted on JUUL’s website.

**Methods:** User testimonials that were displayed on the JUUL website in December 2019 and January 2020 were collected and coded by three reviewers. A total of 220 testimonials were coded for primary and secondary themes (8 codes within 4 broader themes).

**Results:** Testimonial writers were, on average, 43.0 years old (range 28-74) and reported using JUUL for an average of 21.8 months (range 9-59 months). The most prominent theme, present in nearly half of the testimonials, was a description of how to use JUUL, with mentions of JUUL's benefits and tips on how to use the product. Nearly 4 in 10 statements encouraged smokers to give JUUL a try or noted that JUUL is a better product compared to cigarettes. About 1 in 10 statements were focused on switching from smoking cigarettes to using JUUL.

**Conclusions:** This study presents a foundation for understanding how adult users describe JUUL, including their experiences using JUUL to “switch” or stop smoking. Currently, the effectiveness of ENDS for smoking cessation is not supported by substantial evidence; however, if cessation is defined as “quitting combustible tobacco products,” then regulators should be aware that switch and cessation messages may not be distinct.

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## INTRODUCTION

In the United States (U.S.), smoking cessation products are regulated by the U.S. Food and Drug Administration (FDA) as drugs or drug-delivery devices and can only be legally sold if the FDA determines, after reviewing clinical trials, that they are safe and effective for that purpose. To date, no electronic nicotine delivery systems (ENDS) have sought nor received FDA approval for smoking cessation. Accordingly, no ENDS products can be marketed, implicitly or explicitly, as a tool to help smokers quit. By contrast, ENDS that are not intended for smoking cessation are regulated as tobacco products and can be marketed without premarket review.<sup>1</sup>

In January 2019, ENDS market leader JUUL Labs (JUUL) launched an advertising campaign encouraging adult smokers to “make the switch” from combustible cigarettes to JUUL. In the wake of a vicious outbreak of lung injury associated with vaping,<sup>2</sup> and FDA criticism of its advertising activities, JUUL Labs suspended U.S. print, broadcast, and digital product advertising in September 2019.<sup>3</sup> Yet, the company's website, direct email marketing, and online store remained live and continued its “Make the Switch” campaign (<https://www.juul.com/>). JUUL argues that “switching” does not constitute “quitting” (i.e., smoking cessation)<sup>4</sup> and thus its products are tobacco products, not drug-delivery devices that require FDA approval.<sup>5</sup> For example, JUUL spokesman Ted Kwong has defended JUUL as a “switching product” noting, “Switching involves continuing to consume nicotine but from a different device, while cessation is about getting users to eliminate their nicotine consumption altogether.”<sup>4</sup> To date, the FDA has not publicly disagreed with that position: In a September 2019 warning letter, the FDA stated that the company's “safer alternative” claims constituted unsubstantiated risk reduction claims.<sup>6</sup> The FDA did not address the possibility that switch statements are smoking cessation claims.

JUUL use is substantially higher among adolescents and young adults than older adults,<sup>7-9</sup> however, adults do report using JUUL to help them quit smoking.<sup>8,10</sup> Consistent with this, in his testimony before the U.S. House of Representatives, JUUL co-founder James Monsees, noted “The product we developed holds the promise to do what no previous technology has ever done on a consistent basis: help adult smokers stop smoking combustible cigarettes.”<sup>11</sup> It is possible that JUUL's “switch” marketing is influencing consumer decisions to

use JUUL for smoking cessation. Yet, to date, no scientific evidence describes whether consumers discern between “switching” and cessation, nor if consumers consider JUUL to be a smoking cessation product. Understanding how consumers interpret JUUL’s marketing claims is important for regulators. Whether a product is a drug (or device) typically depends on the product’s “intended use,” and the FDA often looks to a company’s promotional claims about its product, including consumer testimonials on the company’s website, to determine intended use. If consumers do not perceive JUUL’s “switch” claims as distinct from “smoking cessation” claims, then JUUL may be subject to regulation as a drug-delivery device.

To begin answering the question of whether consumers perceive switch claims as distinct from cessation claims we turned to JUUL’s website ([juul.com](https://juul.com)). ENDS products are predominantly marketed online, via company-sponsored websites, social media, and email.<sup>12</sup> Similarly, JUUL’s company website presents switch language throughout its site, including in their mission statement and company values, and on their get started (i.e., how to use JUUL) and consumer referral pages. Because our primary aim was to describe *consumer perceptions* of JUUL as communicated by members of JUUL’s online social community, we focused on testimonials promoted publicly on JUUL’s website. Via the JUUL community, consumers can share their “story”, which may include a “selfie” style photograph and a personal testimonial. At any time, consumer stories could be featured on JUUL’s community page ([juul.com/community](https://juul.com/community)) or elsewhere, as a representation of the consumer narrative, or perceptions that users have about JUUL.

## METHODS

### Procedures

Late in 2019, JUUL’s website displayed testimonials from JUUL users on multiple public-facing webpages. Website visitors did not need to create a special account to see these testimonials (in contrast, other features in JUUL’s “community” required visitors to create a login profile). This research focused exclusively on testimonials presented on public-facing web pages that could be easily accessed by every visitor to [JUUL.com](https://juul.com).

We collected user testimonials publicly displayed on [juul.com](https://juul.com) in December 2019 and January 2020 (N = 220). Data (i.e., text) from all 220 testimonials was coded by three individuals (JGP, DL, AM) for primary and secondary themes, identifying 8 codes encapsulated by 4 broader themes (1) Using JUUL (2) Comparing JUUL to other tobacco/nicotine products, (3) General statements, and (4) JUUL and switching/cessation (Table 1). Most testimonials (n = 170, 77.3%) comprised only one theme. Results discussed here are based on primary themes only. Data Analysis

Descriptive statistics were performed on the coded qualitative data. Means, ranges, and percentages were calculated to characterize the user demographics, smoking history, and the themes portrayed by their comments.

## RESULTS

Of all testimonials, consumers were, on average, 43.0 years old (range 28-74) and reported using JUUL for an average of 21.8 months (range 9-59 months). In approximately 1 in 3 testimonials (n = 63; 28.6%), JUUL users referred to their smoking history. Of these, only 11% (n = 7) explicitly referenced their smoking history or described themselves as a smoker (e.g., “For someone who has smoked for the better part of 30 years...”) while 89% (n = 56) implicitly described a combustible smoking history (e.g., “It actually does feel just like smoking, but now I don’t stink”).

As indicated in Table 1, the most prominent theme, present in nearly half of the testimonials, was a description of how to use JUUL. These included mentions of the unique benefits of using JUUL and tips on how to use the product. Combined, nearly 1 in 5 statements compared JUUL more favorably to other tobacco products and presented the benefits of using JUUL over smoking cigarettes. Nearly 1 in 5 testimonials were motivational in nature, encouraging individuals to give “it” (i.e., JUUL) a try. About 1 in 10 statements were focused on switching from smoking cigarettes to using JUUL.

## DISCUSSION

To discern consumer perceptions of JUUL, we analyzed user testimonials presented on JUUL’s website as part of their online “Make the Switch” marketing campaign. Of all testimonials, the youngest contributor was 28 years old suggesting that JUUL has curated the testimonials to advance the company’s narrative that (1) JUUL is a product for “adult smokers” and (2) its marketing strategy targets older smokers (i.e., not adolescents nor young adults). The overarching narrative depicted by users presented JUUL as easy to use, similar to smoking, worth trying, and an effective means to stop smoking. JUUL’s marketing strategy is reminiscent of the Centers for Disease Control and Prevention’s *Tips From Former Smokers*® campaign, which uses “Real People, Real Stories” in the messaging to encourage smokers to quit.<sup>13</sup> Additionally, Chantix®, an FDA-approved smoking cessation drug, uses online user testimonials—described as “Real People, REAL INSPIRATION.”—to promote smoking cessation with varenicline.<sup>14</sup>

Prior studies indicate the JUUL is not the only company to make explicit or implicit smoking cessation claims in its advertising. Reports suggest that 23-56% of online ENDS marketing contained potential cessation claims.<sup>1516</sup> Most of these claims were implicit and used somewhat ambiguous language (e.g., “switching works”), but when directed toward smokers these claims could be interpreted as implicitly promoting ENDS as a smoking cessation tool. Data from these studies were gathered either prior to or right as the newest generation of ENDS was gaining popularity. Future studies should assess whether JUUL’s switch marketing is unique, or if “switching” constitutes a ubiquitous marketing strategy across companies/brands selling novel ENDS.

This study raises several regulatory questions related to switch claims, yet the arguments for and against permitting switch claims in ENDS marketing rest on two main concerns: (1) how smoking cessation is defined (i.e., combustible tobacco product cessation only

or total nicotine and tobacco product cessation) and, relatedly, (2) whether switching and cessation describe synonymous or distinct concepts. While further research is needed to fully understand how JUUL's marketing affects consumer perceptions of JUUL as a smoking cessation product, this study presents a foundation for understanding how adult users describe JUUL, including their experiences using JUUL to "switch" or stop smoking. At present, the effectiveness of ENDS for smoking cessation is not supported by substantial evidence.<sup>17-23</sup> If cessation is defined as "quitting combustible tobacco products," then switch and cessation messages may not be distinct (as implied by consumer testimonials) and, importantly, switch claims made in ENDS product advertising could be considered false or misleading.

In March 2020, JUUL applied for a patent to use artificial intelligence for a device to help users quit nicotine. The device would work with a vaporizer (like JUUL), but would limit daily use to help users reduce and, eventually, quit nicotine altogether.<sup>24</sup> With this change JUUL may be laying the groundwork for more explicitly marketing its products as adult-focused smoking cessation products, belying the company's earlier assertions that "switching" and cessation are distinct.<sup>4</sup> Such a change would be laudable *if* JUUL were shown to be a safe, effective smoking cessation product and was approved by the FDA. Prior to such approval, the FDA should carefully scrutinize JUUL's product promotion – including user testimonials – to determine whether its messaging communicates intent that JUUL be used for smoking cessation and, thus, could be subject to regulation as a drug or drug-delivery device.

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### Regulatory Questions Related to Switch Claims

- Should regulators consider stopping use of combustible tobacco products to be “smoking cessation”?
- Should regulators consider switch claims to be smoking cessation claims, modified risk claims, both, or neither?
- Should there be ways for ENDS manufacturers to market their products as smoking alternatives without regulators considering them to be making smoking cessation or modified risk claims?
- If consumers do understand “switch” messages to constitute smoking cessation messages, is the public health best protected through regulating those ENDS as drugs or as tobacco products?
- Should regulators’ approaches differ if switch claims are a widespread marketing strategy across the ENDS industry?

### WHAT THIS STUDY ADDS

JUUL's "Make the Switch" campaign uses testimonials from adult consumers who encourage others to try JUUL for various reasons, including its ability to help one switch from combustible tobacco products to ENDS. As a result of this study, we know the major themes that are promoted in these testimonials and that approximately 10% of them are messages about stopping combustible tobacco use *and* switching to ENDS, which could be construed as smoking cessation messages.



**Table 1.** Frequencies and definitions of themes and codes in user testimonials on [juul.com](http://juul.com) community (N = 220)

Theme	Code	n(%)	Definition	Sample quotations
Using JUUL	Unique benefits of JUUL	70 (31.8)	Discusses JUUL's unique benefits. May include information about the usability, function, design, pricing, or "feel" (i.e., puff or nicotine level).	"I love the small size and convenience of the device. I appreciate the thought that went into making the product appeal to smokers." (Barbie, 46) "I appreciate that JUUL is purely simple and effective. The ease of use. The great taste and real feel. No more smoke smell." (Antony, 32)
	How to use JUUL	28 (12.7)	Discusses how to use JUUL. May include general directions on using JUUL (i.e., beginning "gradually" or "slowly") or provide tips on specific puffing techniques.	"Give it an honest try. Carry it with you with your smokes. Take a few pulls here and there." (Daniel, 32) "Be careful not to hit as hard as you would a cigarette. Draw in slowly." (Patti, 51)
Comparing JUUL to other tobacco/nicotine products	Shared JUUL and cigarette characteristics	16 (7.3)	Discusses similarities between JUUL and cigarettes. It may be general (e.g., JUUL "feels like a cigarette" or "feels like smoking") or mention specific sensory experiences (e.g., nicotine level or flavor).	"The draw is very similar to a cigarette so the transition is a breeze." (Kimberly, 39) "I appreciate the quick fix and the taste that is appreciative of a cigarette." (Tim, 29)
	Benefits of JUUL vs. cigarettes / cigarette smoking	18 (8.2)	Discusses specific benefits of JUUL vs smoking/ cigarettes.	"JUUL to me means not smelling like smoke or having to go outside to smoke" (Daniel 38) "JUUL means I can still enjoy the please I obtain smoking/vaping without the stink, mess, judgment, and stress." (Regina, 57)
	Benefits of JUUL vs. other e-cigarettes	8 (3.6)	Discusses specific benefits of JUUL vs other e-cigarette or vaping devices.	"It's not messy, as time consuming, and involved as other methods for vaping." (Jai, 39)
General statements	Favorable	19 (8.6)	General favorable statement about JUUL that is not encompassed by an existing code.	"Great product. Highly recommend." (Erick, 38)
	Motivational	38 (17.3)	General motivational statement about JUUL or using JUUL that is not encompassed by an existing code.	"Give it a chance. It really works." (Michelle, 55) "Just use it. Give it a serious attempt and it will work." (Garrett, 38)
JUUL and switching/cessation	"Switching" to JUUL from smoking	21 (9.5)	Implicitly or explicitly discusses switching, changing, or transitioning to JUUL from cigarettes or smoking.	I love it. I absolutely love it, and I'm trying to get everyone who smokes to switch to JUUL." (Bobby, 35) "After 35 years of being a smoker, my friend convinced me to just try hers. Best decision I ever made. I no longer smoke cigarettes." (Jennifer, 49) "If you really want to stop smoking cigarettes JUUL is the best thing to go to. I started using JUUL bask in May. You got this." (Mindi, 43)
	JUUL as a smoking "alternative"	2 (0.9)	Discusses JUUL as a cigarette, tobacco, or smoking "alternative".	"This is a great alternative to actual tobacco products. Enjoy!" (Dale, 55)