

CBD Confusion:

How Consumers Can Be Misled and Why the
Market Needs Adult Supervision Now



digitalcitizens
alliance 

MARCH 2020

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The use of cannabidiol (CBD) is rising in the United States and offers real promise, but a lack of standards, CBD level inaccuracies and a false sense of security that it is regulated for safety and quality, pose serious risks, a Digital Citizens Alliance investigation has found. The risks are immense and could hinder the growth of products that could help Americans suffering from pain, depression, seizures and other maladies.



Products containing CBD, a compound extracted from a marijuana or hemp plant, regularly contain more or less CBD than what's listed on packaging; spot checks found retailers misleading consumers into believing that products meet quality and safety standards; and the lack of standards could inhibit consumer adoption.

The Digital Citizens' investigation included buying dozens of CBD-infused products in retail markets in seven states as well as online purchases of nationally known brands and smaller niche suppliers. During spot checks, investigators were erroneously told by retailers that the CBD products were regulated by the Food and Drug Administration.

Digital Citizens also conducted nationwide surveys to learn about Americans' understanding of CBD, why they purchased it, and whether they understand that the products are not federally regulated to ensure quality and safety.

In that survey research, Digital Citizens found that some Americans use the products as an alternative to traditional prescription and over the counter medication – a troubling prospect given CBD's effects are unproven, level inaccuracies may be akin to administering placebos, and some are using it to treat medical issues such as pain, anxiety, cancer and Alzheimer's disease.

Here's what Digital Citizens found:

CBD Levels and Ingredient Accuracy

Half of the products purchased and tested by Digital Citizens contained CBD levels that were 20 percent higher or lower than what was listed on the packaging.

In some cases, the CBD levels were significantly different. For example, the products Talyoni Youthful Glow 850mg Tincture; Relax Dried Fruit Apricot CBD 750mg; Meds Biotech Eucalyptus Spearmint Bath Bomb 100mg; Chronic candy Gourmet Chocolate Banana OG 200mg; Just CBD Cannabidiol Gummy Worms 750 mg; and, Yum Yum Gummies Twin Cherries Extreme Strength 250X each had less than half the CBD claimed on the bottle.

That's troubling because 70 percent of respondents who reported taking CBD said they did so to replace a prescription medication for medical issues such as pain, insomnia, anxiety, depression and even, in some cases, cancer and Alzheimer's disease.¹

On average, there was a 30 percent discrepancy between what was listed on the label and the actual amount of CBD present in the packages purchased and tested.

Misleading Retailers and Consumer Confusion

- ✱ Only 1 in 4 Americans who have purchased products containing CBD know that it's largely unregulated at the federal level.² This lack of awareness about the unregulated nature of CBD suggests consumers believe the products meet FDA standards for safety and quality.
- ✱ During spot checks, employees in some retail shops where Digital Citizens investigators made purchases either explicitly said CBD-infused products were regulated or implied it. While this is largely anecdotal, greater investigation is needed to determine if this is a wide-scale issue.
- ✱ By a 55 percent to 21 percent margin, Americans believe that products containing CBD should be regulated by a government agency such as the U. S. Food and Drug Administration (FDA).³ The data suggests that those who haven't made purchases are held back from doing so due to the lack of CBD regulation.

¹ Digital Citizens Alliance SurveyMonkey survey of 715 American Adults on January 30-31, 2020.

² John Zogby Strategies survey of 2506 American adults conducted on behalf of Digital Citizens Alliance on January 23, 2020.

³ Id.

“CBD shows promise to treat pain, anxiety and seizures such as epilepsy,” said Tom Galvin, Executive Director of Digital Citizens. “But the market can’t be built on inaccurate CBD levels, misleading claims and a false sense of security about safety. It’s time for the CBD industry to grow up. For consumers to truly trust CBD, they need to know that products meet safety and quality standards backed up by the FDA.”

CBD, which is the abbreviation for cannabidiol, is one of the primary extracts from hemp and marijuana. Unlike tetrahydrocannabinol (THC), CBD doesn’t create a “high” when ingested. The FDA [approved CBD](#) to treat two forms of epilepsy in 2018, and that is the only federally approved usage of the extract. But that hasn’t stopped the rapid consumer adoption of CBD-infused products to treat depression and anxiety and help with insomnia.

Products containing CBD are now sold online, and at specialty shows, pharmacies, vape shops, grocery stores and gas stations. Three in 10 Americans say they have tried them, according to the Digital Citizens research, and of those, 82 percent call the emergence of the products a “positive” thing. But there are no uniform standards that govern CBD and only a fraction of Americans know the products are largely not federally regulated.

That has the FDA worried. “We remain concerned that some people wrongly think that the myriad of CBD products on the market, many of which are illegal, have been evaluated by the FDA and determined to be safe, or that trying CBD ‘can’t hurt,’” FDA Principal Deputy Commissioner Amy Abernethy, M.D., Ph.D [warned in a November statement](#). “We recognize the significant public interest in CBD, and we must work together with stakeholders and industry to fill in the knowledge gaps about the science, safety and quality of many of these products.”

With anticipated consumer CBD sales [doubling from 2018 to 2020](#) to more than \$1.1 billion in the United States, it is vital that users can trust what is in the products. Consumer safety has long been a focus of Digital Citizens. Since its inception in 2013, Digital Citizens has demonstrated the ease of illegally purchasing drugs such as opioids, anabolic steroids, and human growth hormone (HGH) online as well as the likelihood that the drugs may not be real. In September 2019, for example, a Digital Citizens investigation showed how the HGH that it purchased online was not HGH.

CBD-infused products offer a different challenge for consumers. While their legality can sometimes be murky, the products are widely available at thousands of stores across the nation. Unlike HGH and steroids, the issue for CBD-infused products is not just about their long-term legality, but also standards for safety and quality.

To understand Americans' perceptions of CBD, Digital Citizens commissioned John Zogby Strategies to do a nationwide survey of 2,506 Americans in January 2020. Additionally, Digital Citizens did two follow-up Survey Monkey surveys of 715 Americans on January 30-31, 2020 and February 2, 2020. This research shows many Americans are confused by CBD's regulatory status and what medical issues it can treat.

Given that, Digital Citizens calls on the FDA, and Congress if necessary, to step in and write clear rules that set standards for CBD. The FDA's November statement on the loose nature of the current CBD industry and warnings sent by the agency to 15 companies about false marketing claims was a good start, but the agency must develop regulations about levels, marketing practices and what retailers can say about the products. Then it must back up those regulations with enforcement. If projections about CBD's future growth are accurate, consumers deserve to know the products stand up to scrutiny so they can rely on them for treatment.

Right now, many don't.

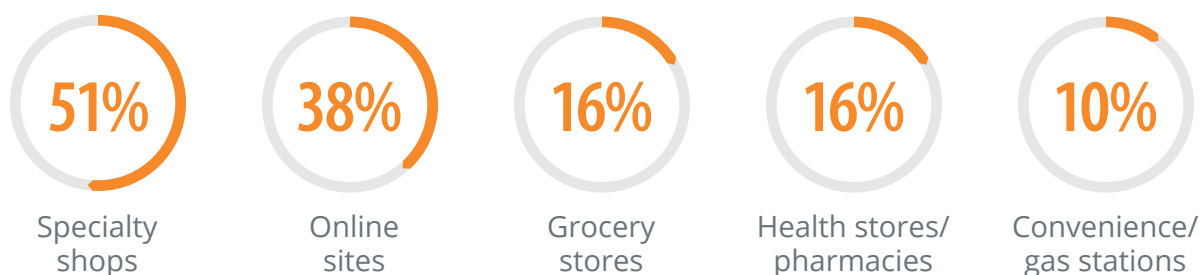
CBD Products: Booming... But Are They What They Say They Are?

It is probably fair to say that a decade ago most Americans had not heard of CBD. And those who did likely associated it with marijuana. CBD products were hard to find, and the market was small. CBD's legal status was hazy. States legalized CBD but it remains on the federal government Controlled Substances list (although not enforced).

In 2015, the Drug Enforcement Agency (DEA) [eased the requirements](#) for FDA-approved clinical trials on CBD, and within three years the first [CBD-based drug](#) to treat two types of seizures was approved. The 2018 Farm Bill was a watershed moment for CBD. The law legalized the cultivation of hemp and removed it from the Controlled Substances list. After the change, Walgreens, CVS and other retailers introduced CBD products. Total CBD sales in the United States will exceed \$2.1 billion by 2020, [according to the Hemp Business Journal](#).

Americans are seizing on CBD products to combat maladies. Fifty-nine percent of those surveyed say they use it on at least a weekly basis, with the primary purpose of pain management and relief (43 percent) or reducing stress, anxiety, or depression (31 percent).⁴

While specialty shops and online sites are the favorite places to purchase CBD products, consumers buy them from myriad retailers:



⁴ John Zogby Strategies survey of 2506 American adults conducted on behalf of Digital Citizens Alliance on January 23, 2020.

It's important to reinforce that many Americans believe that CBD products offer real benefit. By a 5-1 margin, Americans see the emergence of CBD products as a positive thing, according to the research survey of 2,506 people in early January. Early studies reinforce that belief. A study featured in the *European Journal of Pain* showed that topical CBD could lower pain and inflammation caused by arthritis. Other studies show that CBD can treat neuropathic pain.

But many say they don't have enough information to judge CBD and its long-term benefits. The Wild West nature of the CBD market – and claims about its benefits – has [concerned regulators](#), who are cracking down on wild claims while allowing the market to develop. That approach reflects both the promise that CBD can help treat anxiety and depression, insomnia, and aches and pains, while acknowledging that there is a lot for medical researchers to learn about CBD's impact.

Medical experts have raised concerns that because CBD is marketed as a supplement rather than a drug (and therefore not regulated), consumers cannot be sure about products' CBD levels or ingredient impurities. Additionally, more needs to be done to understand the impact of too much CBD. A 2019 study, for example, [raised concerns](#) that high levels of CBD could damage the liver.

Given the promise and uncertainty of CBD products, Digital Citizens initiated an investigation. Specifically, Digital Citizens purchased CBD products in multiple states – California, Colorado, Georgia, Indiana, Maryland, Virginia, and the District of Columbia – as well as online, then sent them to DB Labs, a Las Vegas-based lab for testing. The products included ingestibles, such as beverages, candies and oils, as well as topicals such as creams, lotions, and bath oils.

Nearly five dozen products were purchased and tested. More than half (34 out of 59 products) had either 20 percent more or less CBD than the label claimed. Here's a breakdown:

Percentage Over/Under Label Claim	Percentage of Products
Under by 1-14 percent:	31
Under by 15-24 percent:	5
Under by 25-40 percent:	12
Under by 41 percent or more:	17
Exact amount:	2
Over by 1-14 percent:	8
Over by 15-24 percent:	3
Over by 25-40 percent:	10
Over by 41 percent or more:	12

Overall, the average discrepancy between what the product had and what the label said was 30 percent. The following are purchased products that when tested contained significantly less CBD than listed on the label.

Talyoni Youthful Glow 850mg Tincture:



Unit = 1 Bottle

Cannabinoid Relative Concentration

Analyzed by 300.18 UHPLC/PDA

<LOQ

Δ^9 -THC + Δ^8 -THC

48.573 mg/unit

CBD

48.573 mg/unit

Total Cannabinoids

pH: NT

Aw: 0.75

Not Tested Homogeneity

Pass

Compound	LOQ	Mass	Mass	Relative Concentration
	mg/unit	mg/unit	mg/g	
CBC	1.542	<LOQ	<LOQ	
CBCa	1.542	<LOQ	<LOQ	
CBD	1.542	48.573	1.619	
CBDa	1.542	<LOQ	<LOQ	
CBDV	1.542	<LOQ	<LOQ	
CBDVa	1.542	<LOQ	<LOQ	
CBG	1.542	<LOQ	<LOQ	
CBGa	1.542	<LOQ	<LOQ	
CBL	1.542	<LOQ	<LOQ	
CBN	1.542	<LOQ	<LOQ	
Δ^8 -THC	1.542	<LOQ	<LOQ	
Δ^9 -THC	1.542	<LOQ	<LOQ	
THCa	1.542	<LOQ	<LOQ	
THCV	1.542	<LOQ	<LOQ	
THCVa	1.542	<LOQ	<LOQ	

1 Unit = Talyoni Youthful Glow 850mg Tincture, 30g

Total THC = $0.877 \times \text{THC-A} + \Delta^9\text{-THC} + \Delta^8\text{-THC}$; Total CBD = $\text{CBDa} \times 0.877 + \text{CBD}$

1 Unit = Talyoni Youthful Glow 850mg Tincture, 30g
Total THC = $0.877 \times \text{THCa} + \Delta^9\text{-THC} + \Delta^8\text{-THC}$; Total CBD = $\text{CBDa} \times 0.877 + \text{CBD}$

-94%



Relax Dried Fruit Apricot CBD 750mg:



Unit = 1 Serving

Cannabinoid Relative Concentration

Analyzed by 300.18 UHPLC/POA

<LOQ

0.624 mg/unit

pH: NT

Aw: 0.70

Not Tested

Homogeneity

Δ9-THC + Δ8-THC

0.624 mg/unit

Total Cannabinoids

Compound	LOQ	Mass	Mass	Relative Concentration
	mg/unit	mg/unit	mg/g	
CBC	0.443	<LOQ	<LOQ	
CBCa	0.443	<LOQ	<LOQ	
CBD	0.443	0.624	0.067	
CBDa	0.443	<LOQ	<LOQ	
CBDV	0.443	<LOQ	<LOQ	
CBDVa	0.443	<LOQ	<LOQ	
CBG	0.443	<LOQ	<LOQ	
CBGa	0.443	<LOQ	<LOQ	
CBL	0.443	<LOQ	<LOQ	
CBN	0.443	<LOQ	<LOQ	
Δ8-THC	0.443	<LOQ	<LOQ	
Δ9-THC	0.443	<LOQ	<LOQ	
THCa	0.443	<LOQ	<LOQ	
THCV	0.443	<LOQ	<LOQ	
THCVa	0.443	<LOQ	<LOQ	

1 Unit = Relax Dried Fruit Apic CBD 750mg, 9.324324324g

Total THC = 0.877xTHCa + Δ9-THC + Δ8-THC; Total CBD = CBDa* 0.877 + CBD

1 Unit = Relax Dried Fruit Apricot CBD 750mg, 9.324324324g
Total THC = 0.877 x THCa + Δ^9 -THC + Δ^8 -THC; Total CBD = CBDa * 0.877 + CBD

-97%

Meds Biotech Eucalyptus Spearmint Bath Bomb 100mg:



Unit = 1 Whole Bath Bomb

Cannabinoid Relative Concentration

Analyzed by 300.18 UHPLC/PDA

<LOQ

Δ9-THC + Δ8-THC

28.924 mg/unit

CBD

pH:

NT

Aw:

NT

Not Tested

28.924 mg/unit

Total Cannabinoids

Not Tested

Homogeneity

Compound	LOQ	Mass	Mass	Relative Concentration
	mg/unit	mg/unit	mg/g	
CBC	1.450	<LOQ	<LOQ	
CBCa	1.450	<LOQ	<LOQ	
CBD	1.450	28.924	0.243	
CBDa	1.450	<LOQ	<LOQ	
CBDV	1.450	<LOQ	<LOQ	
CBDVa	1.450	<LOQ	<LOQ	
CBG	1.450	<LOQ	<LOQ	
CBGa	1.450	<LOQ	<LOQ	
CBL	1.450	<LOQ	<LOQ	
CBN	1.450	<LOQ	<LOQ	
Δ8-THC	1.450	<LOQ	<LOQ	
Δ9-THC	1.450	<LOQ	<LOQ	
THCa	1.450	<LOQ	<LOQ	
THCV	1.450	<LOQ	<LOQ	
THCVa	1.450	<LOQ	<LOQ	

1 Unit = Meds Biotech Eucalyptus Spearmanth Babi Bomb 300mg, 119g

Total THC = 0.877 x THCa + Δ9-THC + Δ8-THC; Total CBD = CBDa + CBDa' + CBD

1 Unit = Meds Biotech Eucalyptus Spearmint Bath Bomb 100mg, 119g
Total THC = 0.877 x THCa + Δ^9 -THC + Δ^8 -THC; Total CBD = CBDa * 0.877 + CBD

-71%

Chronic Candy Gourmet Chocolate Banana OG 200mg:



Unit = 1 Bottle

Cannabinoid Relative Concentration				
Analyzed by 300.18 UHPLC/PDA				
<LOQ		72.865 mg/unit	pH:	NT
Δ^9 -THC + Δ^8 -THC		CBD	Aw:	0.24
		72.865 mg/unit	Not Tested	
		Total Cannabinoids	Homogeneity	
Compound	LOQ	Mass	Mass	Relative Concentration
	mg/unit	mg/unit	mg/g	
CBC	2.050	<LOQ	<LOQ	
CBCa	2.050	<LOQ	<LOQ	
CBD	2.050	72.865	1.695	
CBDa	2.050	<LOQ	<LOQ	
CBDV	2.050	<LOQ	<LOQ	
CBDVa	2.050	<LOQ	<LOQ	
CBG	2.050	<LOQ	<LOQ	
CBGa	2.050	<LOQ	<LOQ	
CEL	2.050	<LOQ	<LOQ	
CBN	2.050	<LOQ	<LOQ	
Δ^8 -THC	2.050	<LOQ	<LOQ	
Δ^9 -THC	2.050	<LOQ	<LOQ	
THCa	2.050	<LOQ	<LOQ	
THCV	2.050	<LOQ	<LOQ	
THCVa	2.050	<LOQ	<LOQ	

1 Unit = Chronic Candy Gourmet Chocolate Banana OG 200mg, 43g
Total THC = $0.877 \times \text{THCa} + \Delta^9\text{-THC} + \Delta^8\text{-THC}$; Total CBD = $\text{CBDa} \times 0.877 + \text{CBD}$

-64%

Just CBD Cannabidiol Gummy Worms 750 mg:



Unit = 1 Serving

Cannabinoid Relative Concentration				
Analyzed by 300.18 UHPLC/PDA				
<LOQ		6.671 mg/unit	pH:	NT
Δ^9 -THC + Δ^8 -THC		CBD	Aw:	0.69
		6.671 mg/unit	Not Tested	
		Total Cannabinoids	Homogeneity	
Compound	LOQ	Mass	Mass	Relative Concentration
	mg/unit	mg/unit	mg/g	
CBC	0.199	<LOQ	<LOQ	
CBCa	0.199	<LOQ	<LOQ	
CBD	0.199	6.671	0.544	
CBDa	0.199	<LOQ	<LOQ	
CBDV	0.199	<LOQ	<LOQ	
CBDVa	0.199	<LOQ	<LOQ	
CBG	0.199	<LOQ	<LOQ	
CBGa	0.199	<LOQ	<LOQ	
CBL	0.199	<LOQ	<LOQ	
CBN	0.199	<LOQ	<LOQ	
Δ^8 -THC	0.199	<LOQ	<LOQ	
Δ^9 -THC	0.199	<LOQ	<LOQ	
THCa	0.199	<LOQ	<LOQ	
THCV	0.199	<LOQ	<LOQ	
THCVa	0.199	<LOQ	<LOQ	

1 Unit = Just CBD CBD Cannabidiol Gummy Worms 750mg, 12.27g
Total THC = $0.877 \times \text{THCa} + \Delta^9\text{-THC} + \Delta^8\text{-THC}$; Total CBD = $\text{CBDa} \times 0.877 + \text{CBD}$

-73%

Yum Yum Gummies Twin Cherries Extreme Strength 250X:



Unit = 1 Piece (3 pieces/serving)

Cannabinoid Relative Concentration				
Analyzed by 300.18 UHPLC/PDA				
<LOQ		5.143 mg/unit	pH:	NT
Δ^9 -THC + Δ^8 -THC		CBD	Aw:	0.60
		5.143 mg/unit	Not Tested	
		Total Cannabinoids	Homogeneity	
Compound	LOQ	Mass	Mass	Relative Concentration
	mg/unit	mg/unit	mg/g	
CBD	0.201	<LOQ	<LOQ	
CBDa	0.201	<LOQ	<LOQ	
CBD	0.201	5.143	0.772	
CBDa	0.201	<LOQ	<LOQ	
CBDV	0.201	<LOQ	<LOQ	
CBDVa	0.201	<LOQ	<LOQ	
CBG	0.201	<LOQ	<LOQ	
CBGa	0.201	<LOQ	<LOQ	
CBL	0.201	<LOQ	<LOQ	
CBN	0.201	<LOQ	<LOQ	
Δ^8 -THC	0.201	<LOQ	<LOQ	
Δ^9 -THC	0.201	<LOQ	<LOQ	
THCa	0.201	<LOQ	<LOQ	
THCV	0.201	<LOQ	<LOQ	
THCVa	0.201	<LOQ	<LOQ	

1 Unit = Yum Yum Gummies Twin Cherries Extreme Strength 250x, 6.66g

Total THC = $0.877 \times \text{THC-A} + \Delta^9\text{-THC} + \Delta^8\text{-THC}$; Total CBD = $\text{CBDa} \times 0.877 + \text{CBD}$

-53%



CBD Honey Sticks 10mg per stick:



Unit = 1 Bottle (100 sticks (10mg/stick))

Cannabinoid Relative Concentration				
Analyzed by 300.18 UHPLC/PDA				
<LOQ		516.484 mg/unit	pH:	NT
Δ^9 -THC + Δ^8 -THC		CBD	Aw:	0.53
		516.484 mg/unit	Not Tested	
		Total Cannabinoids	Homogeneity	
Compound	LOQ	Mass	Mass	Relative Concentration
	mg/unit	mg/unit	mg/g	
CBD	30.654	<LOQ	<LOQ	
CBDa	30.654	<LOQ	<LOQ	
CBD	30.654	516.484	0.852	
CBDa	30.654	<LOQ	<LOQ	
CBDV	30.654	<LOQ	<LOQ	
CBDVa	30.654	<LOQ	<LOQ	
CBG	30.654	<LOQ	<LOQ	
CBGa	30.654	<LOQ	<LOQ	
CBL	30.654	<LOQ	<LOQ	
CBN	30.654	<LOQ	<LOQ	
Δ^8 -THC	30.654	<LOQ	<LOQ	
Δ^9 -THC	30.654	<LOQ	<LOQ	
THCa	30.654	<LOQ	<LOQ	
THCV	30.654	<LOQ	<LOQ	
THCVa	30.654	<LOQ	<LOQ	

1 Unit = CBD Honey Sticks 10mg per Stick, 606g

Total THC = $0.877 \times \text{THC-A} + \Delta^9\text{-THC} + \Delta^8\text{-THC}$; Total CBD = $\text{CBDa} \times 0.877 + \text{CBD}$

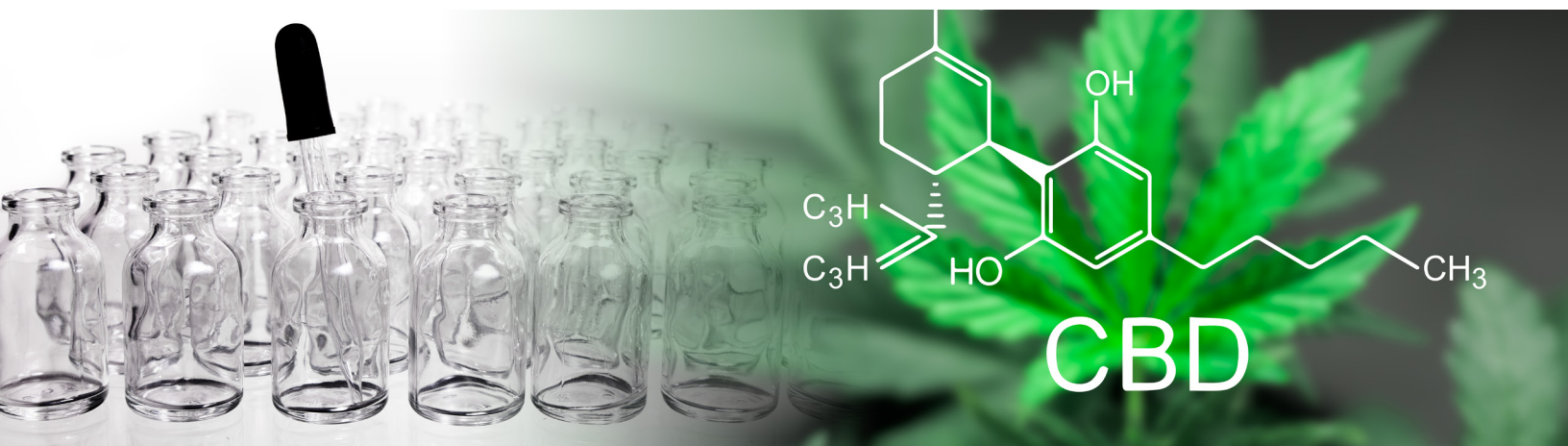
-48%



These were the results of testing these specific products purchased. Other products by these manufacturers may have other levels of ingredients.

CBD Shouldn't be a Placebo

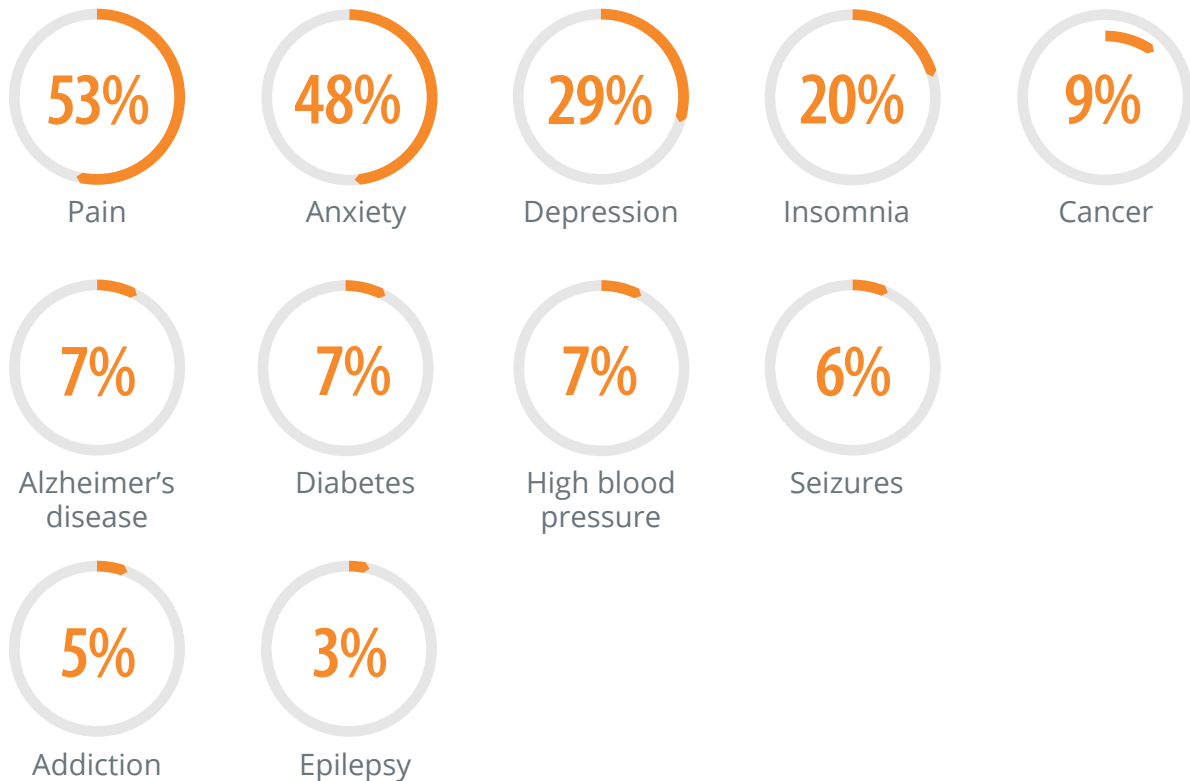
Products containing little CBD, Americans' belief in CBD's unproven therapeutic properties, and willingness to rely on it over other medications is a dangerous combination that could lead to potentially devastating health outcomes.



In 2019, the FDA signaled it would get aggressive in cracking down on suppliers who made irresponsible claims, such as that CBD can cure cancer or prevent Alzheimer's disease. "We're using enforcement discretion right now," former FDA Commissioner Scott Gottlieb, M.D., told Congress. "I will take enforcement action against CBD products that are on the market if manufacturers are making what I consider 'over-the-line' claims."

Digital Citizens research found that concern is warranted. Seventy percent of those using CBD products said they do so "as an alternative to taking other medication." Nearly half (46 percent) said it was a replacement for a prescription medication.

But the most troubling finding is that Americans are turning to CBD as a replacement for medication treating serious health issues. CBD users were asked, “If you used a CBD product in replacement of a medication, what type of medical issue were you treating?” Here’s how they responded (able to check as many as apply):⁵



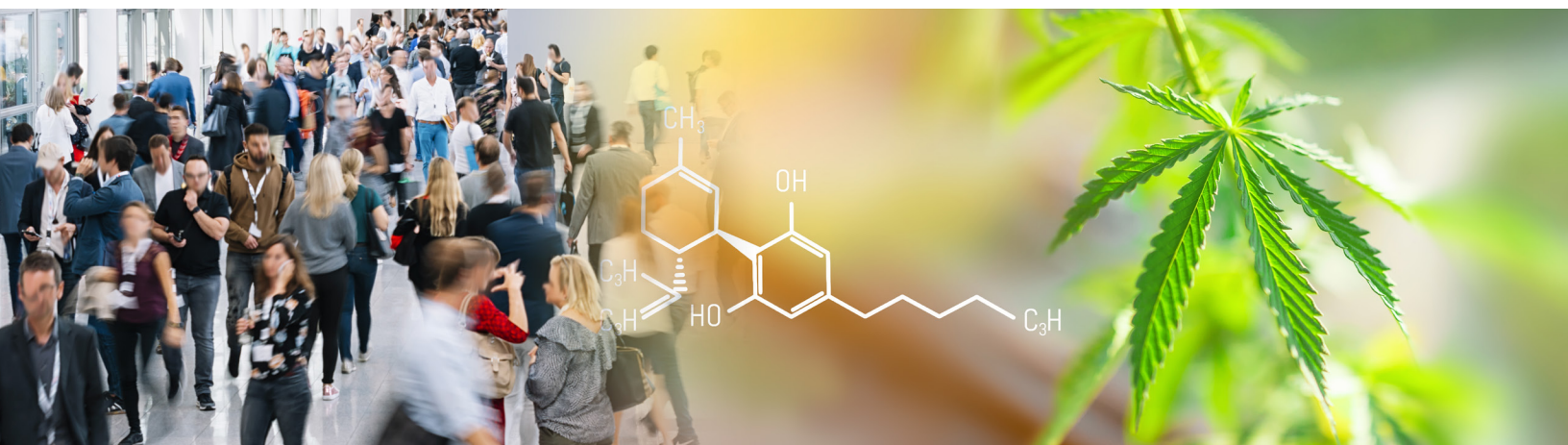
Digital Citizens would like to caution the sample size for this part of the research (715 respondents) means that follow-up research is needed, but further points to a troubling prospect. Of those who responded they are using CBD to treat cancer, 85 percent said it was a replacement for a prescription medication.

It's not just the CBD levels that concern consumer watchdogs. An NBC New York investigation last year reflects concerns about what is in CBD products. [That investigation found lead in one of its purchases](#) and other products were rejected by a testing lab because the samples did not meet California standards for quality control. When contacted by the media, one of the suppliers, Lazarus Naturals, said it couldn't verify samples and reported that they had issues with counterfeits sold on unapproved marketplaces.

⁵ Digital Citizens Alliance SurveyMonkey survey of 715 American Adults on February 2, 2020.

Americans and CBD: Ignorance is Not Bliss

The booming CBD business reflects how many Americans are turning to these products to get pain relief, combat anxiety or depression or get a good night's sleep. But many Americans make purchases based on the mistaken belief that the products are regulated by the FDA. Only 1 in 4 of the Americans who purchased CBD products knew it wasn't federally regulated.⁶ By a near 2-1 ratio, when asked whether CBD is regulated, those who have purchased it say yes (48 percent to 25 percent, with 28 percent unsure).⁷ It's important to underscore those figures are of consumers who purchased CBD products.



Perhaps one of the reasons purchasers of CBD products think it's regulated is because during spot checks, Digital Citizens investigators when making purchases were told it was. An interaction at a New Jersey vape shop demonstrates how Americans may be receiving misleading information. After getting product suggestions to specifically help his wife with insomnia and aches and pains, the investigator asked, "She was wondering if these are FDA products?" The retailer responded, "Yes, they are all FDA approved," before requesting credit card information.

⁶ John Zogby Strategies survey of 2506 American adults conducted on behalf of Digital Citizens Alliance on January 23, 2020.

⁷ Id.

Another retailer, when asked, said that CBD manufacturers are required to submit the ingredients to the FDA for certification. Whether the misleading retailer information is willful or just a lack of knowledge by retailers, if it's widespread it would give consumers a false sense of security about the products they purchase.

Digital Citizens intends to conduct a follow-up investigation of what retailers tell consumers about CBD regulation.

Americans want a higher level of confidence in these products. By a 55 percent to 21 percent margin, Americans believe that products containing CBD should be regulated by a government agency such as the FDA.⁸

Late last year, the FDA acknowledged it had [missed deadlines](#) for releasing a blueprint on how it would regulate CBD products. "My commitment is to work as quickly as possible and I've made that commitment quite vocally," FDA official Amy Abernethy told STAT News last fall. "There is a great sense of urgency internally to get this out."

Research suggests that those who haven't purchased CBD are most commonly held back from doing so by the lack of CBD regulation. Fifty-six percent of Americans said the fact that CBD is not regulated concerns them and people don't know enough about the benefits or risks.⁹ Forty-six percent said they would be more likely to purchase CBD products if they were regulated.¹⁰ That's compared to only 17 percent who said it would make them less likely to buy.¹¹

Concerns about levels and misleading retailer information could also stall the growth of the CBD market. Sixty-six percent of those who purchased CBD products said they would be less likely to do so in the future if they couldn't trust it had the amount of CBD listed on the label. And seventy-one percent said they would be concerned if retailers give inaccurate information about FDA regulation of CBD. What these findings indicate is for CBD manufacturers and retailers to retain consumer trust, they must ensure that the products are what they say they are and not mislead buyers.

⁸ John Zogby Strategies survey of 2506 American adults conducted on behalf of Digital Citizens Alliance on January 23, 2020.

⁹ Id.

¹⁰ Id.

¹¹ Id.

CBD: Creating Certainty for Americans

The CBD market is in desperate need of adult supervision. More needs to be done at the legislative and regulatory level along with a greater investment in awareness campaigns to alert consumers about what is true – and not true – about CBD. It's important to reinforce that these steps should be taken not to scare consumers away from CBD, but rather to ensure the market can be trusted and consumers are educated.

With that in mind, Digital Citizens makes the following recommendations:

✦ **Research on CBD.** Congress should step in by providing more funding to the FDA specifically for CBD research. It is vital that we learn more about CBD. Users of CBD swear by its therapeutic properties and 82 percent call the emergence of CBD a positive thing.

But we need to know the long-term impacts, both positive and negative. Since it's only been five years since the FDA gave the go-ahead for clinical testing, there is a long road ahead to verify the benefits and assess the long-term risk of taking the product. FDA's Abernathy acknowledged as much late last year. "There's a huge gap in the data," she said. "We don't know what happens if you take CBD every day for a year or we don't know what happens if you're pregnant or breastfeeding. We don't know about CBD for people who are older in life or have other medical conditions."

✦ **Regulations/Standards.** The FDA, by its own admission, is way behind in providing a CBD regulatory roadmap. But that admission is no excuse. If CBD is as therapeutic as its users claim it is, then the FDA's delay is a hinderance to Americans' health. The delay also hinders research and testing. Part of the problem is the FDA is either unwilling or unable to act despite possessing the necessary authority to do so. If the FDA will not act of its own accord, the only entity that can break the logjam is Congress. In a shot across the FDA's bow, Senate Majority Leader Mitch McConnell last fall introduced a legislative proposal to call on the FDA to establish interim rules governing CBD within 120 days. Congress should continue to demand action by the FDA.

✦ **Enforcement.** The vacuum created by the FDA's inaction has emboldened CBD marketers and retailers to make false claims about the curative and therapeutic qualities of the products. At the minimum, it's misleading to consumers and could undermine trust in CBD. At its worst, those claims encourage those with serious health issues to potentially turn away from life-saving drugs.

The FDA sent letters in November to 15 companies warning them that they were selling CBD products in ways that violate the Federal Food, Drug, and Cosmetic Act. But the FDA's dragging of its feet about clarifying CBD is the very reason that companies and retailers have taken liberties with their claims. The FDA cannot send a warning letter once or twice a year and expect to tame the Wild West marketplace. The FDA and FTC must act to consistently protect consumers by flagging and punishing those who make fraudulent health and safety claims.

As mentioned, Digital Citizens intends to conduct a follow-up investigation on what consumers are hearing about CBD when the shop in retail stores and will explore how to create greater awareness through public service announcements (PSAs).

Consumers Deserve Better

Go into just about any grocery store, vape shop, health store or gas station, and you'll likely find CBD for sale. A friendly retailer with no medical experience is likely to use their "expertise" to tell you which product is best for whatever malady ails you. And if you ask them if the products are regulated, there's a very good chance they'll say yes.



According to estimates, that will happen so many times in 2020 that CBD will now be a billion-dollar market. Consumers will buy products certain of what they are getting and confident that they have a government seal of approval. The majority will take the products on a weekly basis.



















Americans deserve to know what is in the CBD products they ingest or apply to their skin. CBD has already been approved to help with two rare forms of epilepsy. It offers great promise to help with anxiety, pain and depression. There is a hope that it can address difficult to treat neuropathic issues. Americans like CBD.

For that reason, we need to ensure that the CBD Americans purchase lives up to the standards they expect. The levels should be accurate, it shouldn't contain THC or impurities such as lead. Manufacturers and retailers should be held accountable for wild claims that can harm consumers.

If CBD is as good as its promise, then it is in the national interest for the market to grow. But that won't happen if along the way disreputable manufacturers and retailers chip away at consumer confidence. A billion-dollar industry promising to cure maladies screams for adult supervision.

Addendum: CBD Products & Purchase Locations

In total, Digital Citizens Alliance researchers bought 59 separate items with CBD ingredients. The purchases were made online and at retailers located in seven states and the District of Columbia. Products purchased and tested include:

- | | |
|---|---|
|  "Ageless Serum" |  Oils |
|  Bath Soap |  Oral Sprays |
|  Body Lotion |  Relief Creams |
|  Bubble Bath |  Salves |
|  Cake Pops |  Sleep Aids |
|  Chocolate |  Sticks |
|  Cough Drops |  trips |
|  Gels |  Teas |
|  Gummies |  Tinctures |

States where items were purchased include:



Note: Additional purchases were made online

Addendum: Polling Questions & Answers

To better understand the use and attitudes about CBD, its benefits and the need for federal oversight to ensure its safety, Digital Citizens Alliance conducted three surveys. The first with John Zogby Strategies on January 23, 2020 sampling 2506 American adults, the second two were follow-ups through Survey Monkey on January 30-31, 2020 and February 2, 2020 with an online sampling of 715 in each. Here are some of the key findings.

The first 13 are from a John Zogby Strategies survey (2,506 respondents):

Some consumers use CBD to deal with issues such as anxiety, seizures and pain relief. From your perspective, is the emergence of CBD as a consumer product a positive or a negative thing:

Positive:	53%
Not a positive or negative:	18%
Negative:	11%
Not sure:	18%

Have you ever purchased a product that contains CBD?

Yes:	30%
No:	64%
Not Sure:	7%

How often have you purchased a product that contains CBD?

Weekly:	18%
Monthly:	22%
Every few months:	19%
A few times a year:	12%
Once or twice:	28%
Not sure:	2%

What type of CBD-infused products have you purchased?

Topical:	47%
Foods:	44%
Vitamin or supplement:	31%
Vaping:	25%
Beverage:	22%
Pet Product:	9%
Tincture/Ointment:	6%
Not Sure:	2%

Did you use the products that contain CBD that you purchased?

Yes, on a daily basis:	37%
Yes, on a weekly basis:	21%
Yes, occasionally:	24%
Just a few times:	12%
No:	4%
Not Sure:	1%

What was your primary purpose for using CBD?

Pain management or relief:	43%
Reduce stress, anxiety or depression:	31%
Improving quality of my sleep:	9%
Curiosity:	9%
Treat effects of a neurological disorder (epilepsy, MS)	5%
I thought it would give me a "high:"	2%
Not sure:	2%
Other:	1%

Where did you purchase a product that contains CBD?

Specialty Shop	51%
Online:	39%
Grocery Store:	16%
Pharmacy/Health Professional:	15%
Convenience Store/Gas Station:	10%
Farmer's Market:	6%
Not Sure:	2%
Other:	1%

Do government agencies currently regulate products that contain CBD?

Yes:	33%
No:	26%
Not sure:	42%

The United states does NOT regulate or oversee the safety of using CBD in products at the federal level. Does that concern you? (Asked of 742 respondents who said they purchased CBD)

Yes, very much:	24%
Yes, somewhat:	35%
No, not really:	22%
No, not at all:	9%
Not sure:	11%

In your opinion, should products that contain CBD be regulated by federal government agencies, like the FDA? (Asked of 742 respondents who said they purchased CBD)

Yes:	53%
No:	32%
Not sure:	15%

Do you believe consumers know enough about the benefits or risks of CBD? (Asked of 742 respondents who said they purchased CBD)

Yes:	22%
No:	56%
Not sure:	22%

In your opinion, should products that contain CBD be regulated by federal government agencies (like the FDA)?

Yes:	55%
No:	21%
Not sure:	24%

If products that contain CBD were federally regulated, would that make you more or less likely to purchase them?

Much more likely:	16%
Somewhat more likely:	30%
Somewhat less likely:	9%
Much less likely:	8%
Not sure:	37%

Questions from follow-up surveys on Survey Monkey conducted on January 30-31, 2020 and February 2, 2020 (715 respondents, of which 289 and 291, respectively said they had purchased CBD):

Recent research found that it is common for the amount of CBD in a product to be higher or lower than what the label claims. Would you be less or more likely to purchase a product if you were concerned it didn't contain the amount of CBD the labels it has? (Asked of 291 respondents who said they purchased CBD)

I would be much less likely to purchase the product:	37%
I would be somewhat less likely to purchase the product:	30%
It wouldn't make a difference:	18%
I would be somewhat more likely to purchase the product:	4%
I would be much more likely to purchase the product:	5%
Not sure:	7%

If you have taken a CBD product, did you do so as an alternative to taking other medication? (Asked of 289 respondents who said they purchased CBD)

Yes:	70%
No:	28%
Not sure:	2%

If you used a CBD product in replacement of a medication, what type of medication were you replacing? (name as many as apply)
(Asked of 289 respondents who said they purchased CBD)

Over the counter medication:	47%
Prescription medication:	46%
Not sure:	20%

If you used a CBD product in replacement of a medication, what type of medical issue were you treating? (name as many as apply)
(Asked of 289 respondents who said they purchased CBD)

Pain:	53%
Anxiety:	48%
Depression:	29%
Insomnia:	20%
Not sure:	11%
Cancer:	9%
Alzheimer's disease:	7%
High blood pressure:	7%
Diabetes:	7%
Seizures:	6%
Addiction:	5%
Epilepsy:	3%

About Digital Citizens Alliance

The Digital Citizens Alliance is a nonprofit, 501(c)(6) organization that is a consumer-oriented coalition focused on educating the public and policymakers on the threats that consumers face on the Internet. Digital Citizens wants to create a dialogue on the importance for Internet stakeholders—individuals, government, and industry—to make the Web a safer place.

Based in Washington, DC, the Digital Citizens Alliance counts among its supporters: private citizens, the health, pharmaceutical and creative industries as well as online safety experts and other communities focused on Internet safety. Visit us at digitalcitizensalliance.org

