VOL. I

U.S. CBD CONSUMER REPORT:

ARCHETYPES & PREFERENCES

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letter from the PUBLISHER

New Frontier Data is proud to announce the release of the *U.S. CBD Consumer Report: Archetypes and Preferences*, the first volume among our continuing examination of the customers who drive market demand in the American legal CBD industry.

Through further surveys and investigation of nine differentiated archetypes among CBD consumers and nonconsumers, the report delves further into consumers' use and purchasing behavior, preferences, information sharing, and beliefs about the cannabinoid.

About 1 among 6 U.S. adults (16%) reported having purchased a CBD product at least once. Roughly 3 in 10 (29%) of Americans overall reported being likely to purchase CBD in the following six months, including about 1 in 5 (21%) of those who have not yet purchased it.

New Frontier Data's intelligence about consumer archetypes and segmentation offers the best analysis toward understanding potentialities in the nation's markets, which further research will track across jurisdictions to monitor trajectories as those markets continue to evolve.

This report examines the general population's attitudes and consumer behaviors regarding CBD as new regulations, technology, and research will continue to exert their respective influences. Consumer preferences for safe, high-quality products which deliver consistent experiences will inexorably pressure producers to meet continually improving standards.

Among all CBD products sold In the United States, oil/tincture (used by 63% of consumers) is currently the dominant product category, but topical products (36%) and infused foods (31%) are gaining popularity, especially among younger cohorts.

As is the case with all of our reports available through New Frontier Data's online intelligence portal Equio™, we trust that readers will benefit from this consumer data, our unbiased insights, and the actionable intelligence provided to continue to succeed in the global CBD arena.

New Frontier Data's mission is to elevate the discussion around the legal cannabis industry globally by providing unbiased, vetted information intended to educate stakeholders in making informed decisions. We provide individuals and organizations operating, researching, and investing in this emerging industry with unparalleled access to actionable business intelligence and market insight, helping each to leverage the power of knowledge to succeed in a fast-paced and dynamic market.

Please do enjoy our newest report, produced in collaboration with Square, as you shape your strategy and devise your action plan within the CBD industry!

Giadha Aguirre de Carcer
Founder and CEO,
New Frontier Data

Strength in Knowledge®

executive
SUMMARY

A self-reported 18% of Americans surveyed have tried CBD (23% among adults aged 18-34, 21% of ages 35-54, and 14% of adults 55 and older).

Nearly 9 in 10 Americans are familiar with CBD; 86% of respondents had heard of CBD. A majority (55%) of Americans were interested in learning more about CBD, with younger cohorts being more interested than older groups.

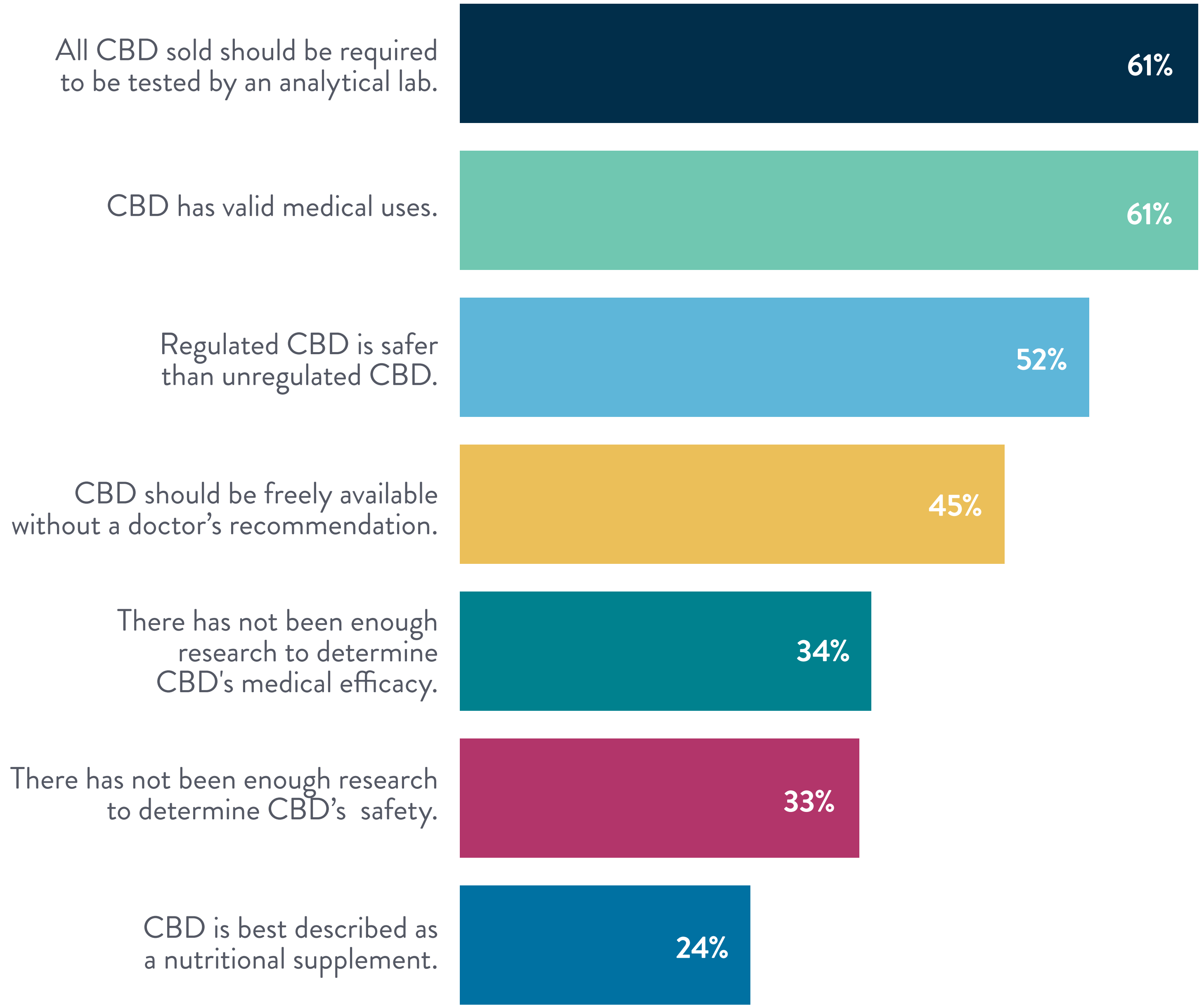
Personal connections are important in driving attitudes, knowledge, and — ultimately — use of CBD.

Nearly 3 in 4 (73%) Americans who had heard of CBD reportedly had a conversation about it, including 67% of people who had not consumed CBD. The majority of people who had a conversation about CBD said their conversations were mostly positive.

The positive associations with CBD come from familiarity: 51% of Americans surveyed knew a friend or family member who uses CBD. Nearly 1 in 5 (17%) Americans recommended CBD to someone they know. Nearly 2 in 5 (39%) received a recommendation to try CBD.

Generally, Americans have favorable views of CBD, with 48% reporting positive feelings about the cannabinoid, and 61% believing CBD has valid medical uses.

BELIEFS & POLICY OPINIONS



Sum of "strongly agree" + "somewhat agree.
Source: New Frontier Data 2020 U.S. CBD Survey

Among all Americans who reported ever having consumed CBD, 40% of consumers said they do so at least once a week. Older consumers tend to use it more frequently than do younger consumers.

One-quarter (25%) of those who tried CBD only did so once or twice before stopping. Women were more likely than men to have only consumed CBD once or twice (30% vs. 19%).

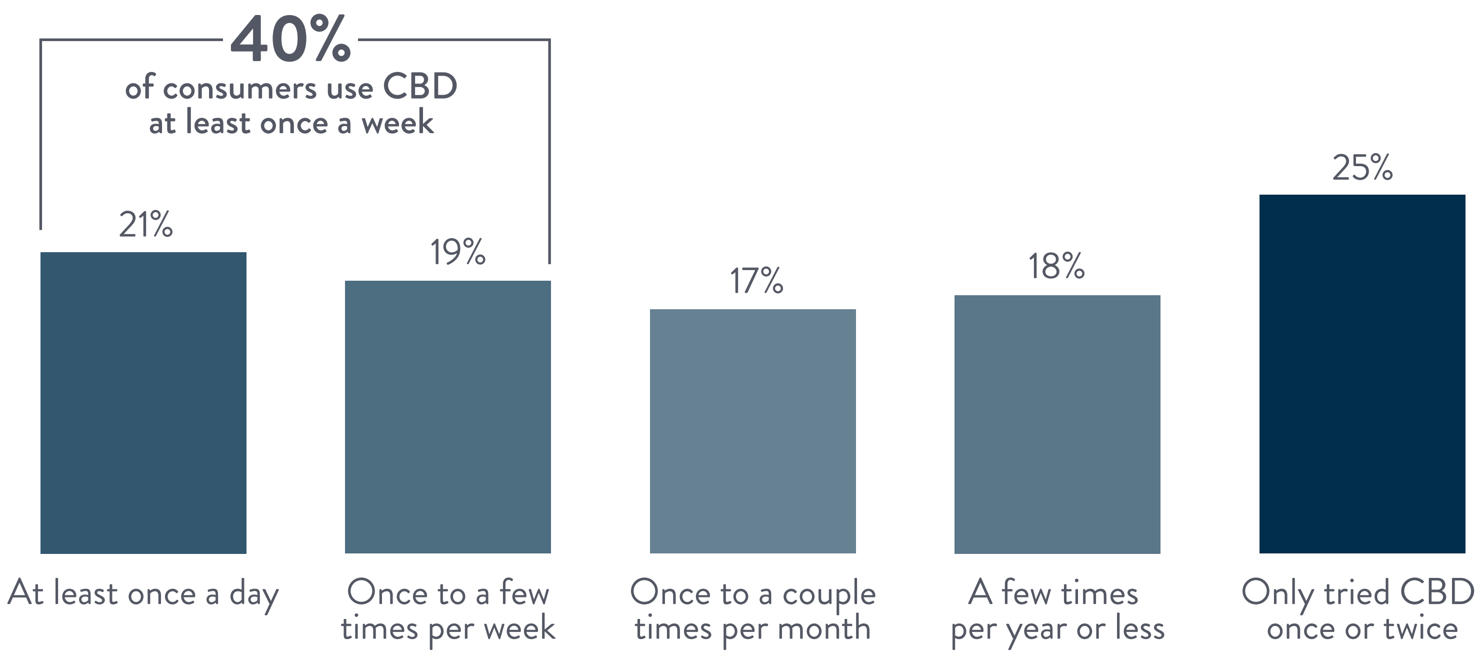
Oil is the dominant form of CBD, with 63% of consumers having tried CBD oil. Topicals (36%) and infused foods (31%) are also somewhat popular. Younger groups have used a wider variety of forms than have older groups.

More than 4 in 10 (43%) among consumers use less than 30 mg of CBD per day; 12% use 100 mg or more per day.

Three in five (60%) of consumers reported using CBD for some form of unwinding (e.g., relaxation, relieving stress, or anxiety reduction). When asked to identify one primary reason for CBD use, the leading response (41%) was pain management.

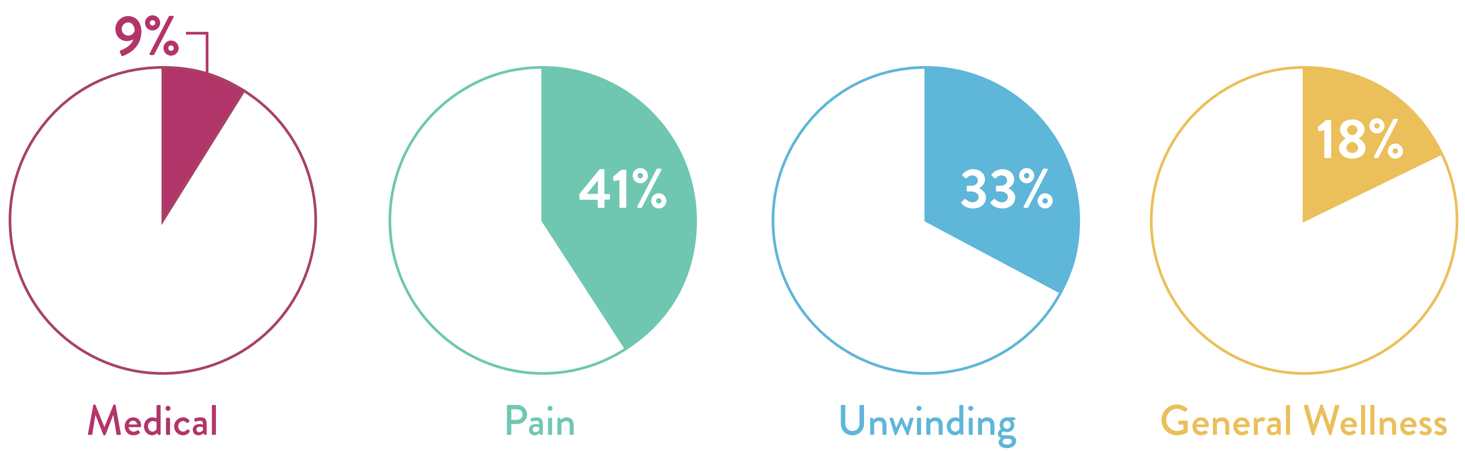
Personal connections (39%) and online retailers (38%) are cited as the most widely used sources of CBD. More than 1 among 4 (27%) of CBD purchasers expected their spending on CBD to increase over the proceeding six months.

CBD USE FREQUENCY



Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

PRIMARY REASON FOR USING CBD



Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Most consumers (59%) spend less than $50 per month on CBD. On average, men spend more for it than do women. CBD purchasers aged 35-54 reported being the most likely of any group to spend more than $100 per month on CBD (21%).

CBD purchasers reported being generally happy with the products they have access to, with 71% agreeing they were satisfied with what they have purchased.

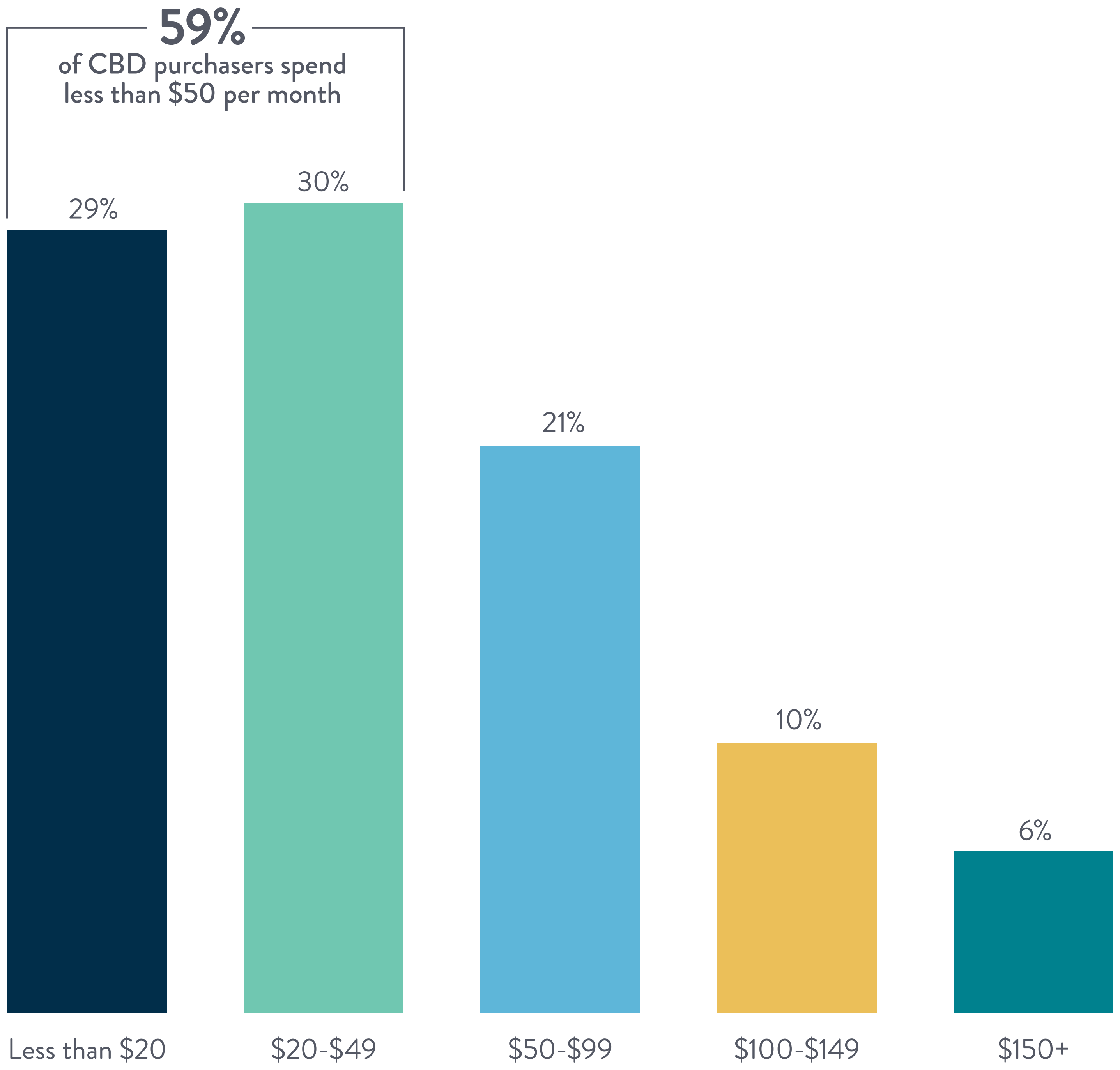
When selecting which CBD product to purchase, the price and quantity of CBD were named the most important factors. When selecting a CBD source, the quality and variety of products available, along with convenience of location and service from staff, were the most compelling factors.

Roughly half (51%) of CBD purchasers said they usually purchase familiar brands. The others split between trying new brands and not knowing what brands they were buying.

In total, about 3 in 10 (29%) Americans reported being likely to purchase CBD in the following six months. 7 among 10 (72%) of those who purchased CBD in the past reported being likely to purchase it again in the following 6 months.

Among current CBD consumers, 28% expected the amount of CBD they used to increase over the next six months. About 1 in 5 (22%) of nonconsumers said they were likely to try CBD within the next six months.

MONTHLY SPENDING ON CBD



Among those who have ever purchased CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Archetypes

Based on analysis of dozens of behavioral and attitudinal variables, New Frontier Data identified the following nine consumer and nonconsumer archetypes, which identify unique and distinct groups within the adult population.

CONSUMER ARCHETYPES

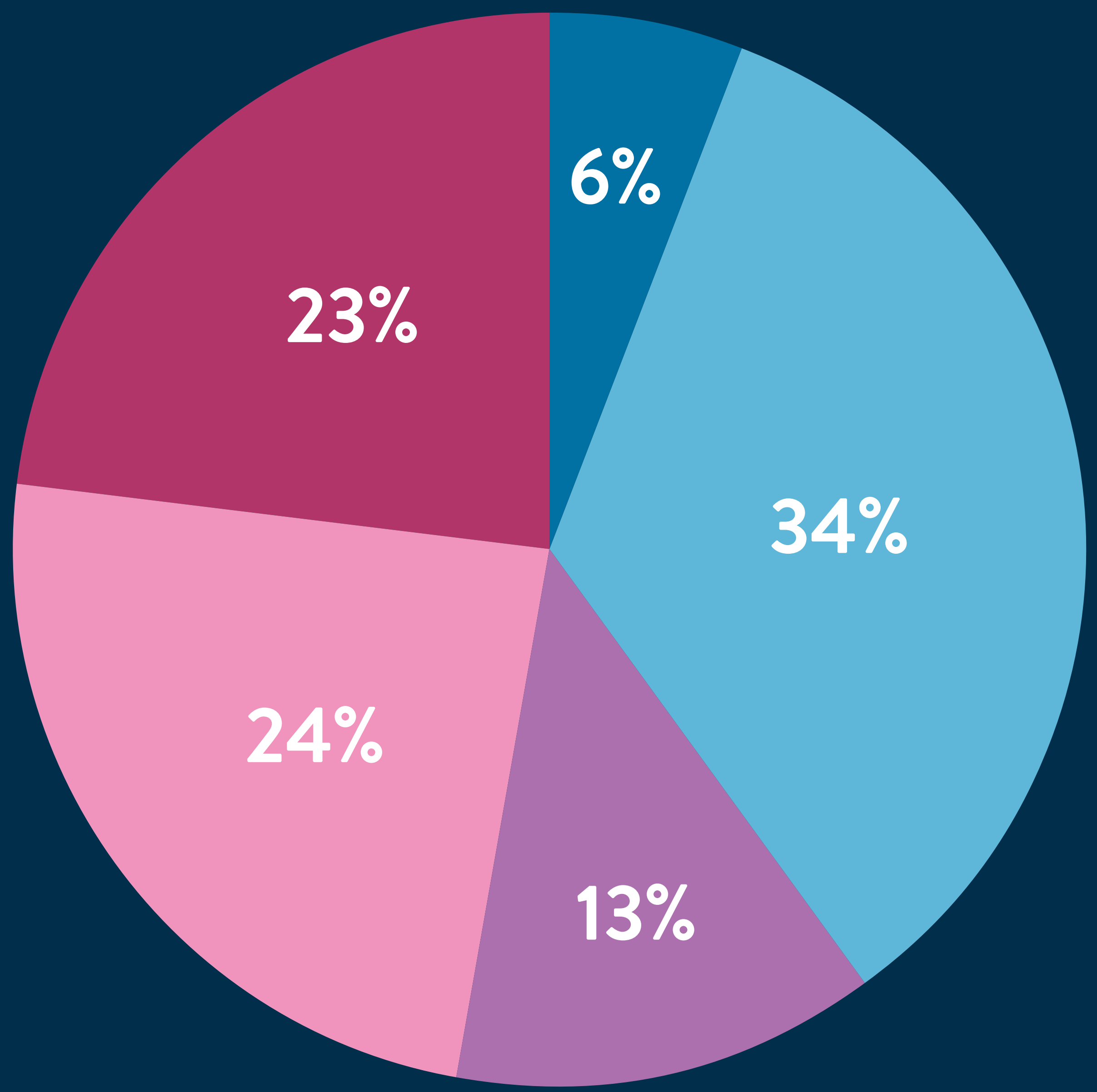
EXUBERANT & INTENSE
(6% of consumers)
Extremely enthusiastic, frequently consuming, high-spenders.

INTEGRATIVE & CONSISTENT
(34% of consumers)
CBD believers, experienced consumers, moderate spenders.

SKEPTICAL AND LIMITED
(13% of consumers)
Treating pain, moderate spenders, skeptical of some applications.

RECEPTIVE & RESERVED
(24% of consumers)
Believe in CBD's benefits, not connected to other consumers, lower spenders.

AMBIVALENT & EXPERIMENTAL
(23% of consumers)
Never purchased CBD, may no longer consume, least enthusiastic.



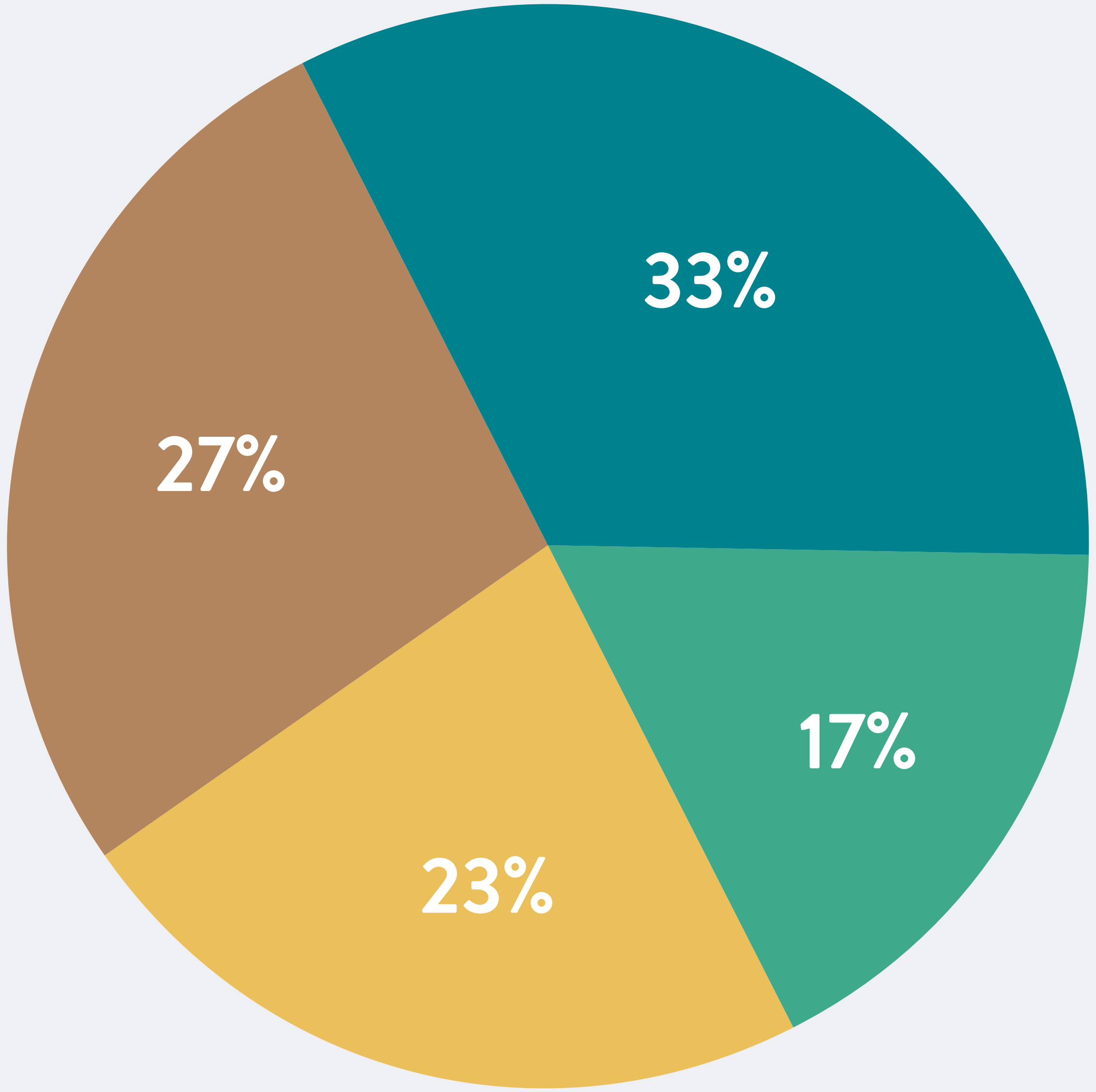
NONCONSUMER ARCHETYPES

KNOWLEDGEABLE & PRIMED
(33% of nonconsumers)
Most likely to try CBD.

CAUTIOUS & CURIOUS
(17% of nonconsumers)
Still have some lingering concerns.

INFORMED & INDIFFERENT
(23% of nonconsumers)
Have decided CBD is not for them.

UNAWARE & UNINTERESTED
(27% of nonconsumers)
Lack information or interest in CBD.



Key Takeaways

- Consumer archetypes illustrate the nuanced differences between CBD users whose continued evolution brands will need to understand and adapt to meet.
- While tinctures currently lead the market, brands should anticipate a significant shift to infused products (regulations permitting).
- Younger consumers are more likely to have tried a range of product forms, affirming the ongoing public curiosity about CBD products.
- As the market matures, price-based competition will become more acute as brands vie for market shares.
- Both industry stakeholders and regulators will need to be diligent in monitoring medical claims made by unregulated and unscrupulous CBD brands.
- The COVID-19 pandemic presents a significant opportunity for consumers to use CBD for managing stress and anxiety fueled by widespread economic and social disruptions.

about

NEW FRONTIER DATA

New Frontier Data is an independent, technology-driven analytics company specializing in the global cannabis industry. It offers vetted data, actionable business intelligence and risk management solutions for investors, operators, researchers, and policymakers. New Frontier Data's reports and data have been cited in over 80 countries around the world to inform industry leaders. Founded in 2014, New Frontier Data is headquartered in Washington, D.C., with additional offices in Denver, CO, and London, U.K.

New Frontier Data does not take a position on the merits of cannabis legalization. Rather, its mission and mandate are to inform cannabis-related policy and business decisions through rigorous, issue-neutral, and comprehensive analysis of the legal cannabis industry worldwide.

Mission

New Frontier Data's mission is to elevate the discussion around the legal cannabis industry globally by providing unbiased, vetted information intended to educate stakeholders in making informed decisions.

Core Values

- Honesty
- Respect
- Understanding

Vision

Be the Global Big Data & Intelligence Authority for the Cannabis Industry.

Commitment to Our Clients

The trusted one-stop shop for actionable cannabis intelligence, New Frontier Data provides individuals and organizations operating, researching, or investing in the cannabis industry with unparalleled access to actionable industry intelligence and insight, helping them leverage the power of big data to succeed in a fast-paced and dynamic market.

We are committed to the highest standards and most rigorous protocols in data collection, analysis, and reporting, protecting all IP and sources, as we continue to improve transparency into the global cannabis industry.

For more information about New Frontier Data, please visit: **NewFrontierData.com**

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METHODOLOGY

Consumer Survey:

In a census-adjusted survey of the general population of the United States, New Frontier Data gathered information about the uses, purchasing habits, beliefs, and attitudes about the cannabinoid CBD and products containing it. Survey themes included CBD use, purchasing behavior, decision influencers, product preferences, and expenditures, beliefs about CBD, and policy attitudes.

SURVEY OVERVIEW

SAMPLE SIZE	MARGIN OF ERROR
4,074	**±1.38%**
FIELDING DATES	METHODOLOGY
March 18-24, 2020	**Online Survey**

Archetype Clustering:

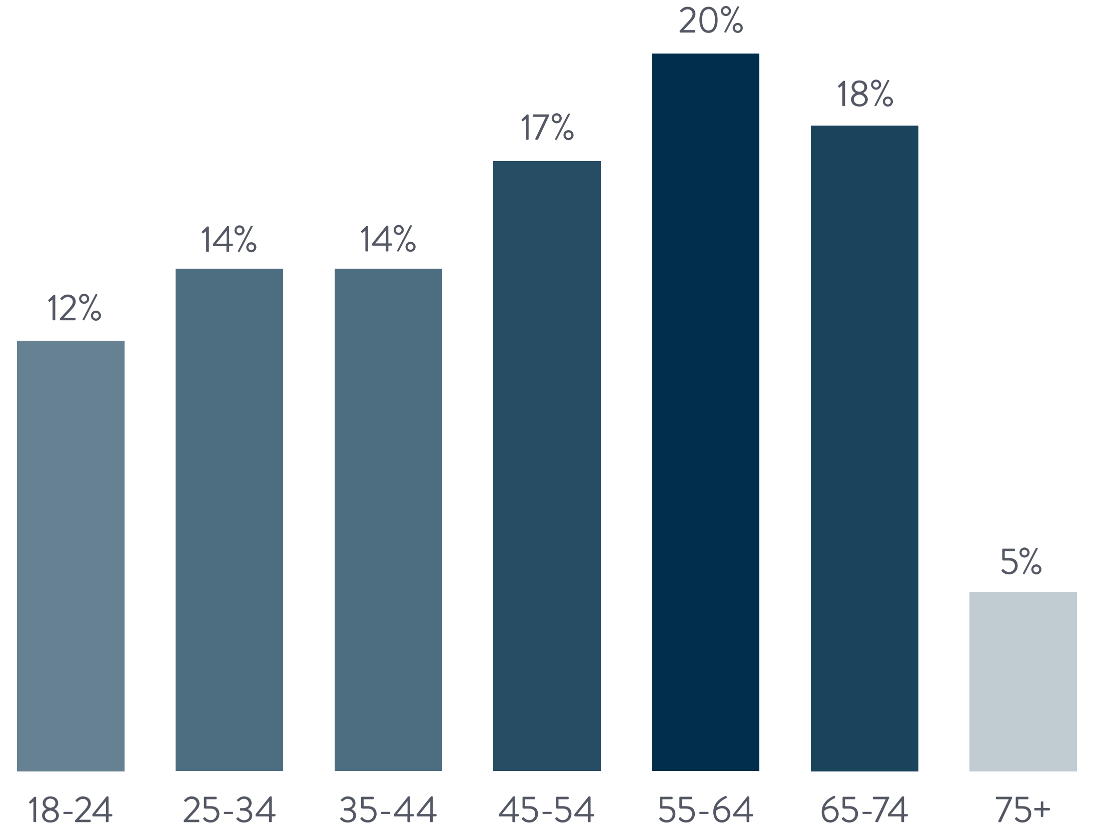
In general, algorithmic clustering is a technique used to automatically organize objects into groups that are similar in some aspect. The result is a collection of objects which are like each other, yet different from those in other collections. New Frontier Data previously used unsupervised clustering algorithms to mathematically explore the consumer and nonconsumer archetypes (groups) defining U.S. and EU CBD markets. The data used in the algorithms was sourced from key variables relating to respondent behavior, beliefs, attitudes, and exposure to CBD. Importantly, such techniques ascertain the inherent divisions within CBD consumer and nonconsumer groups, as opposed to predefining (or guessing) the qualities of each group.

In the current analysis, New Frontier Data uses the same cluster centroids as defined in our previous CBD archetype reporting, and classified the newest respondents as the archetype centroid closest to it. In effect, that allows us not only to determine the share of each archetype in the current market environment, but also to analyze how the size of the archetypes are changing. This is a critical datapoint in understanding evolution of the CBD market over time.

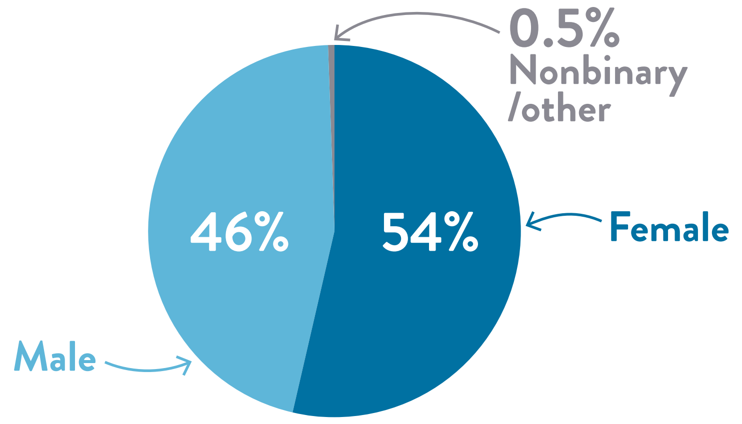
survey
PARTICIPANTS

Distribution of respondents across age, gender, and other social metrics:

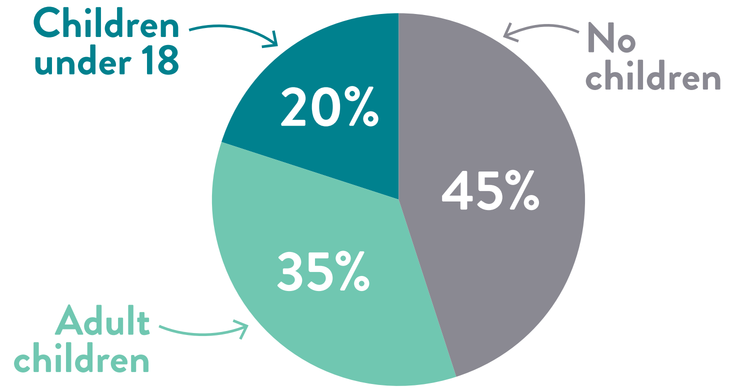
AGE OF RESPONDENTS



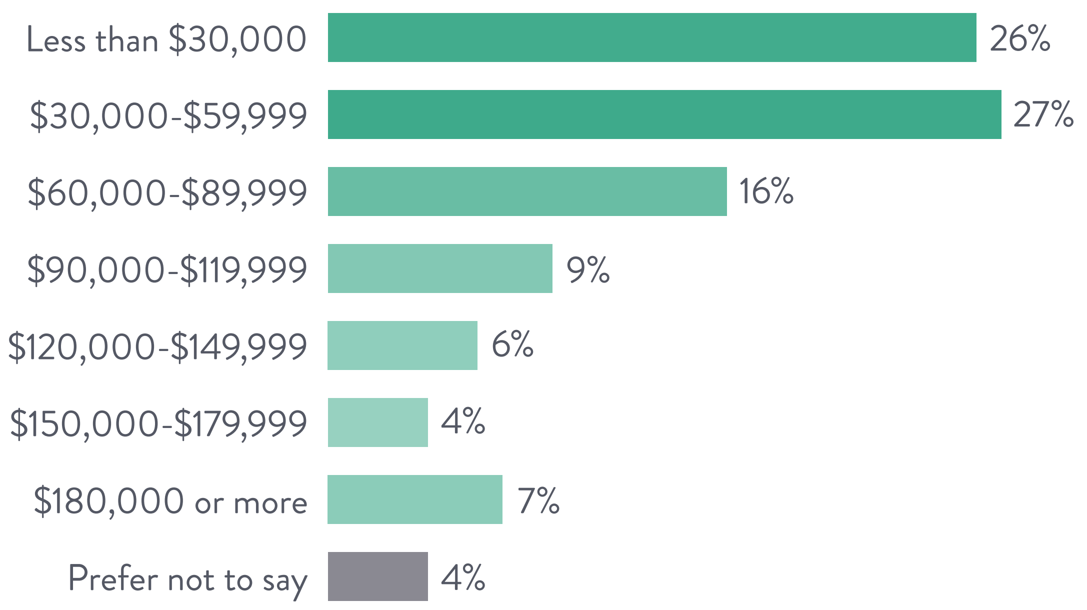
GENDER OF RESPONDENTS



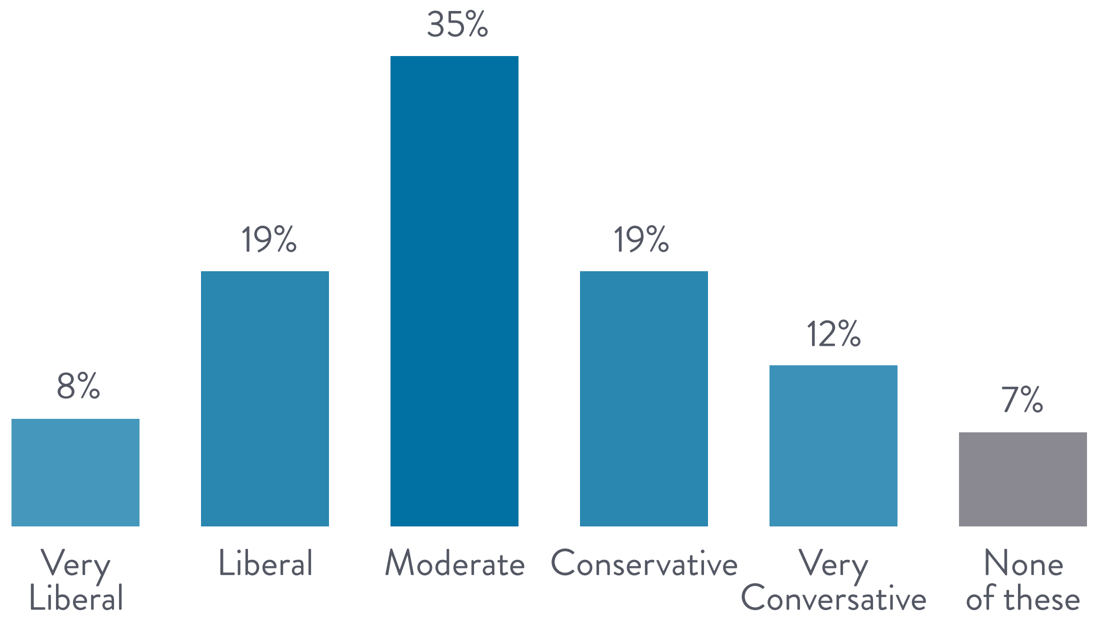
PARENTAL STATUS OF RESPONDENTS



ANNUAL HOUSEHOLD INCOME OF RESPONDENTS



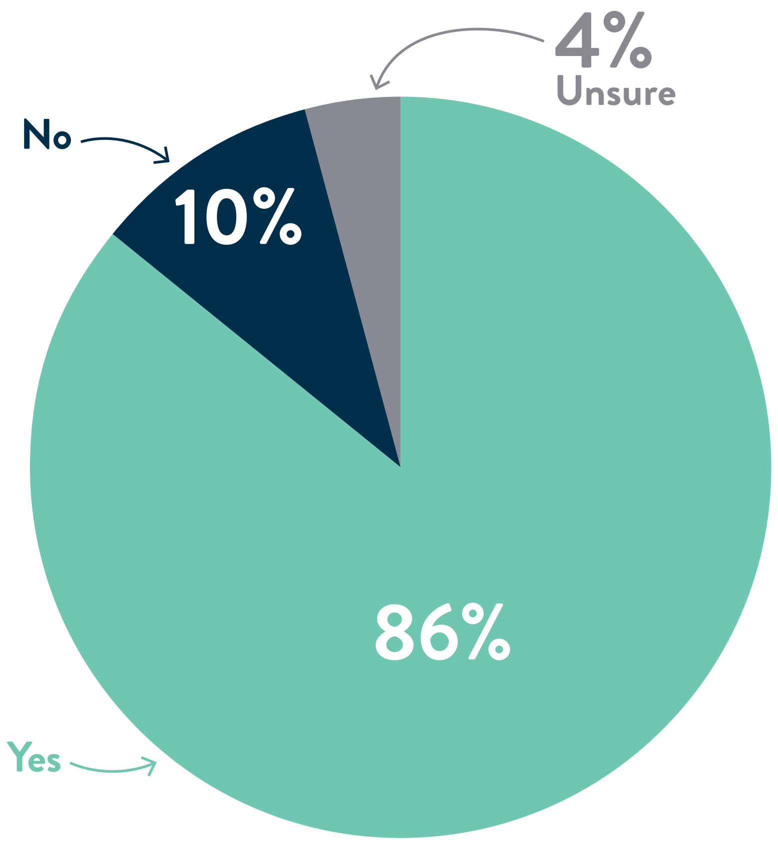
POLITICAL ORIENTATION OF RESPONDENTS



PART 1:
Findings

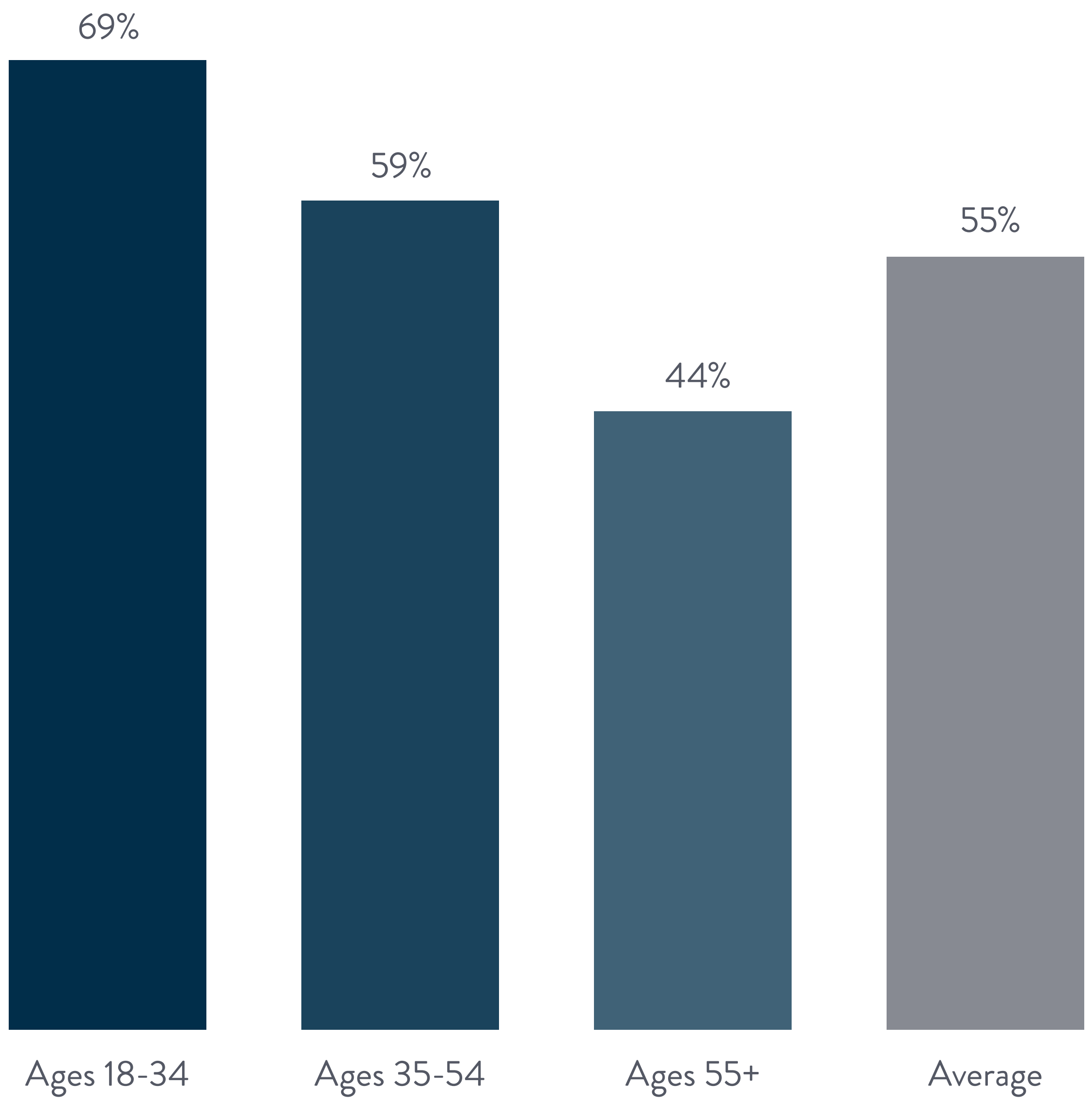
Awareness of & Exposure to CBD

HAVE HEARD OF CBD



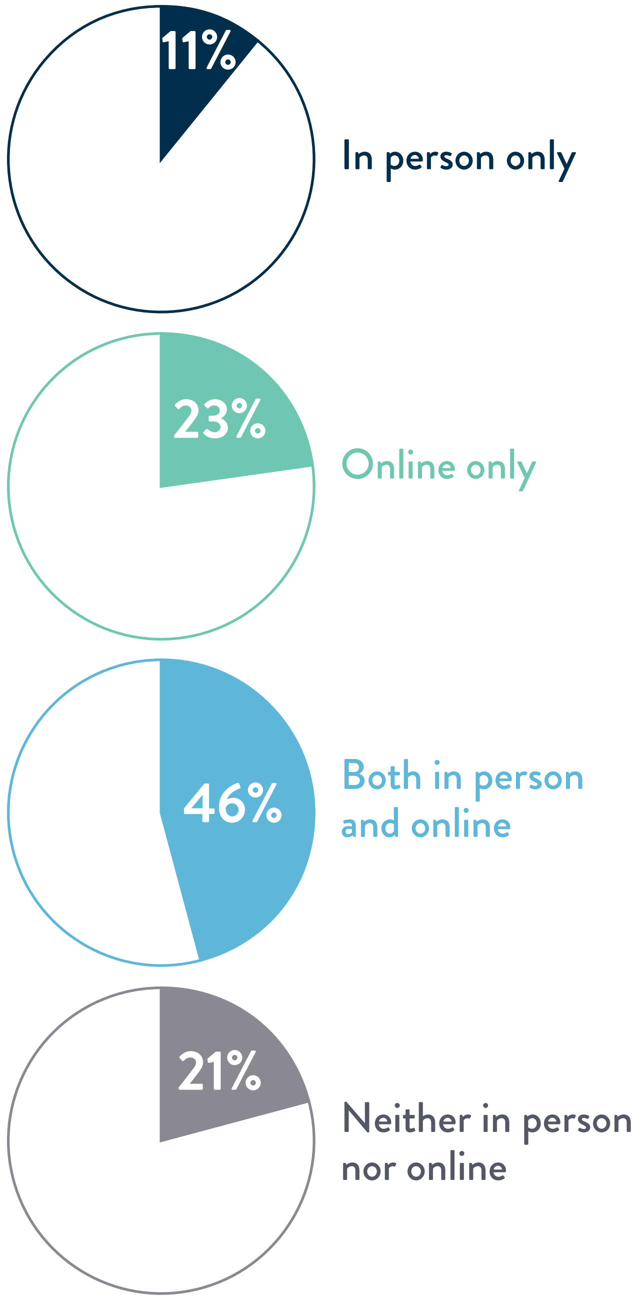
Source: New Frontier Data 2020 U.S. CBD Survey

AGREE: I AM INTERESTED IN LEARNING MORE ABOUT CBD



Among those who have heard of CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

WHERE HAVE YOU SEEN CBD PRODUCTS?

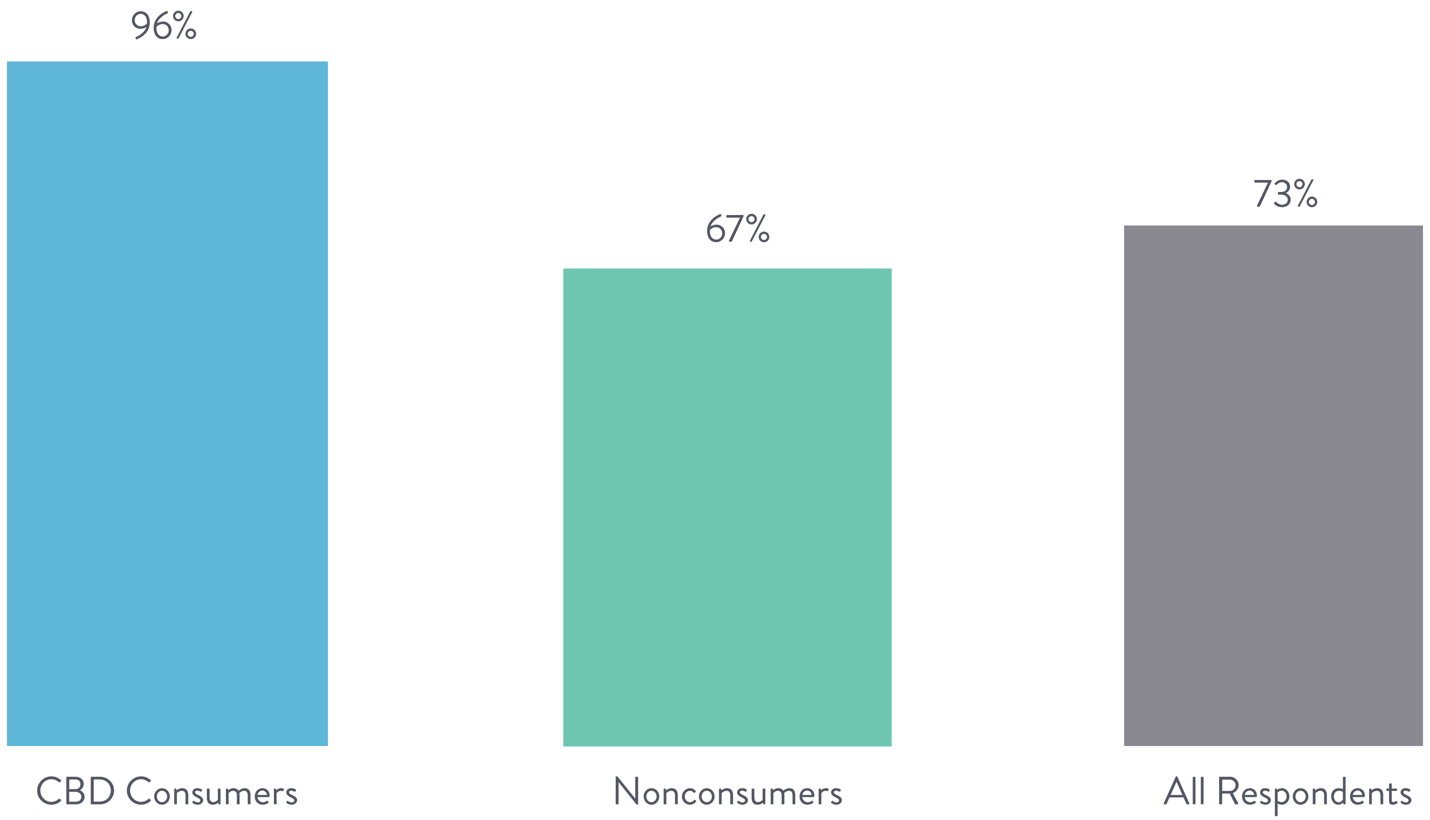


Among those who have heard of CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Information Sharing & Social Factors

Personal connections are important in driving attitudes, knowledge, and ultimately the use of CBD.

HAVE HAD A CONVERSATION ABOUT CBD

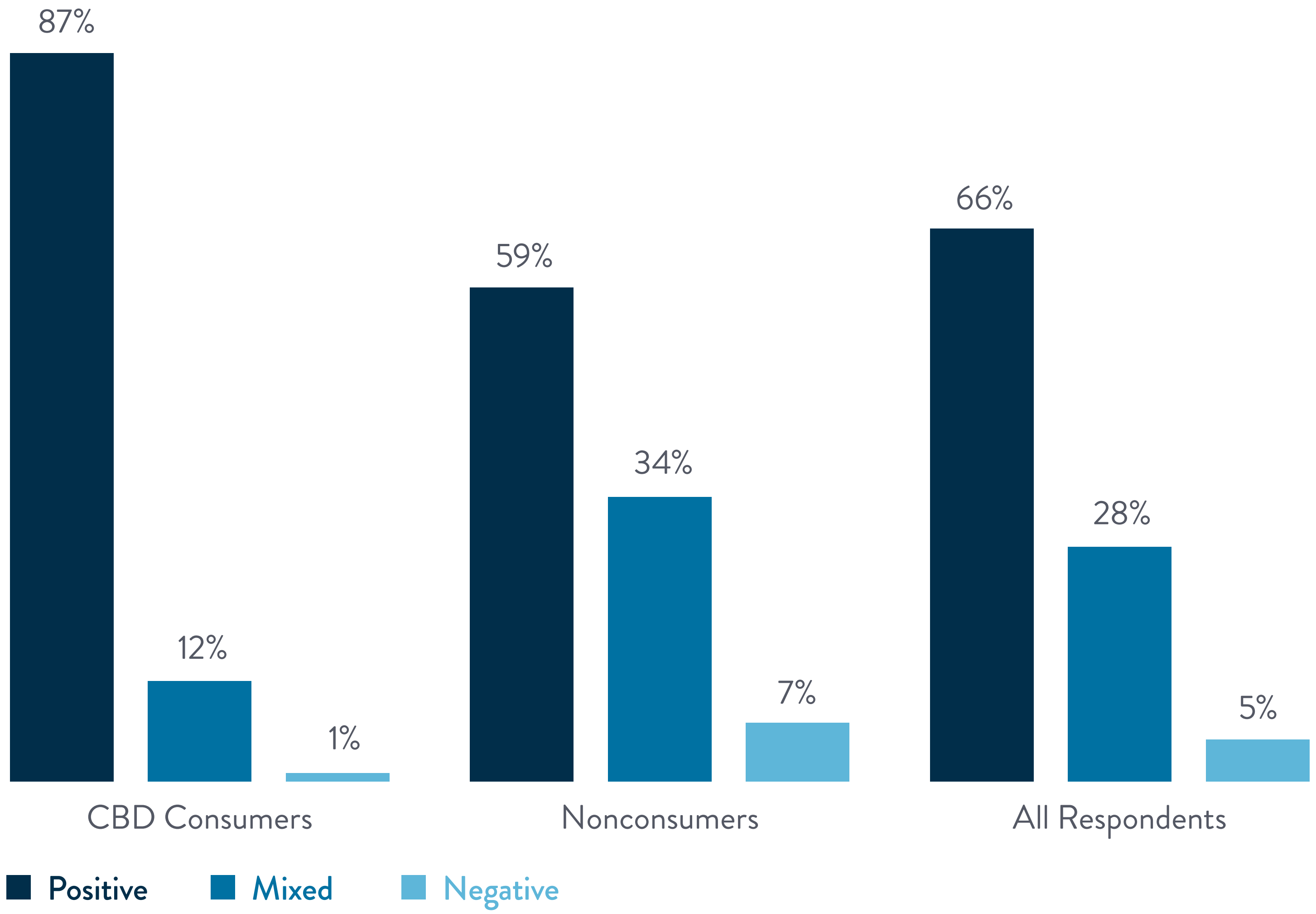


Among those who have heard of CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Nearly three-quarters (73%) of Americans have had a conversation about CBD, including two-thirds (67%) of those who have not tried CBD themselves.

And those conversations tended to view CBD positively:

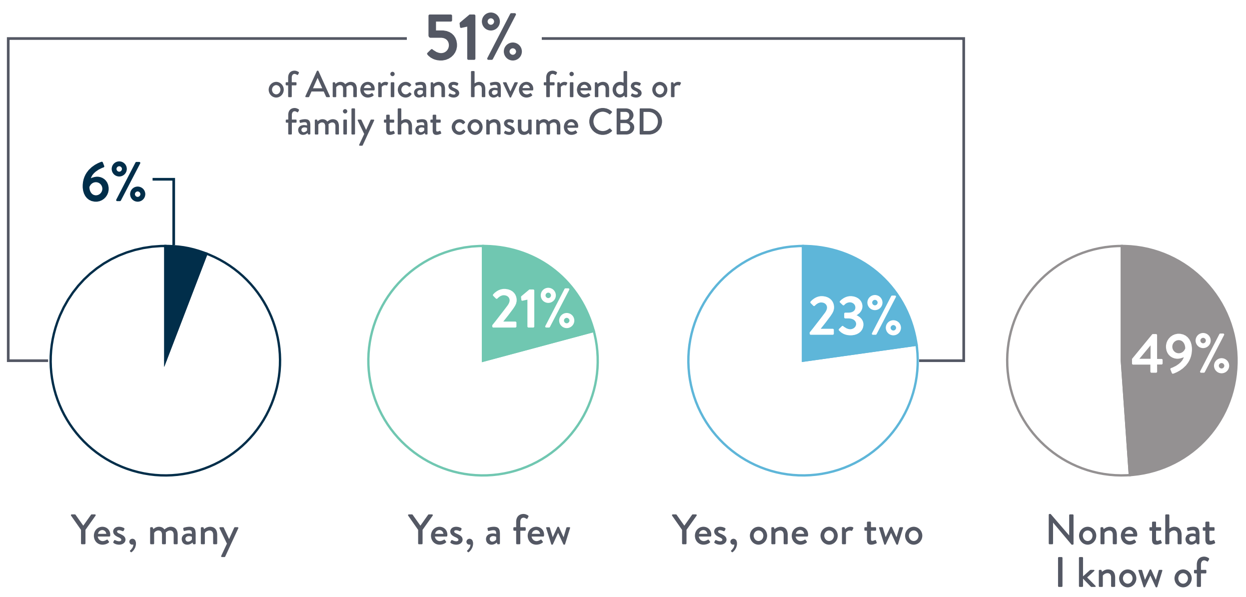
WHAT WAS THE VIEW OF CBD IN YOUR CONVERSATIONS?



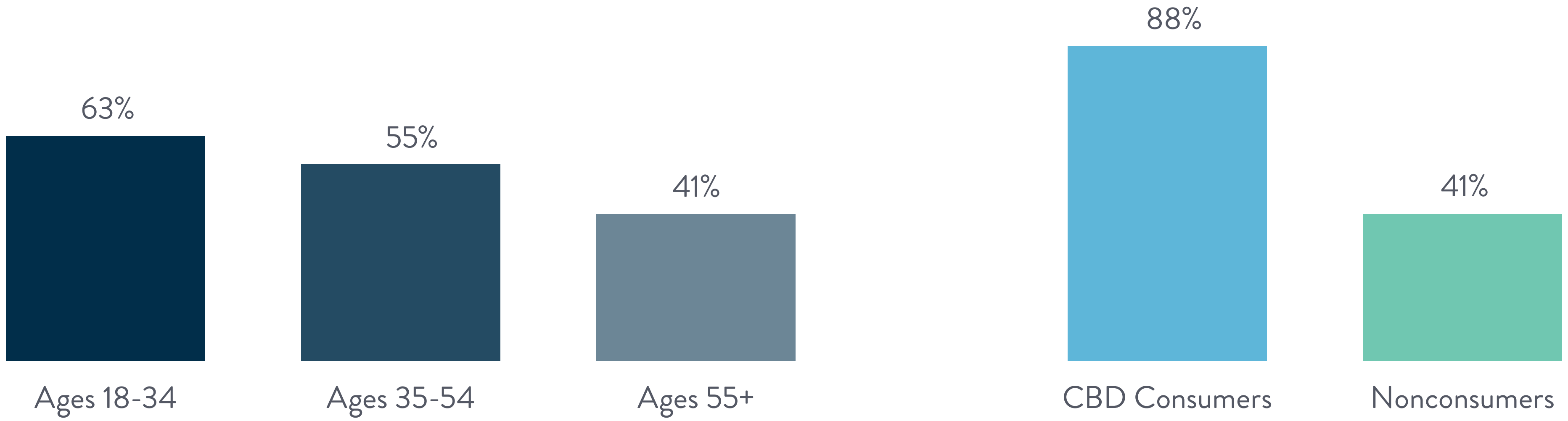
Among those who have had a conversation about CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Positive associations with CBD come from familiarity. Roughly half of Americans know about the CBD consumption of someone close to them:

DO YOU HAVE FRIENDS OR FAMILY THAT CONSUME CBD?

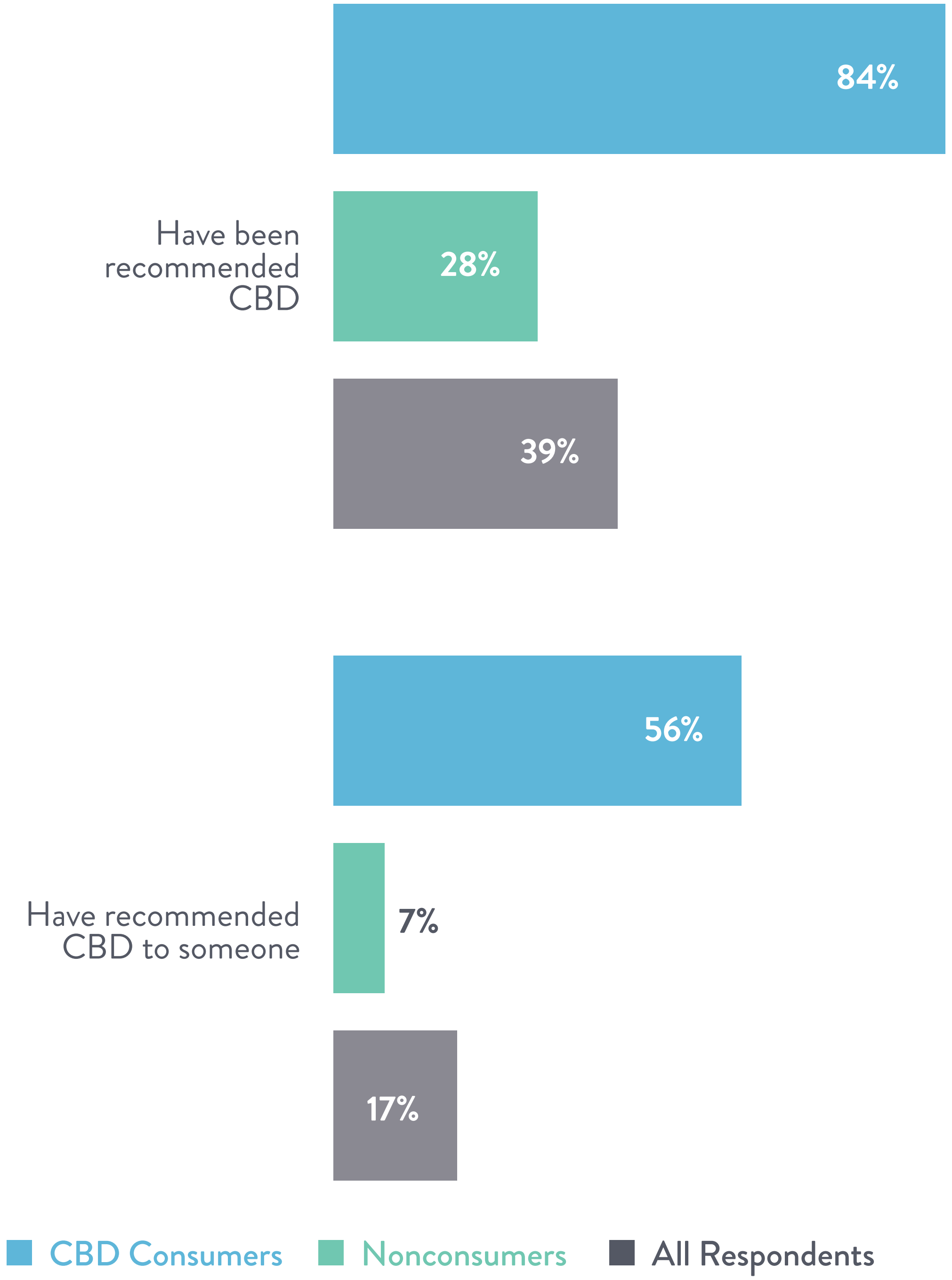


HAVE FRIENDS OR FAMILY THAT CONSUME CBD



Among those who have had a conversation about CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

RECOMMENDING CBD

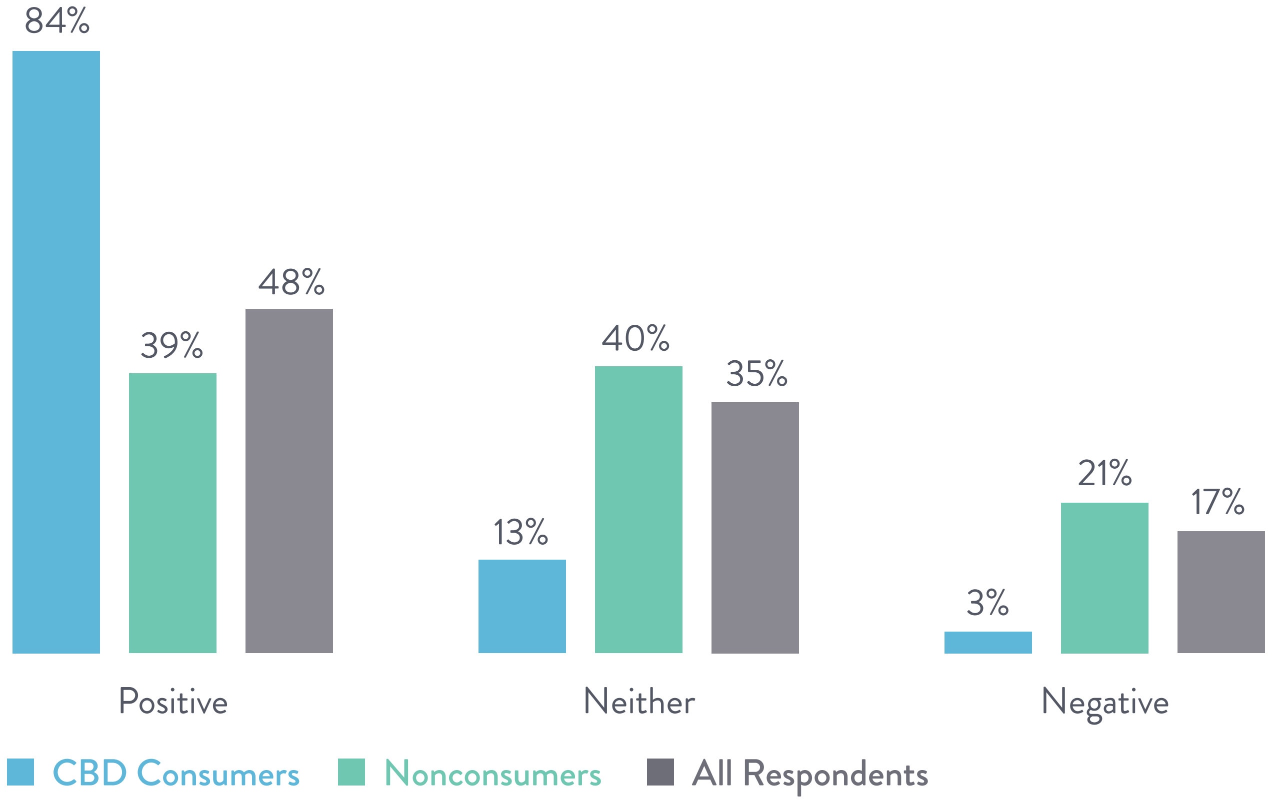


Among those who have had a conversation about CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Beliefs & Policy Opinions

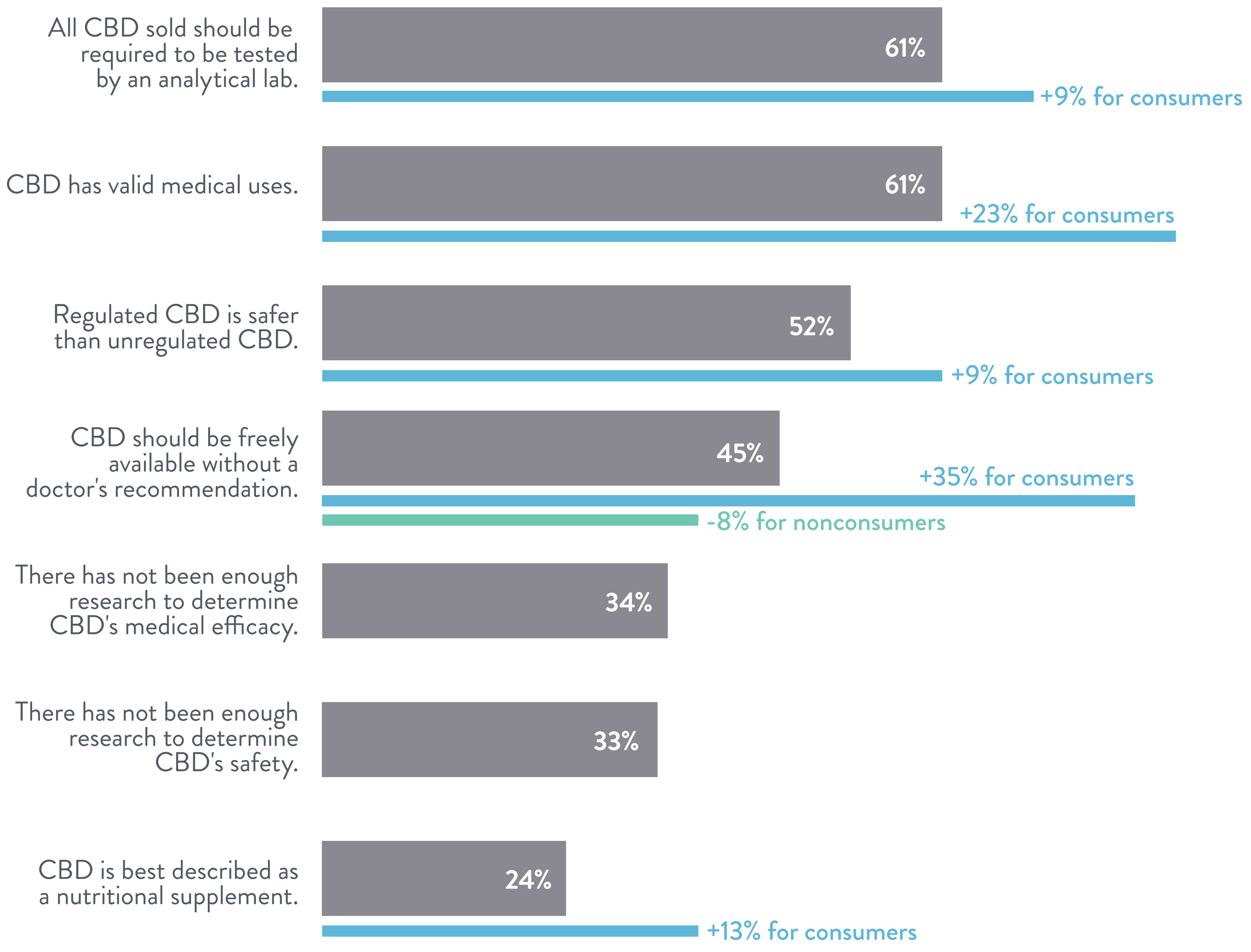
Generally, Americans have favorable views of CBD and support its being tested. CBD consumers are considerably more supportive of CBD's being freely available without the recommendation of a medical professional.

GENERAL FEELINGS ABOUT CBD



Source: New Frontier Data 2020 U.S. CBD Survey

BELIEFS & POLICY OPINIONS
ALL RESPONDENTS



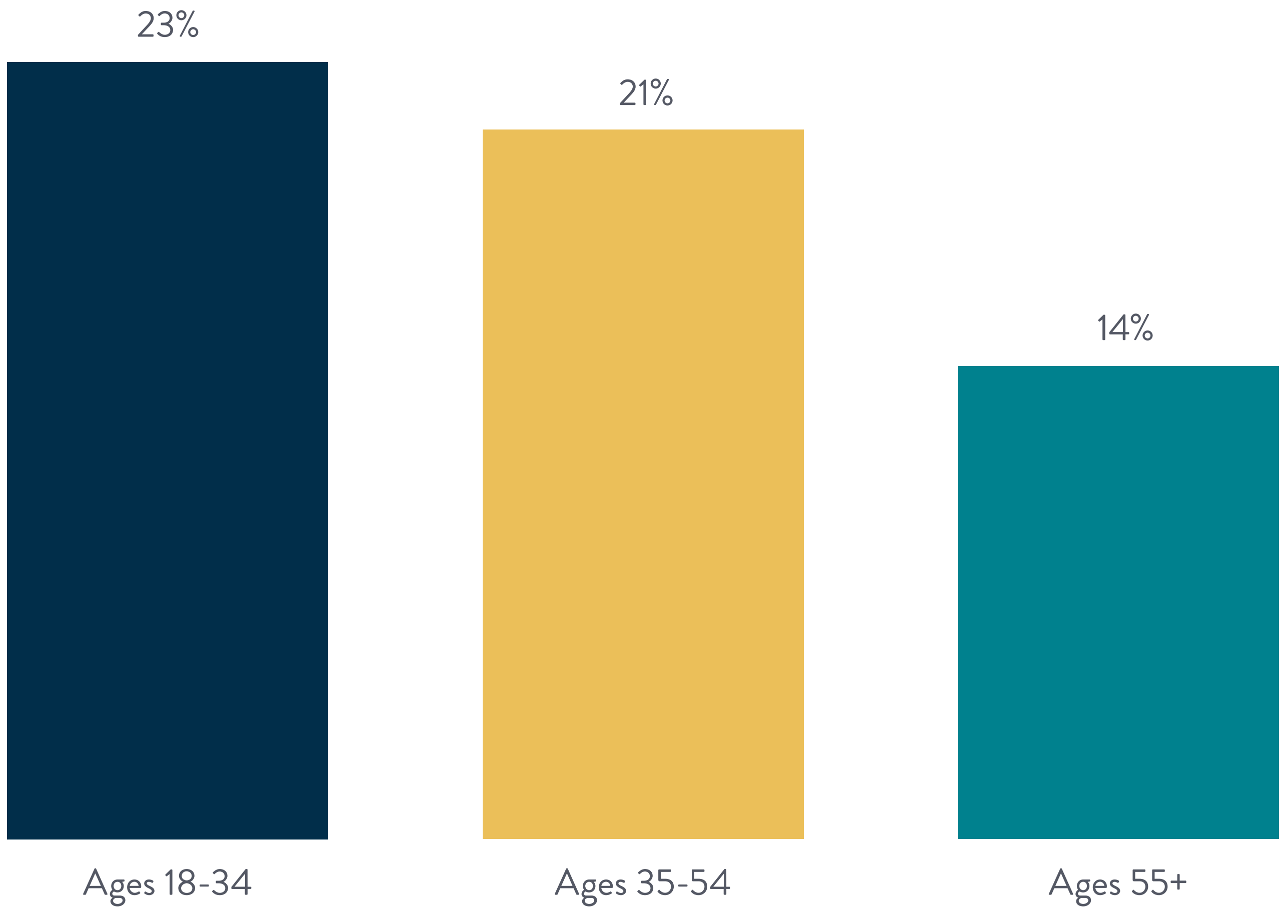
Sum of "strongly agree" + "somewhat agree"; consumer/nonconsumer segment responses noted where group average differs from national average by at least 8 percentage points. Source: New Frontier Data 2020 U.S. CBD Survey

CBD Use & Purchasing

Nearly 1 in 5 (18%) Americans surveyed have tried CBD (19% of women, and 18% of men). Younger groups were more likely to have tried it than older groups.

16% of respondents had ever purchased CBD. About three-quarters (77%) of people who have ever used CBD have purchased it.

EVER CONSUMED CBD
BY AGE



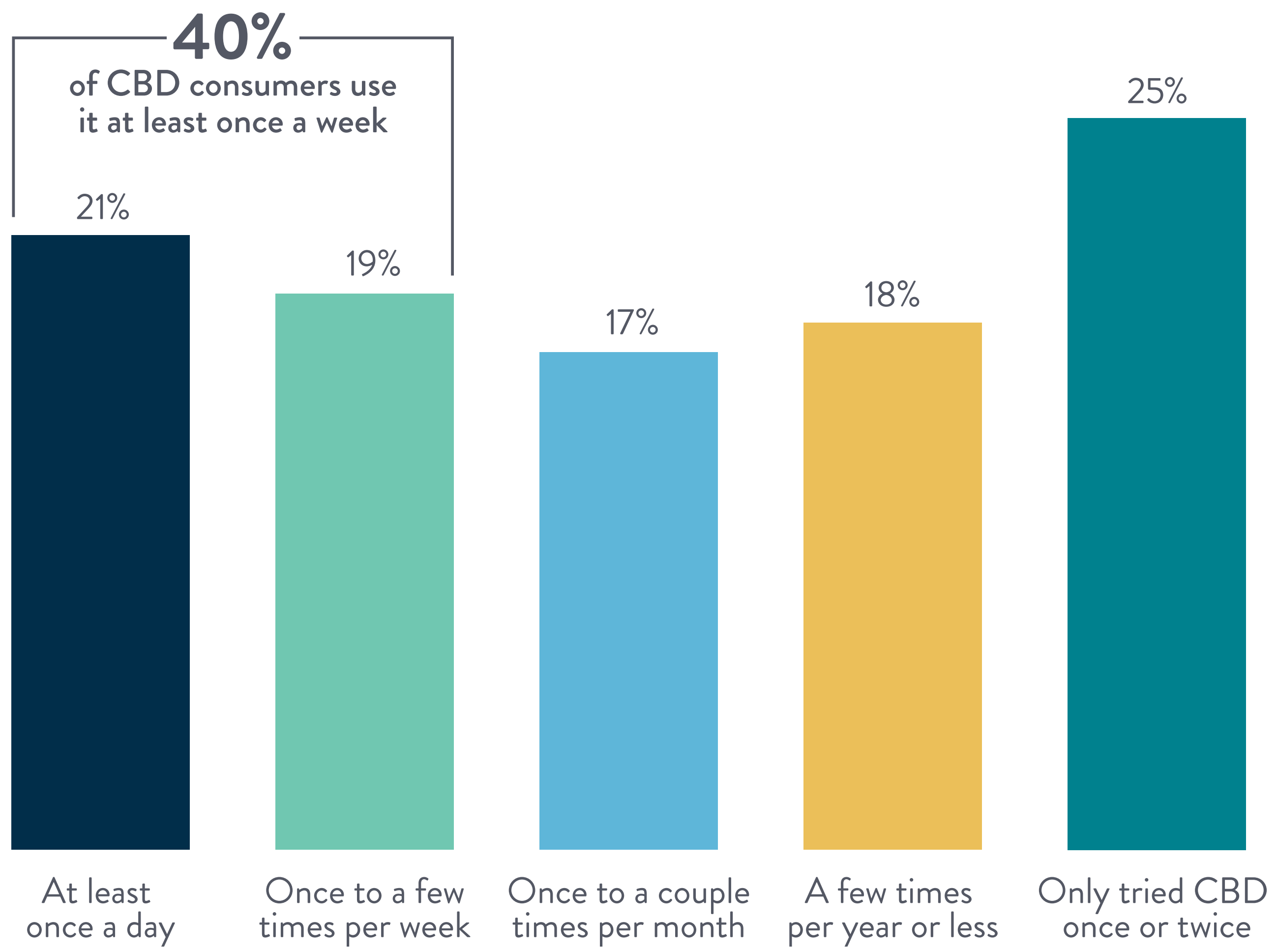
Source: New Frontier Data 2020 U.S. CBD Survey

Use Frequency & Adoption

Two in five (40%) of CBD consumers use CBD at least once a week, and one-quarter (25%) of people who have ever tried CBD only did so once or twice before they stopped consuming it.

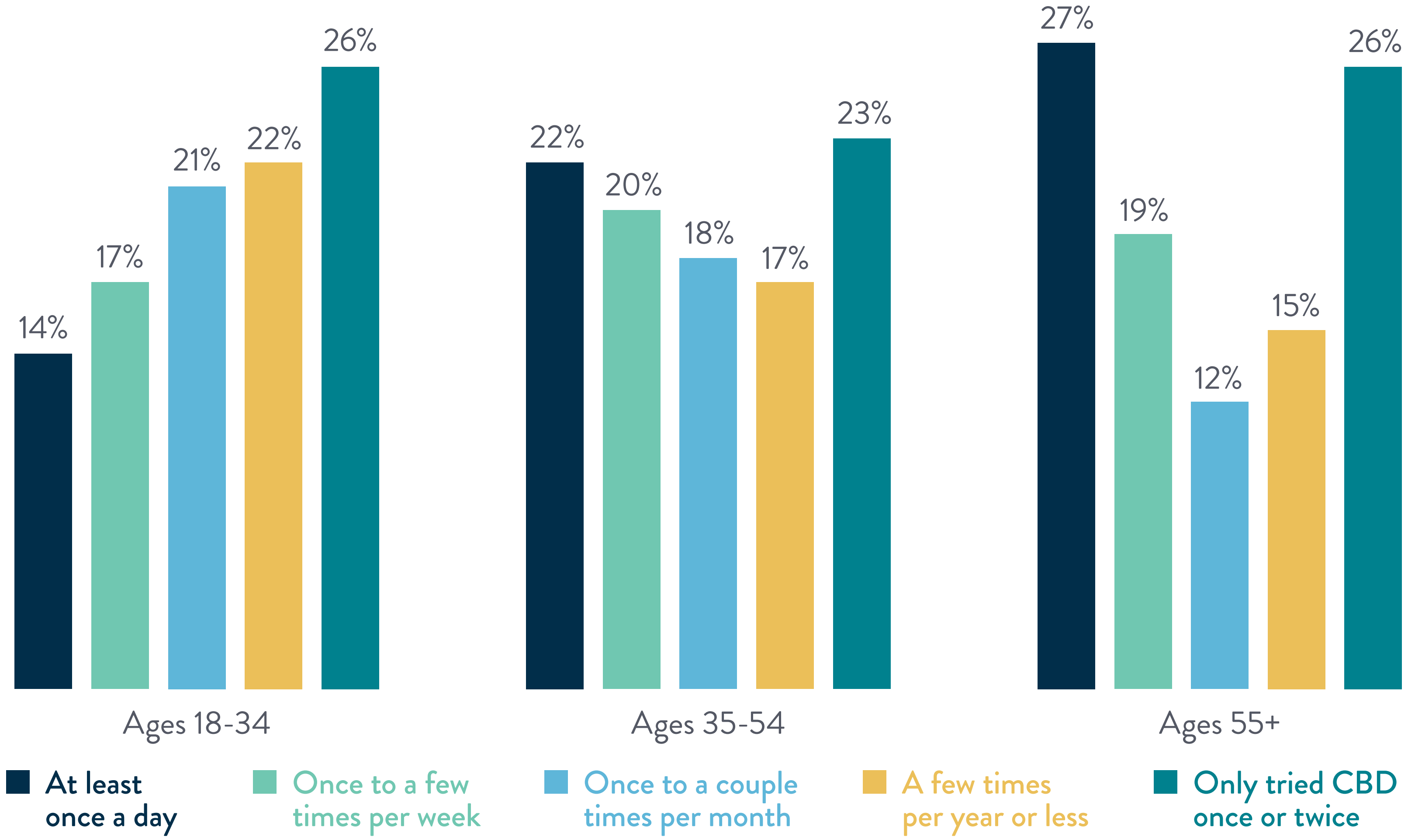
But use patterns vary significantly among different age groups:

CBD USE FREQUENCY



Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

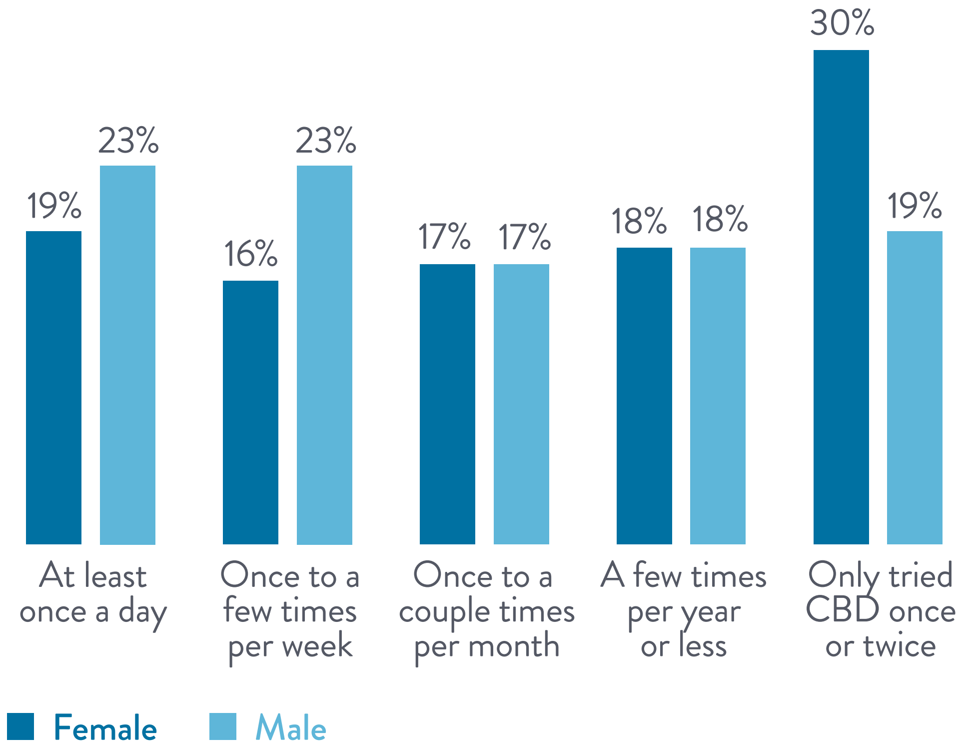
CBD USE FREQUENCY BY AGE



Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Consumers under 35 were less likely than older consumers to consume CBD once or more per week. More than one-quarter (27%) of those 55 and older who have ever tried CBD now consume it daily. All age groups were similarly likely to have tried CBD once or twice and not continued using it.

CBD USE FREQUENCY BY GENDER

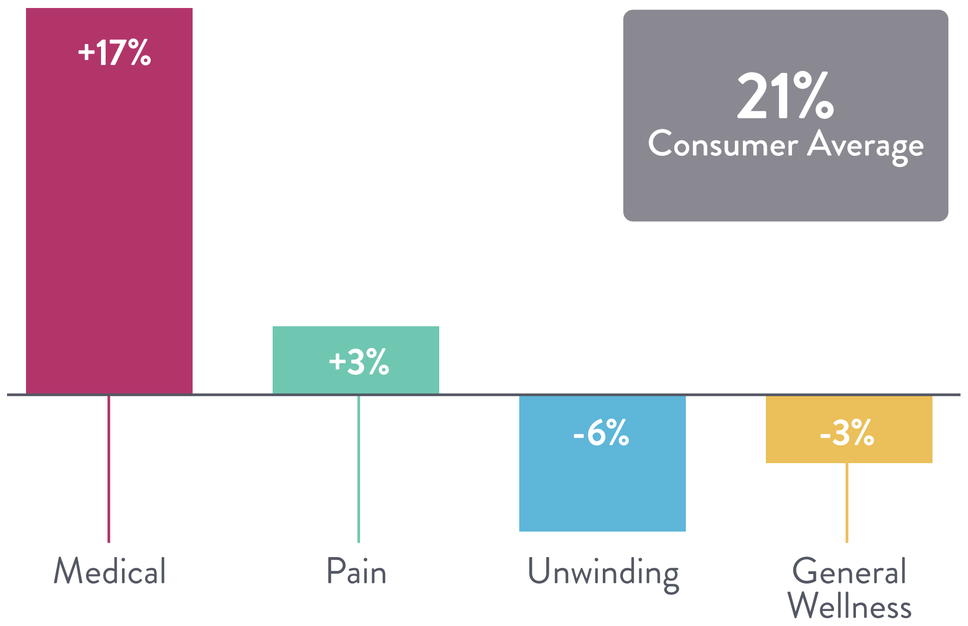


Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Women were more likely than men (30% vs. 19%) to have experimented with CBD once or twice and then discontinued using it. And men were more likely than women to consume at least once per week (46% vs. 36%).

Consumers who use CBD primarily for medical reasons were the most frequent consumers of CBD, with 38% using it at least once a day.

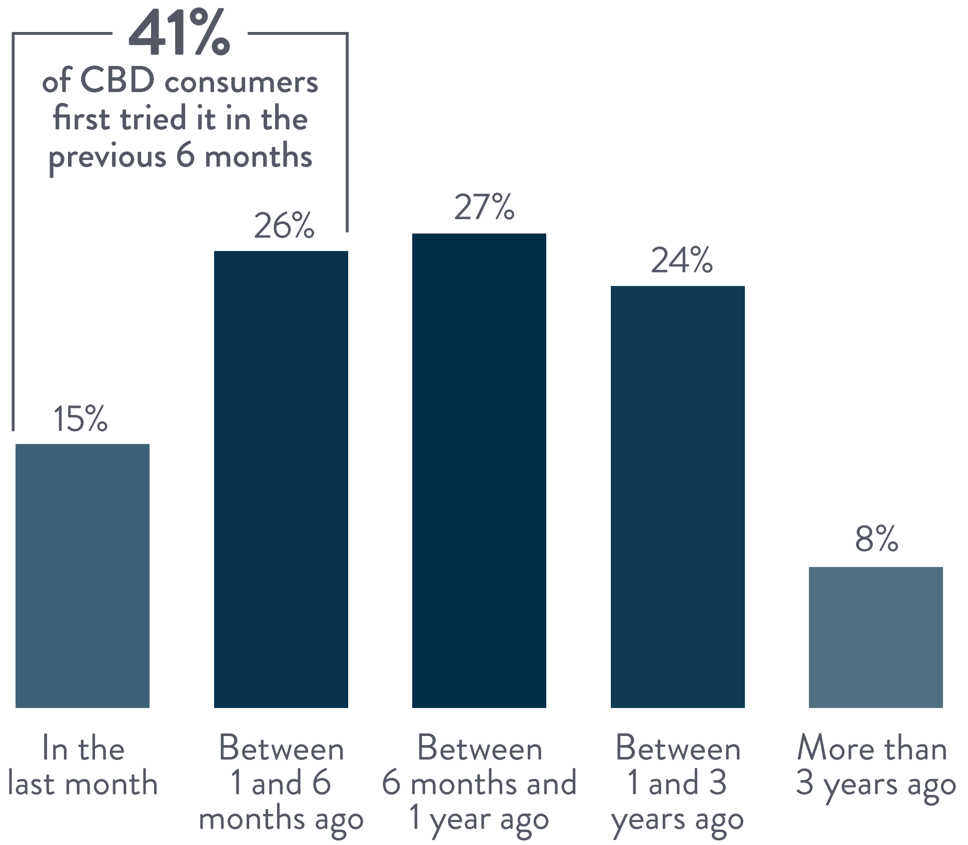
CONSUME CBD AT LEAST ONCE A DAY



Difference from consumer average of 21%.
Source: New Frontier Data 2020 U.S. CBD Survey

Habits remain unsettled, as two thirds (68%) of consumers have been using CBD for less than a year. Consumers who are new to CBD may be expected to experience a period of experimentation in seeking new applications and routines.

WHEN CONSUMERS FIRST USED CBD



Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Forms & Doses

Oil is the dominant form of CBD, but topicals and infused foods are also relatively popular.

Sweet edibles lead the CBD food products by a significant margin. Body moisturizers/salves lead the topical product category, followed by massage oil/personal lubricants.

Forms	Have Ever Used This Form	Favorite Form	First Form Used
Oil/Tincture	63%	38%	42%
Topical/ External Products	36%	19%	18%
Food	31%	15%	14%
Vape Pen	16%	7%	7%
Pills/Capsules	15%	7%	5%
Flower	13%	8%	8%
Drinks	10%	3%	2%

Among those who have ever used CBD; sums total more than 100% when respondents could select more than one option. Source: New Frontier Data 2020 U.S. CBD Survey

Topicals (36%)	Have Ever Used This Form
Body moisturizers, salves, or sprays	23%
Massage oil or lubricants	15%
Facial products	6%
Bath products	4%

Food (31%)	Have Ever Used This Form
Sweet edibles	29%
Savory edibles	5%
Other food ingredients (cooking oil, honey)	3%
Food prepared at a restaurant or café	1%

Younger groups have used a wider variety of forms than older groups; they were particularly more likely to have consumed CBD in vape pens, foods, and drinks.

Similarly, men have used a wider variety of forms than have women, though women were more likely to have used topicals by a significant margin.

Ever Used Form	18-34	35-54	55+	Female	Male
Oil/Tincture	64%	61%	64%	62%	63%
Topicals	35%	38%	35%	43%	27%
Food	40%	31%	23%	32%	29%
Vape Pen	28%	14%	5%	13%	19%
Pills/Capsules	16%	16%	13%	12%	19%
Flower	16%	14%	8%	11%	15%
Drinks	16%	13%	2%	9%	11%

Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

FAVORITE FORMS

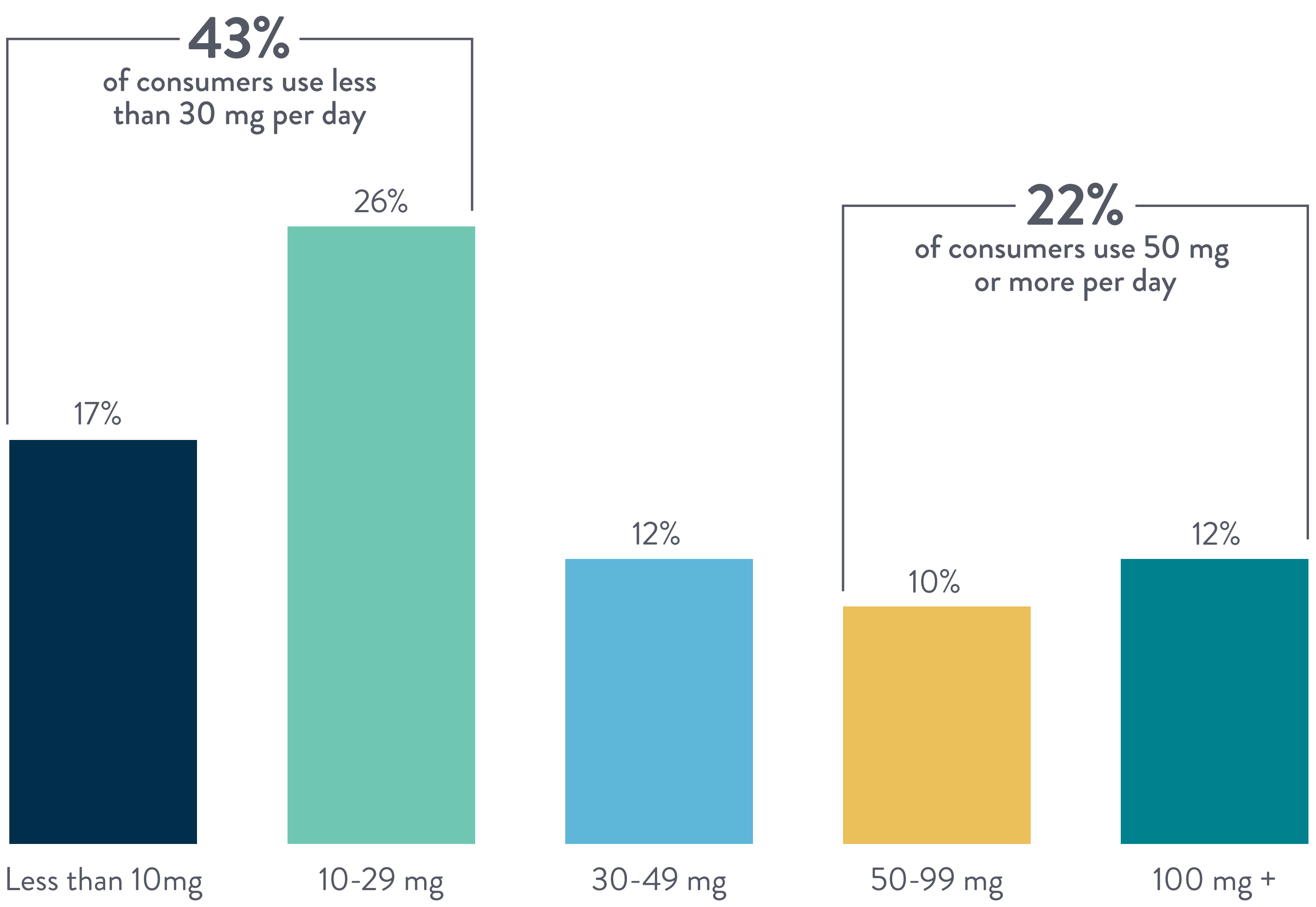
The younger the age group, the wider the variety of favorite forms. Consumers ages 35-54 have favorite forms that align with the average. Men also have a wider variety of favorite forms than do women. The table below outlines differences between demographic groups in favorite forms of CBD compared to the consumer average on the right.

Favorite Form of CBD *(difference from average)*	18-34	35-54	55+	Female	Male	Consumer Average
Oil/Tincture	-9%	+1%	+8%	0%	0%	38%
Topicals	-3%	+1%	+1%	+6%	-7%	19%
Food or Drink	+5%	0%	-5%	0%	0%	18%
Flower	+2%	0%	-2%	-1%	+1%	8%
Pills/Capsules	+2%	-1%	0%	-2%	+2%	7%
Vape Pen	+6%	-2%	-3%	-2%	+3%	7%

Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

DOSE PER DAY

TYPICAL AMOUNT OF CBD USED PER DAY
ON CONSUMING DAYS

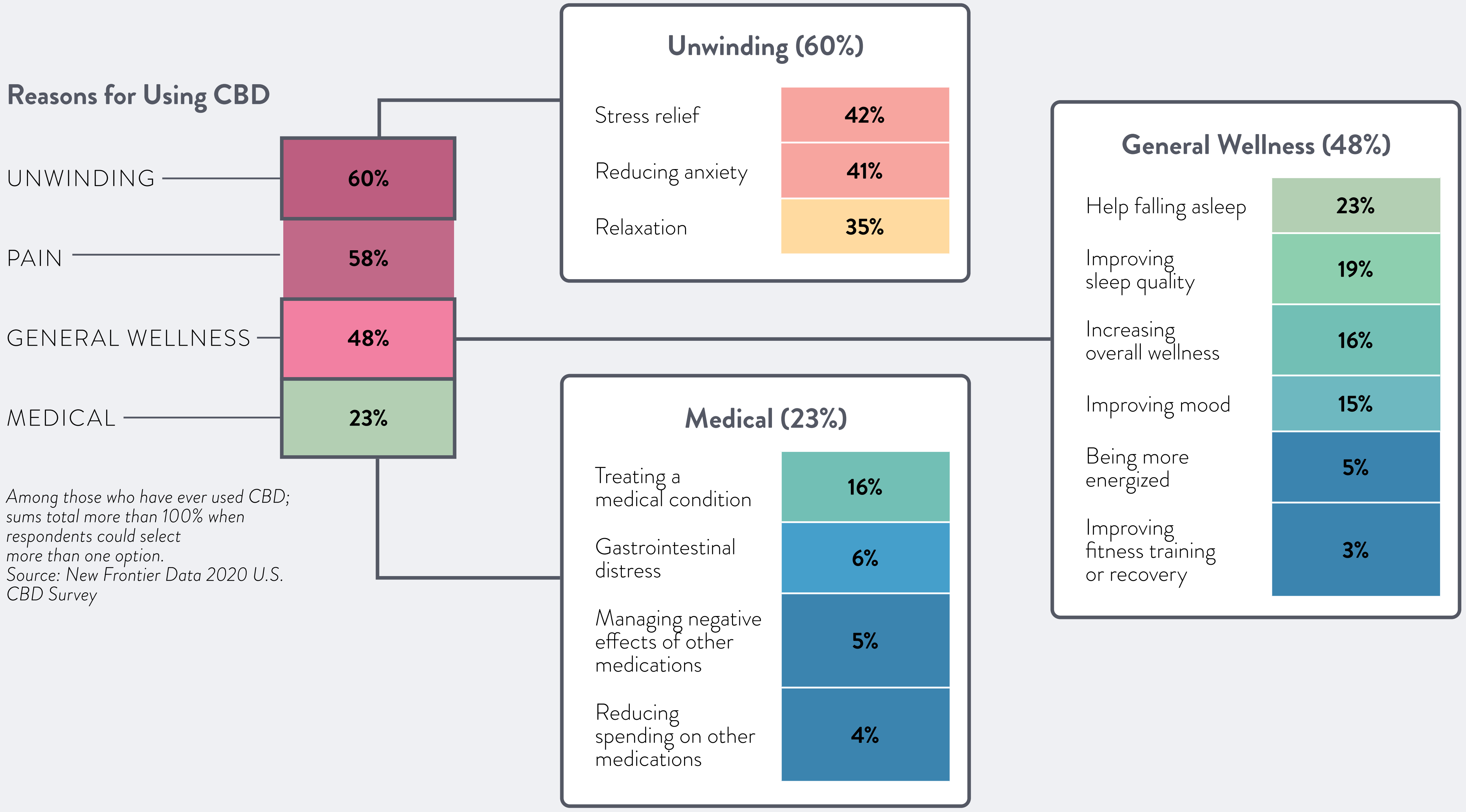


Among consumers who use at least once per month.
Source: New Frontier Data 2020 U.S. CBD Survey

Use Reasons & Goals

Most consumers use CBD for more than one reason. The most common use (60% of consumers) is for some form of unwinding (ranging from relaxation, to relieving stress, or anxiety reduction, with about two in five consumers reporting each). After unwinding, pain management is a close second (58%).

Nearly half (48%) use CBD to promote general wellness, including aiding sleep and boosting mood. About a quarter (23%) of consumers use CBD for a medical reason—either directly treating the condition or something indirect—managing side effects or mitigating costs of other medications.



Among those who have ever used CBD; sums total more than 100% when respondents could select more than one option.
Source: New Frontier Data 2020 U.S. CBD Survey

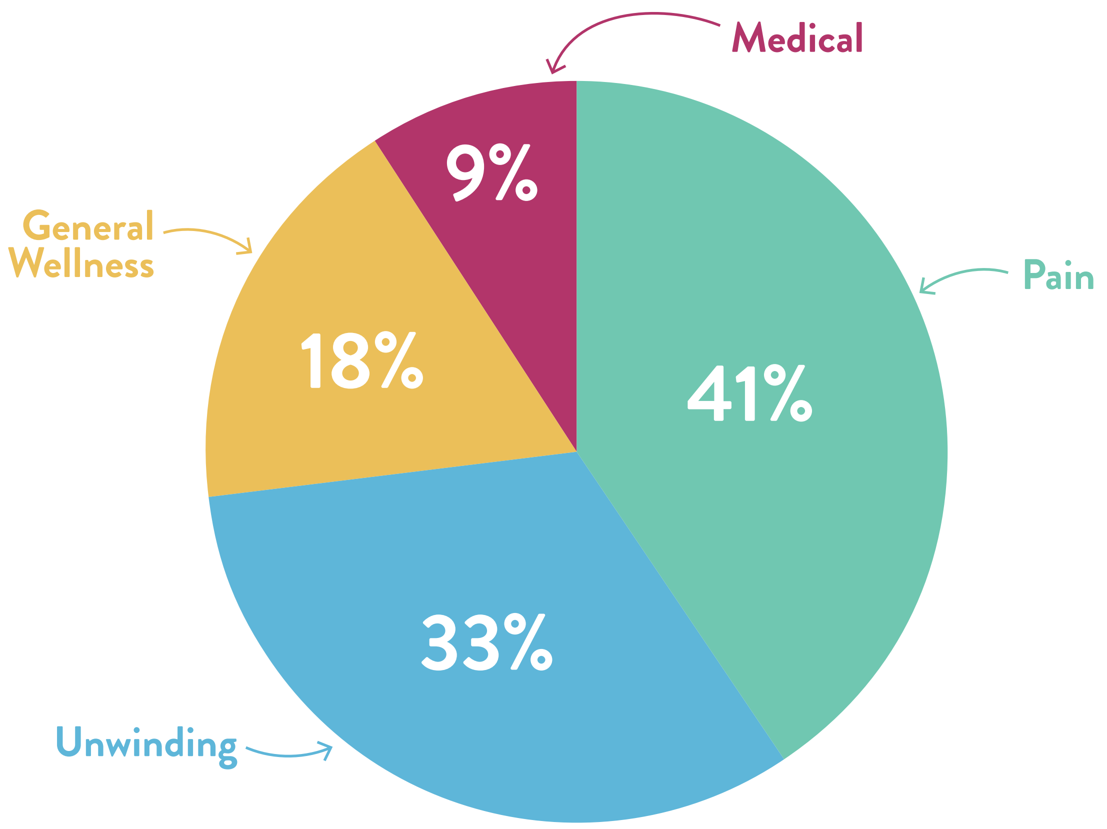
PRIMARY REASON:

While unwinding-related reasons were those which people most commonly cited for CBD use, when asked to identify a primary reason to consume CBD, pain was it, with 41% of CBD consumers naming it as the leading reason for their consumption. Unwinding ranked second, followed by general wellness, then a medical reason.

Of those that did have health-related goals for their CBD use, consumers overwhelmingly used CBD to manage medical conditions and their symptoms, rather than to prevent or cure disease.

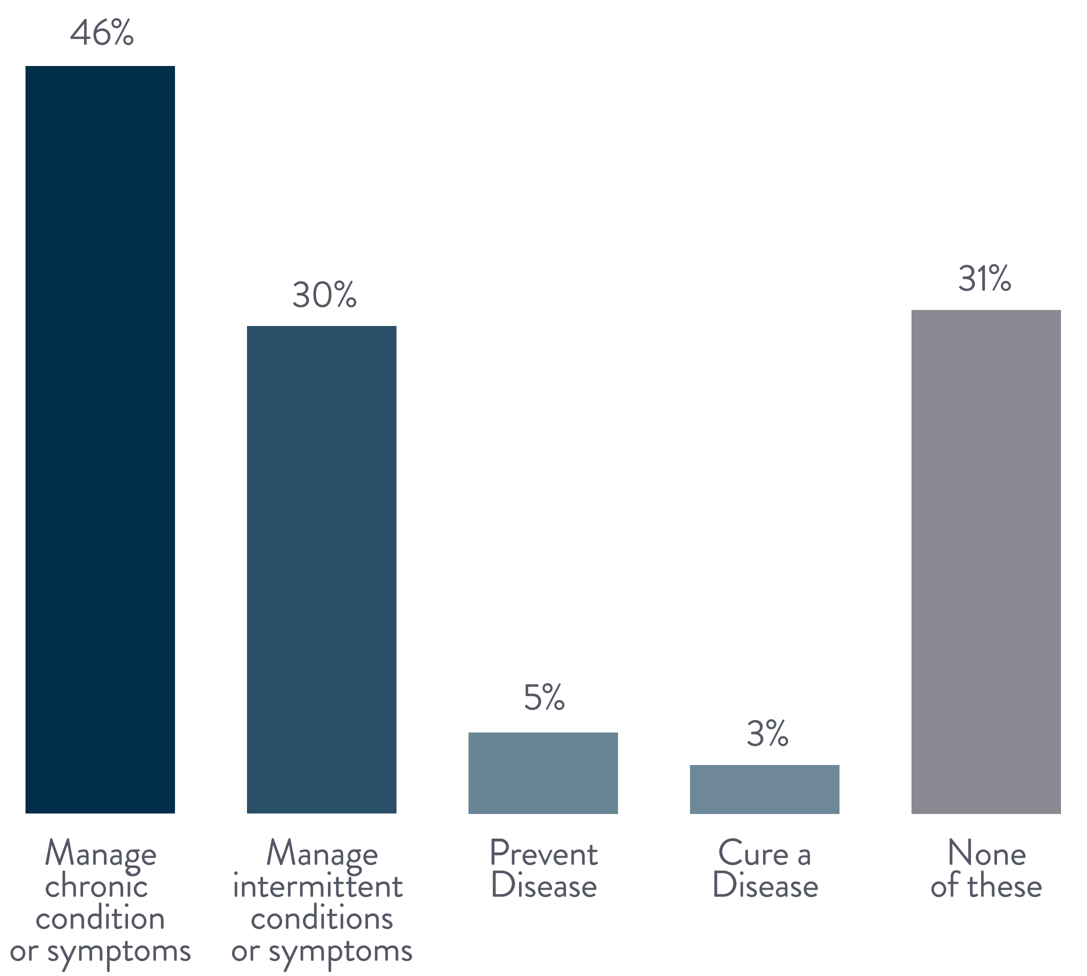
38% of consumers are "very satisfied" with CBD's help in achieving their health goals. An additional 46% are "somewhat satisfied".

PRIMARY REASON FOR USING CBD



Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

HEALTH GOALS OF USING CBD



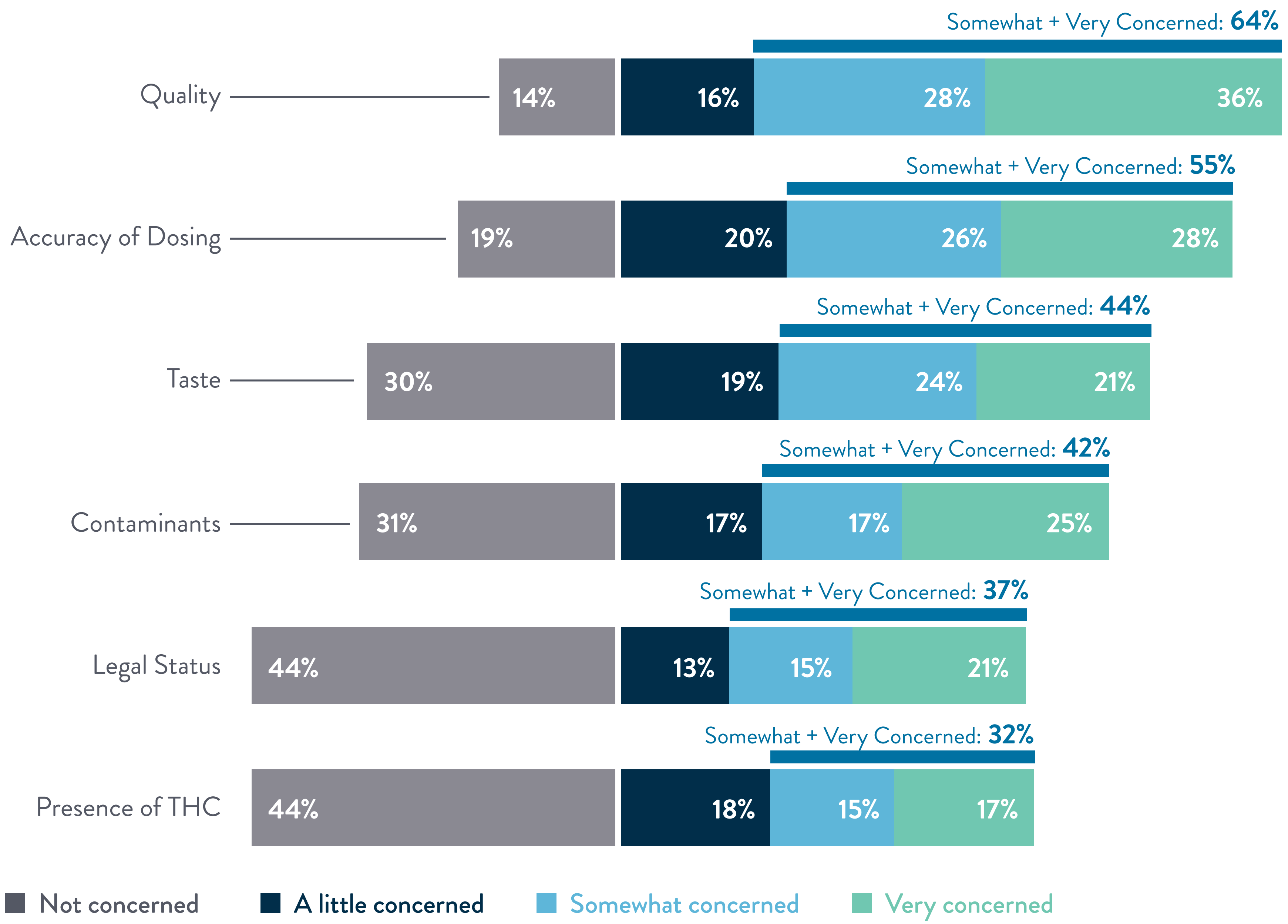
Among those who have ever used CBD; respondents could select more than one goal.
Source: New Frontier Data 2020 U.S. CBD Survey

Concerns About CBD Products

Quality of CBD is the top concern for consumers. At least half of consumers are also somewhat to very concerned about accuracy of dose.

Despite concerns, 65% of CBD consumers say it has positively affected their quality of life. Conversely, 2% report a negative effect.

CONCERNS ABOUT CBD



Among those who have ever used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Sources & Spending

Online sources and personal connections, especially friends, are the most commonly used sources for CBD, with about 4 in 10 consumers having ever sourced from each, and about 3 in 10 naming each as their primary source.

CBD Sources	Ever Sourced From	Primary Source
Personal connection	39%	27%
Online	38%	28%
Smoke shop/Cannabis store	29%	19%
Drugstore/Pharmacy	13%	6%
Grocery store	8%	3%
Beauty shop, spa, salon	6%	2%

Personal Connections (39%)

	Ever Sourced From
Friends	30%
Family	16%

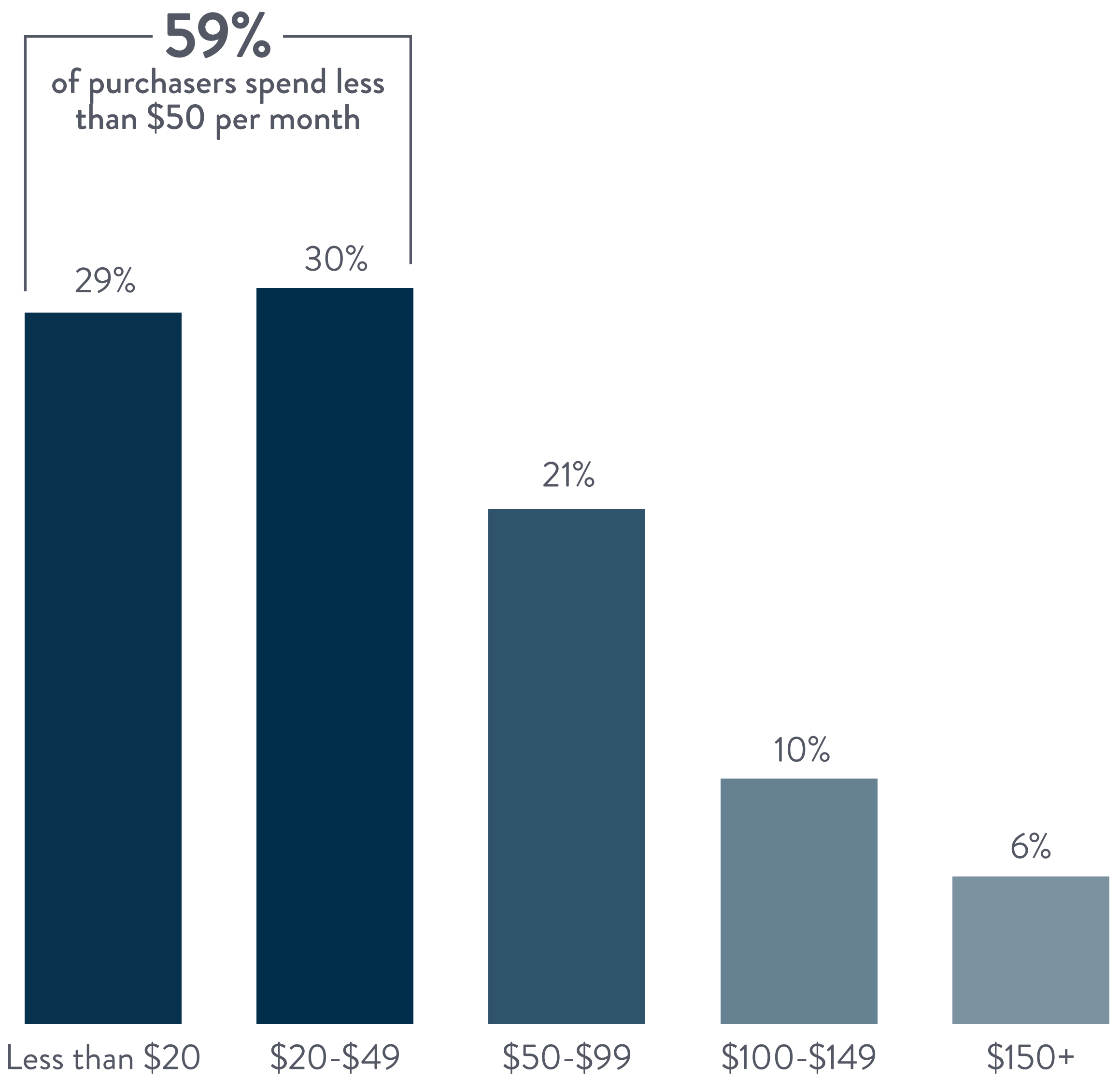
Online Sources (38%)

	Ever Sourced From
Specialty store	25%
Major retailer	17%

Among those who have ever used CBD; sums total more than 100% when respondents could select more than one option. Source: New Frontier Data 2020 U.S. CBD Survey

59% of purchasers spend under $50 per month on CBD.

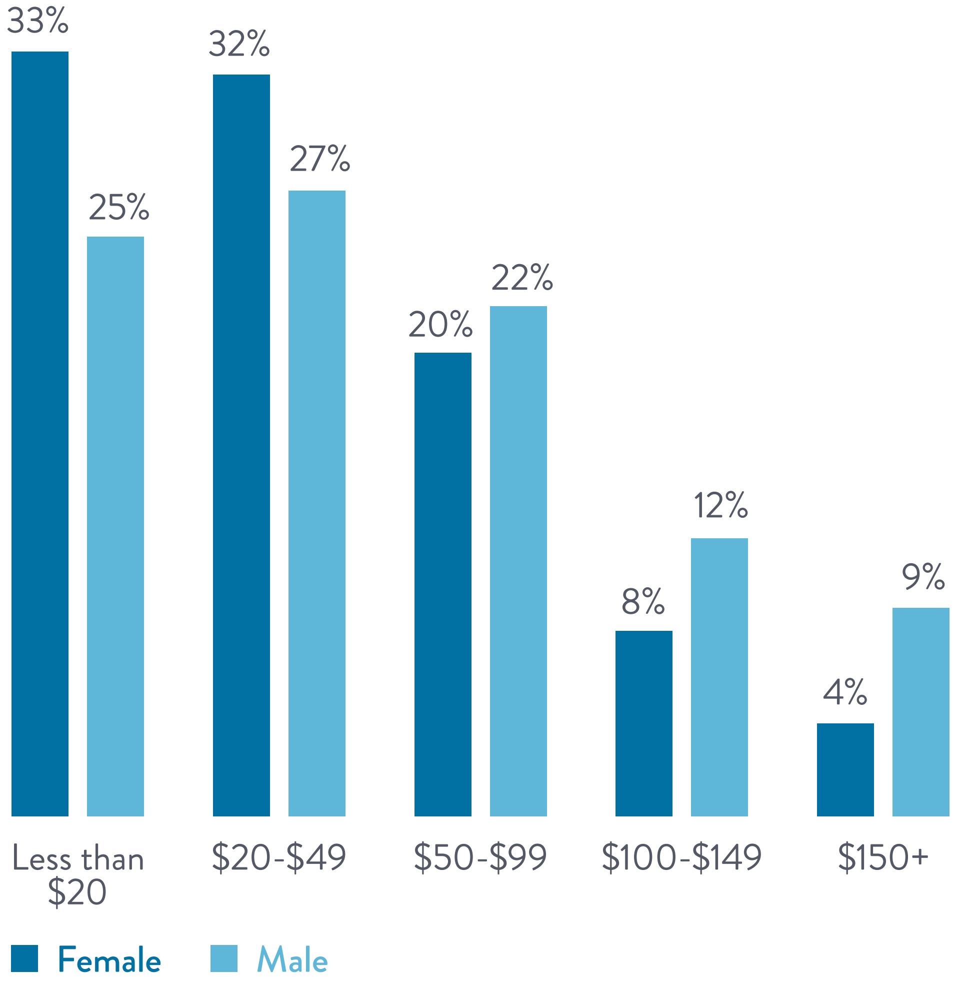
MONTHLY SPENDING ON CBD



Among those who have ever purchased CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Men report spending more on CBD per month than women on average.

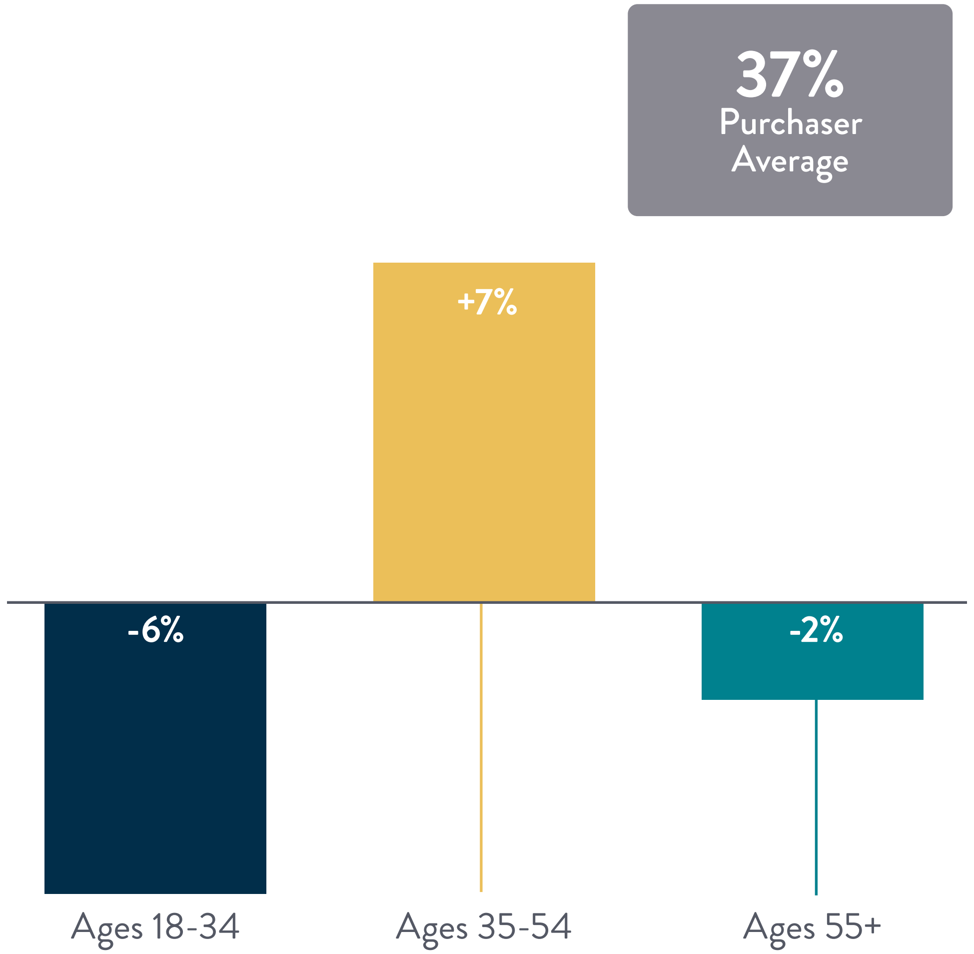
MONTHLY SPENDING BY GENDER



Among those who have ever purchased CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

35-54 year-olds are the highest spending age group. Purchasers 55 and older are the middle spenders, and those under 35 are the lowest spenders.

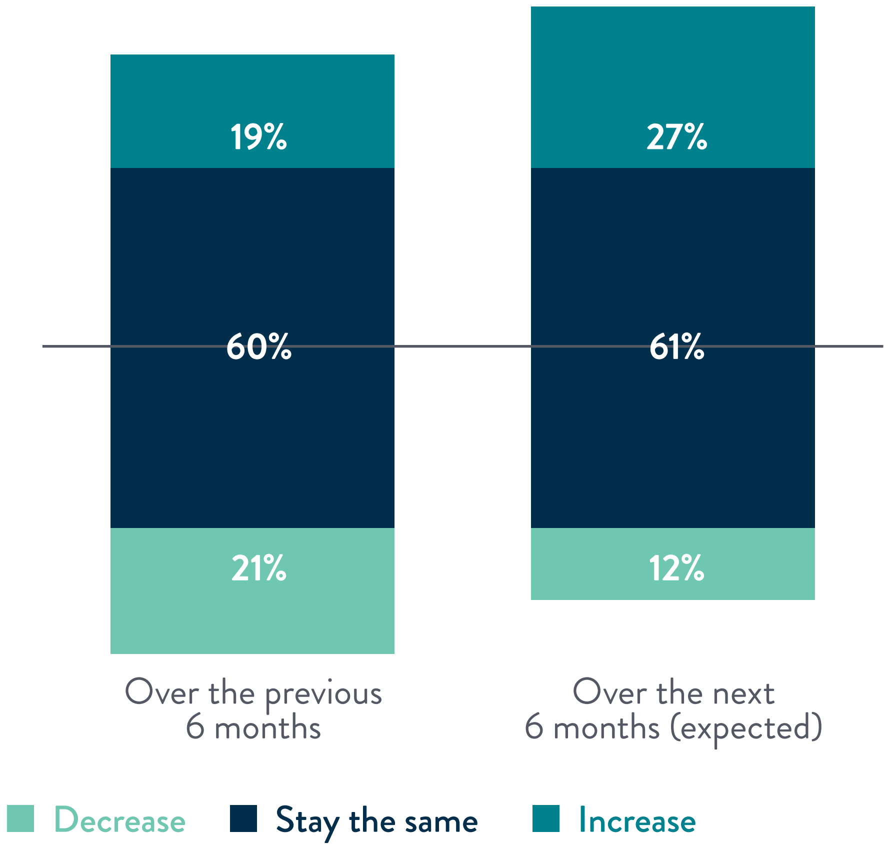
SPEND $50 OR MORE ON CBD PER MONTH
BY AGE GROUP (DIFFERENCE FROM AVERAGE)



Difference from purchaser average of 37%.
Source: New Frontier Data 2020 U.S. CBD Survey

Most CBD purchasers report their spending has stayed stable over the last 6 months, and a similar proportion expect their spending to stay the same in the next 6 months. Just over a quarter expect their CBD spending to increase in the near future.

PAST & FUTURE CHANGES IN CBD SPENDING

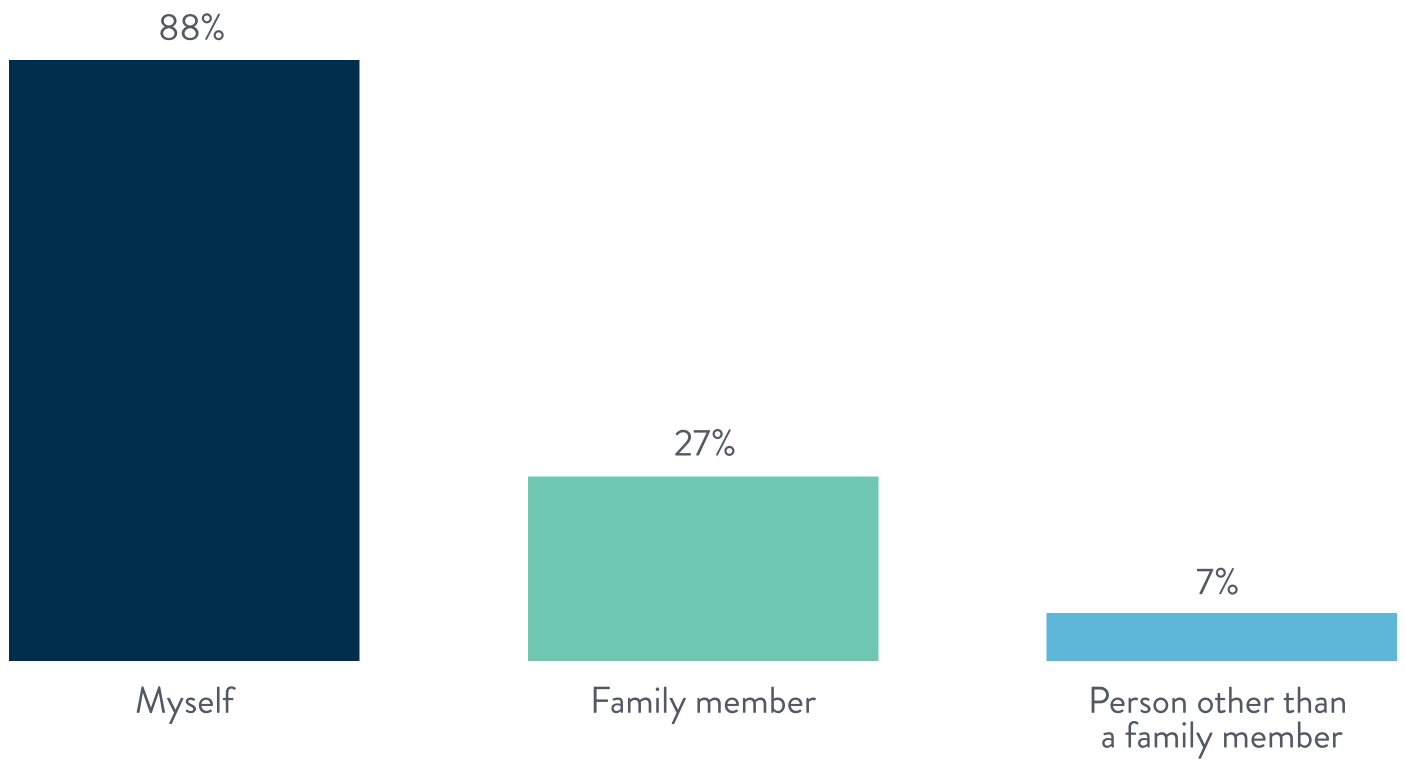


Among those who have ever purchased CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Purchasing Context

Most people who have purchased CBD have done so for themselves, and about one-quarter have purchased for a family member.

WHO HAVE YOU PURCHASED CBD FOR?



Among those who have ever purchased CBD; sums total more than 100% when respondents could select more than one option.
Source: New Frontier Data 2020 U.S. CBD Survey

PURCHASE PLANNING

Impulse Buying: **14% of CBD purchasers** report that the last time they purchased CBD they did not plan to buy it.

About two-thirds **(65%) of CBD purchasers** said they only purchased CBD products in their last CBD transaction.

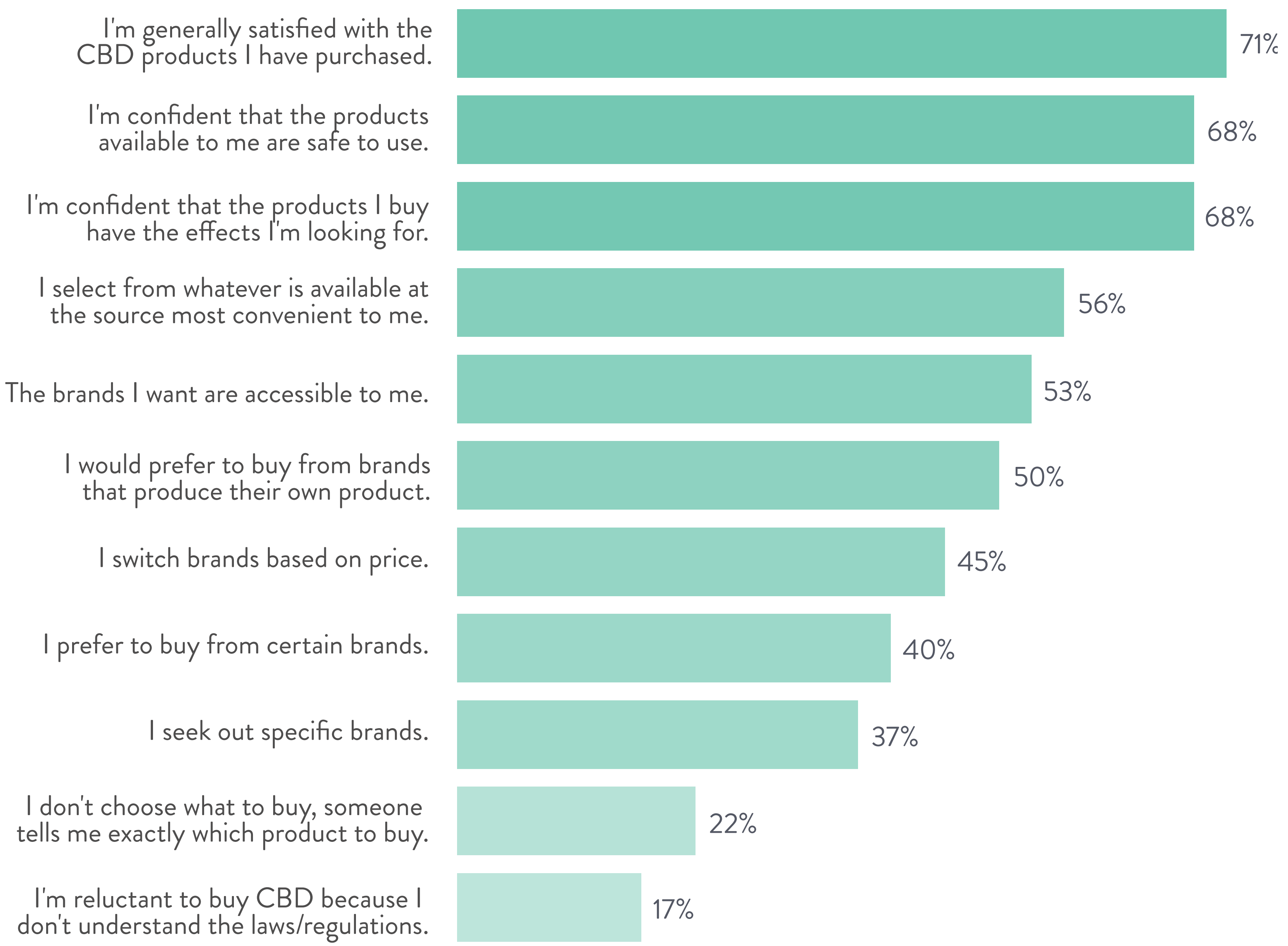
Intent\ Products Purchased	Bought Both CBD & Other Products	Bought Only CBD Products
Intended to buy CBD	14%	61%
Did not intend to buy CBD	11%	3%

Among those who have ever purchased CBD; "don't remember" omitted.
Source: New Frontier Data 2020 U.S. CBD Survey

Purchasing Behaviors

CBD purchasers seem to be generally happy with the products they have access to, with more than 7 in 10 agreeing that they are satisfied with what they have purchased, and that they have confidence in the safety and efficacy of those products.

PURCHASING BEHAVIORS

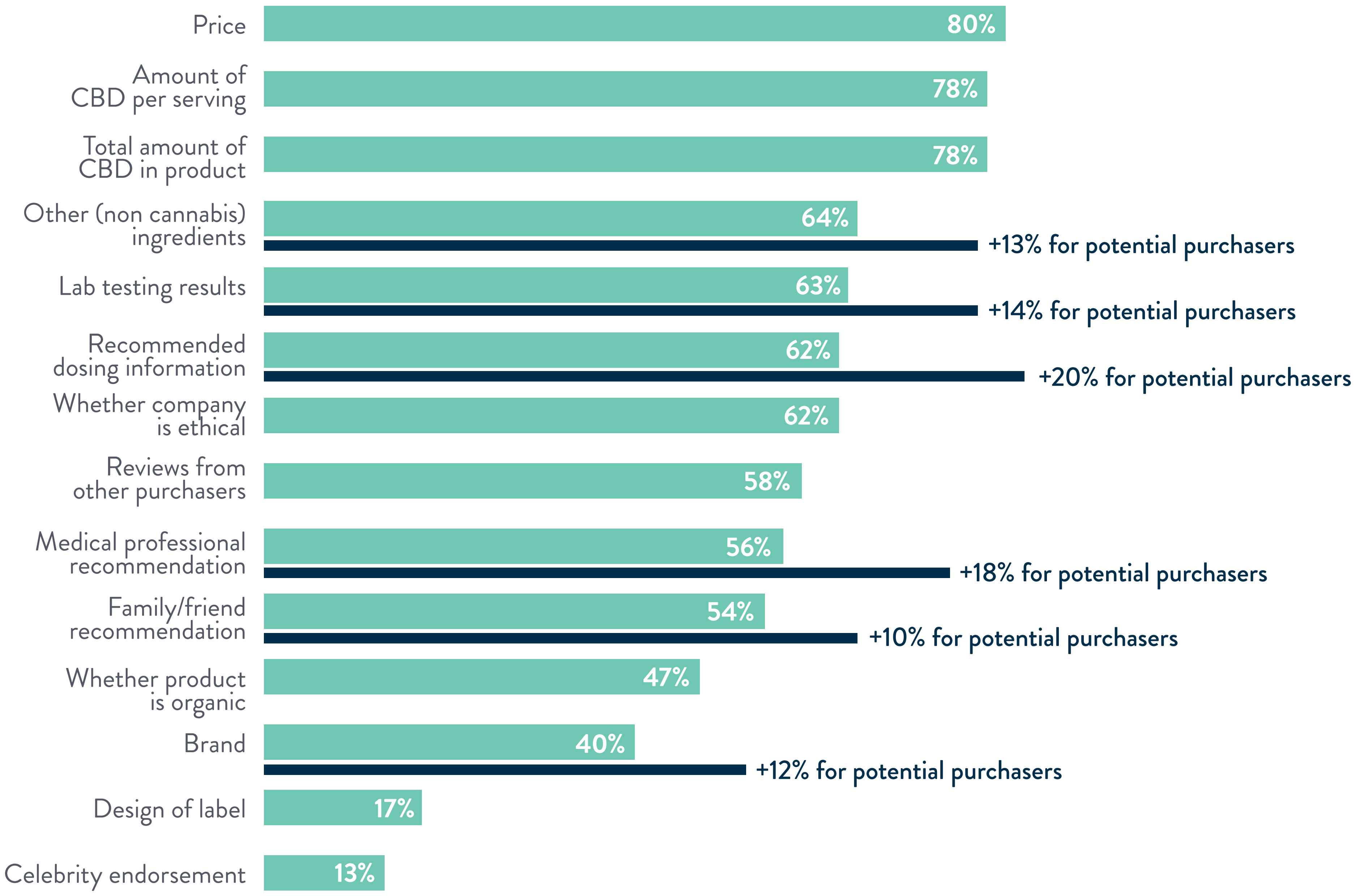


Among those who have ever purchased CBD; sum of "strongly agree" + "somewhat agree".
Source: New Frontier Data 2020 U.S. CBD Survey

When selecting which CBD product to purchase, consumers cited price and quantity as the most important factors.

Potential purchasers (those who have not yet purchased CBD but indicate being likely to do so in the next six months) in particular would be motivated by the inclusion of recommendations on dosing and product recommendations from medical professionals, indicating a need for guidance.

PRODUCT PURCHASE INFLUENCERS

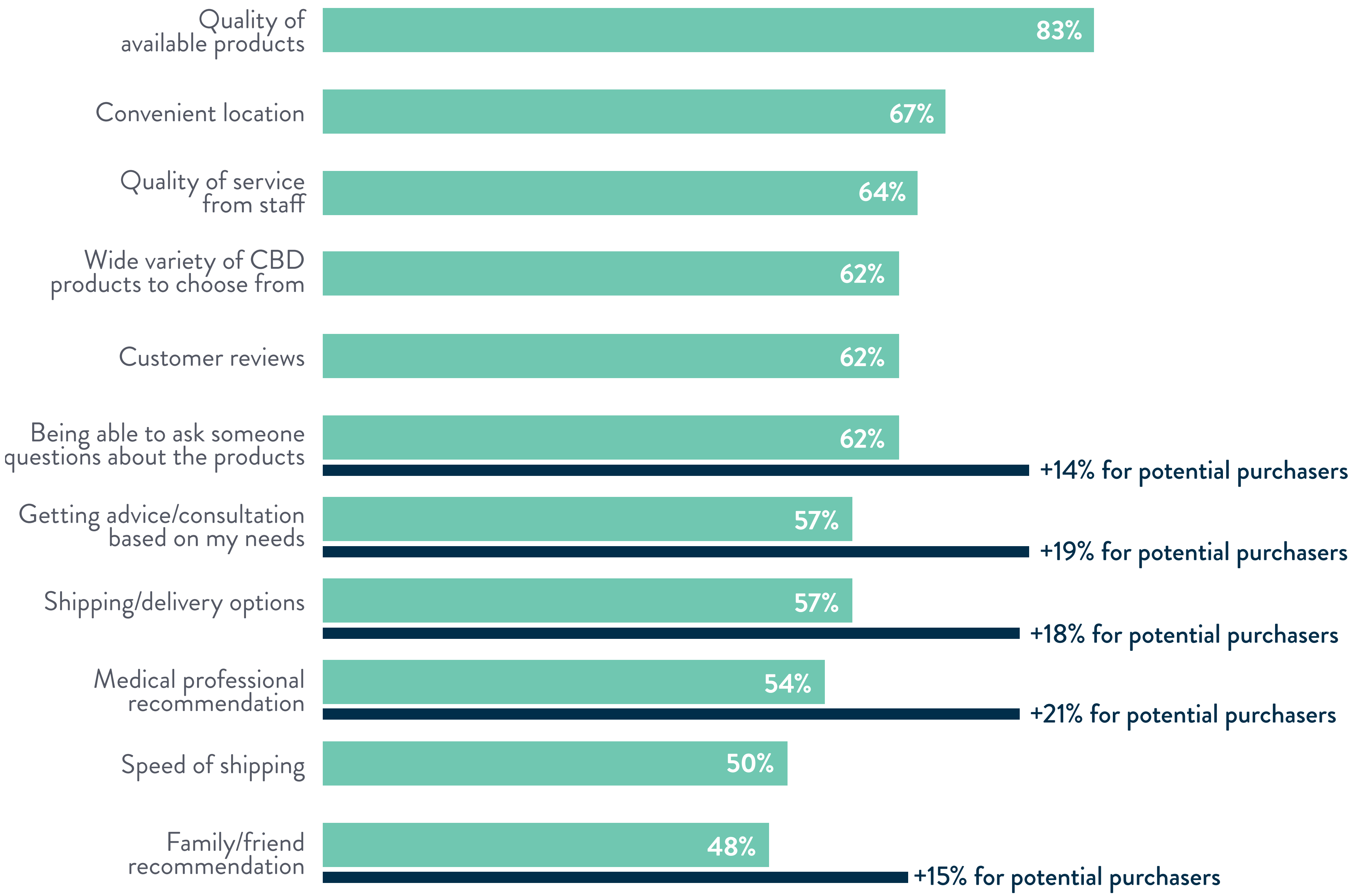


Among those who have ever purchased CBD; sum of "very important" + "important"; "potential purchasers" are those who have not purchased CBD but indicated being likely to do so in the next 6 months; potential purchaser responses are noted where responses differ from actual purchasers by more than 10 percentage points. Source: New Frontier Data 2020 U.S. CBD Survey

When selecting a CBD source, the quality of products available was the most compelling factor by a significant margin.

Again, potential purchasers were much more motivated than current purchasers by factors which provided guidance, such as someone to ask questions of, getting a needs-based consultation, or receiving a recommendation from a health professional.

SOURCE PURCHASE INFLUENCERS

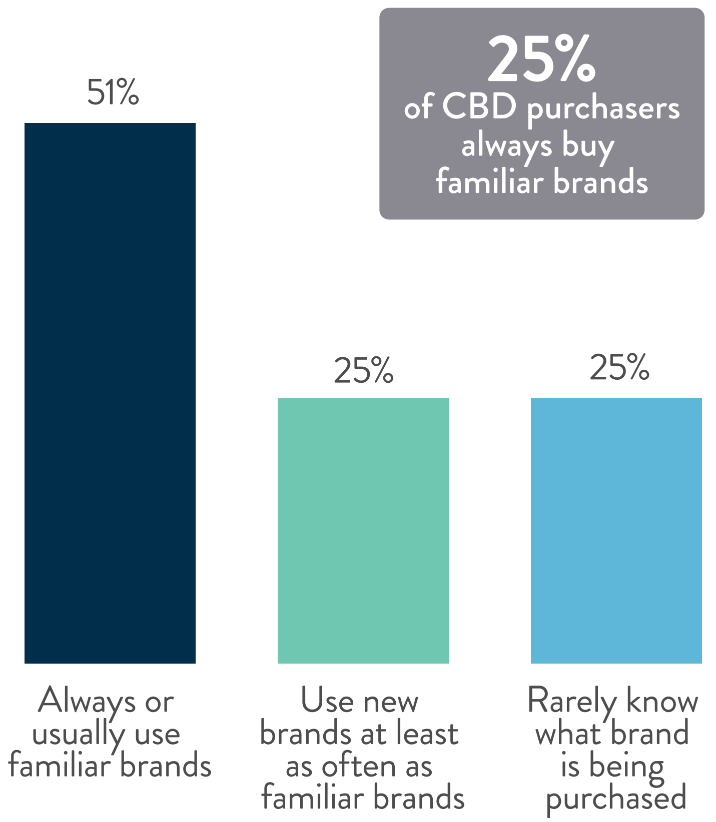


Among those who have ever purchased CBD; sum of "very important" + "important"; "potential purchasers" are those who have not purchased CBD but indicated being likely to do so in the next 6 months; potential purchaser responses are noted where responses differ from actual purchasers by more than 14 percentage points. Source: New Frontier Data 2020 U.S. CBD Survey

Brand Awareness & Preferences

Half of CBD purchasers reportedly tend to purchase familiar brands. The others split between trying new brands and not knowing what brands they are buying.

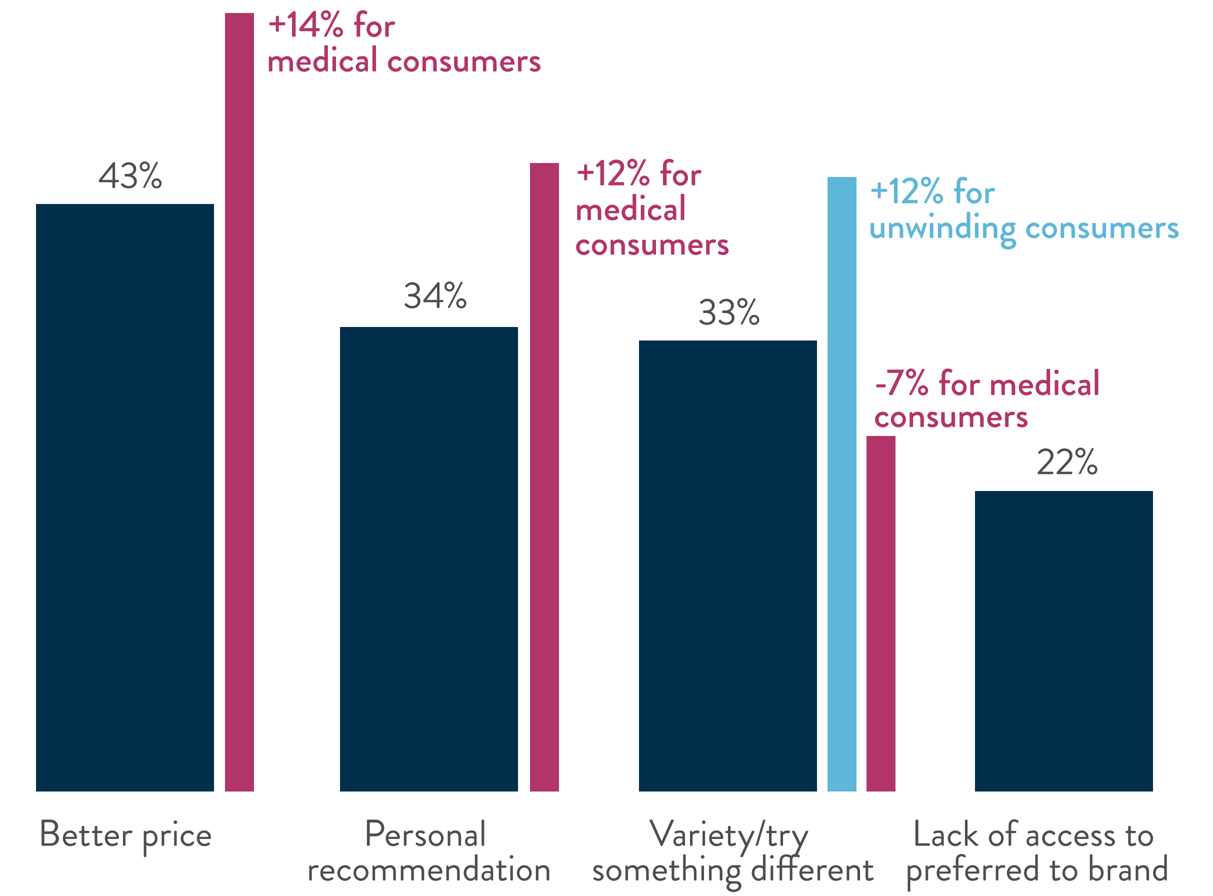
BRAND LOYALTY



Among those who have ever purchased CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

Consumers who use for primarily medical reasons are reportedly the most brand-loyal consumers, with 34% always using the same brands.

MOTIVES FOR SWITCHING BRANDS



Among those who have ever purchased CBD, and who report ever switching brands; callouts reflect deviations from the average for groups of different primary reasons for CBD use and are noted where responses differ by at least 7 percentage points; sums total more than 100% when respondents could select more than one option.
Source: New Frontier Data 2020 U.S. CBD Survey

TOP CBD BRANDS

Brand Recognition

1. Charlotte's Web	**16.3%**
2. Garden of Life	**12.0%**
3. Hemp Fusion	**10.1%**
3. HempWorx	**10.1%**
5. PureKana	**9.0%**
6. American Shaman	**8.5%**
6. HempMeds	**8.5%**
8. CBDistillery	**7.7%**
9. +CBD Oil	**7.2%**
10. HEMPd	**7.0%**

Among those who have ever used CBD.

Brands Purchased

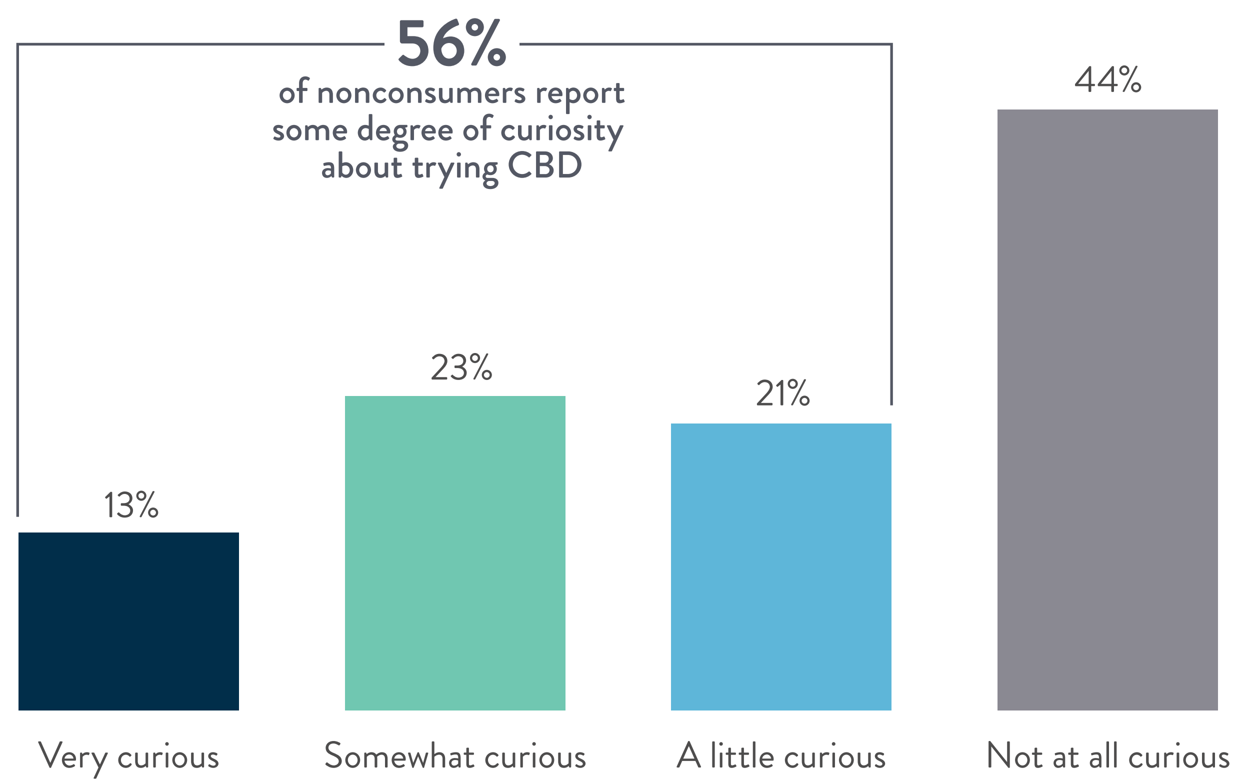
1. Charlotte's Web	**7.3%**
2. Garden of Life	**5.9%**
3. American Shaman	**4.4%**
4. HempMeds	**3.9%**
5. Hemp Fusion	**3.8%**
5. PureKana	**3.8%**
7. Select CBD	**3.5%**
8. HempWorx	**3.3%**
8. +CBD Oil	**3.3%**
10. HEMPd	**3.0%**

Among those who have ever purchased CBD.

Nonconsumers Attitudes & Behaviors

More than half of Americans who had not tried CBD expressed some curiosity about trying it, with 13% indicating being "very curious".

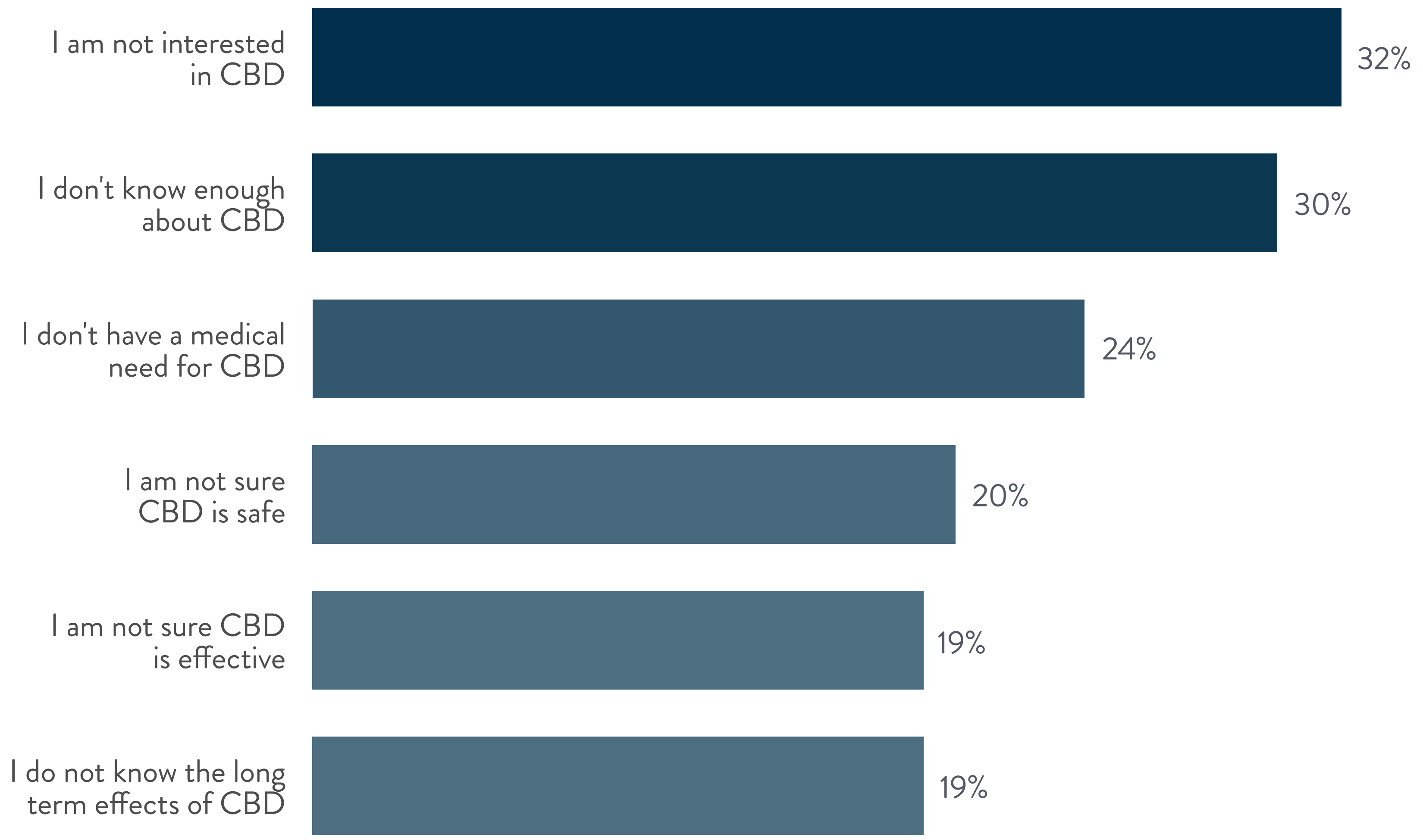
CURIOSITY ABOUT TRYING CBD



Among those who have not used CBD.
Source: New Frontier Data 2020 U.S. CBD Survey

The most commonly cited reason for not trying CBD was a lack of interest, followed closely by a lack of information. While most with a lack of interest seem likely not to soon try it, with consumer education some nonconsumers who have abstained for a lack of knowledge might be reached.

REASONS FOR NOT TRYING CBD

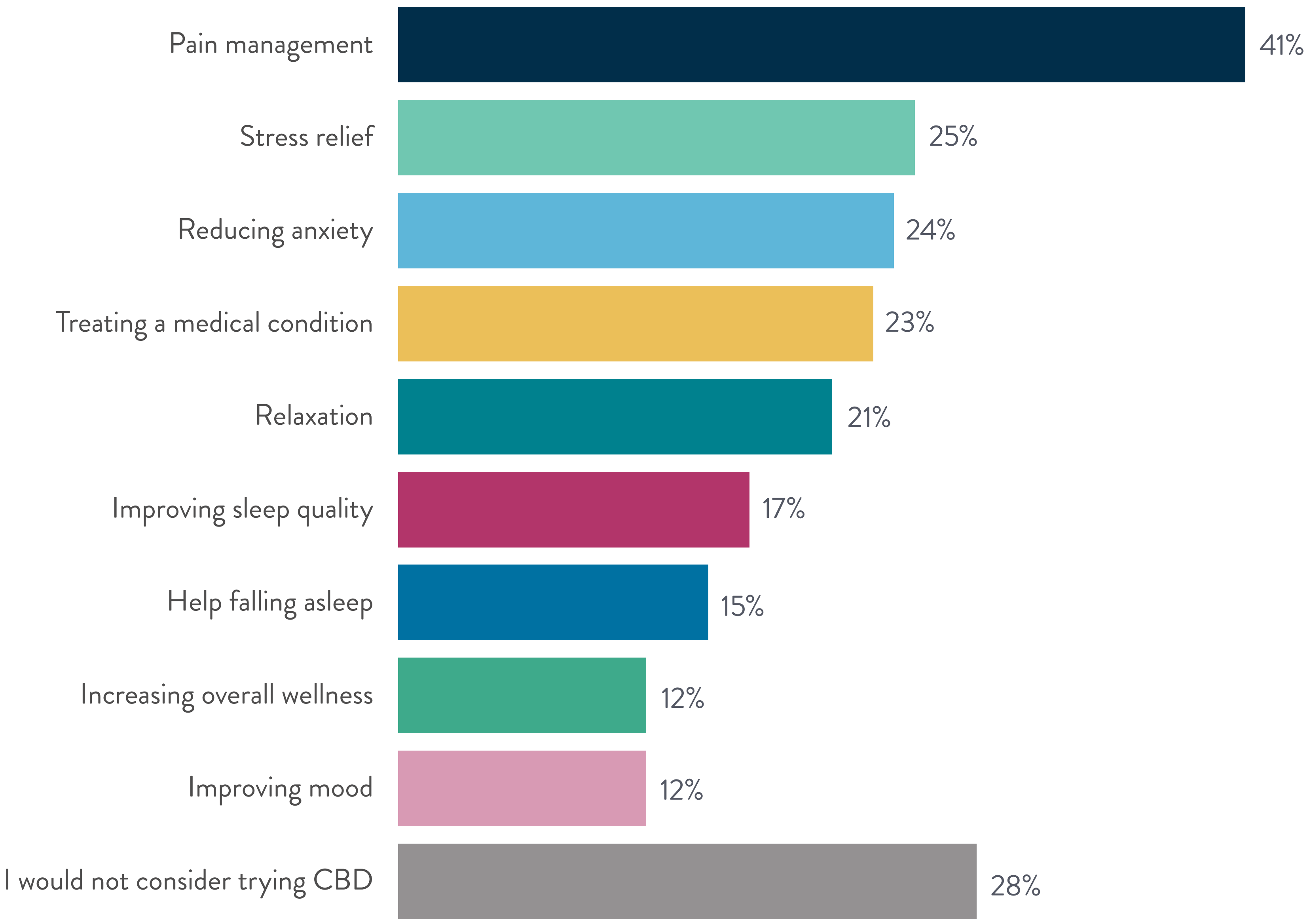


Among those who have not used CBD; sums total more than 100% when respondents could select more than one option.
Source: New Frontier Data 2020 U.S. CBD Survey

As far as reasons to consider trying CBD, the most compelling by far was pain management. More than a quarter of nonconsumers said they would not consider trying it.

About 1 in 5 (22%) among nonconsumers reported being likely to try CBD within the following six months.

REASONS NONCONSUMERS WOULD CONSIDER TRYING CBD



Among those who have not used CBD; sums total more than 100% when respondents could select more than one option.
Source: New Frontier Data 2020 U.S. CBD Survey

Future CBD Consumer Behaviors

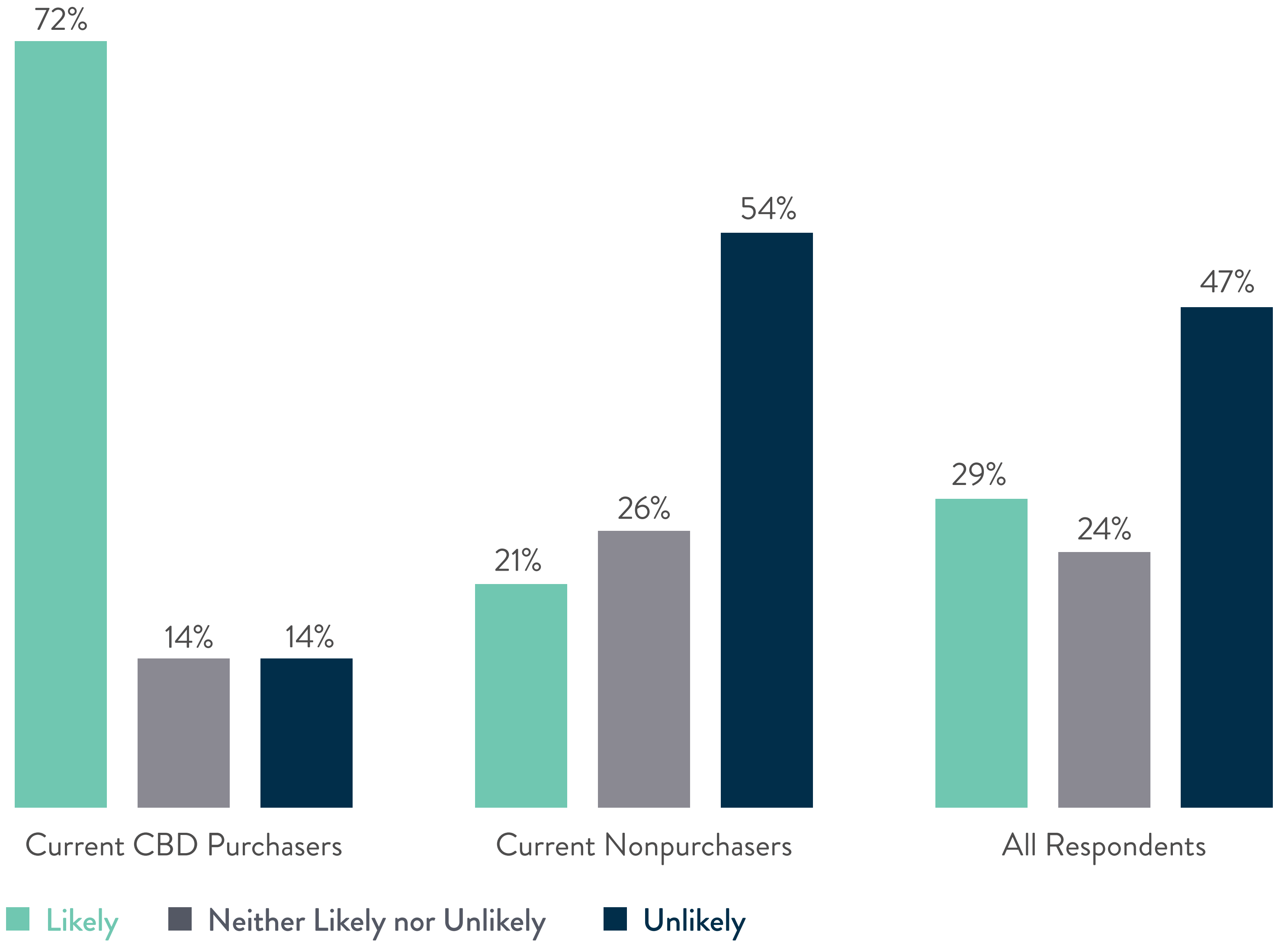
More than a quarter (28%) of current CBD consumers expected the amount of CBD they used to increase over the following six months. 11% expect a decrease.

7 among 10 (72%) of those who purchased CBD in the past reported being likely to purchase it again in the following six months.

More than a fifth (21%) of people who had not already purchased CBD said they were likely to do so in the following six months.

In total, about 3 in 10 (29%) Americans reported being likely to purchase CBD in the following six months.

LIKELIHOOD OF PURCHASING CBD IN THE NEXT 6 MONTHS

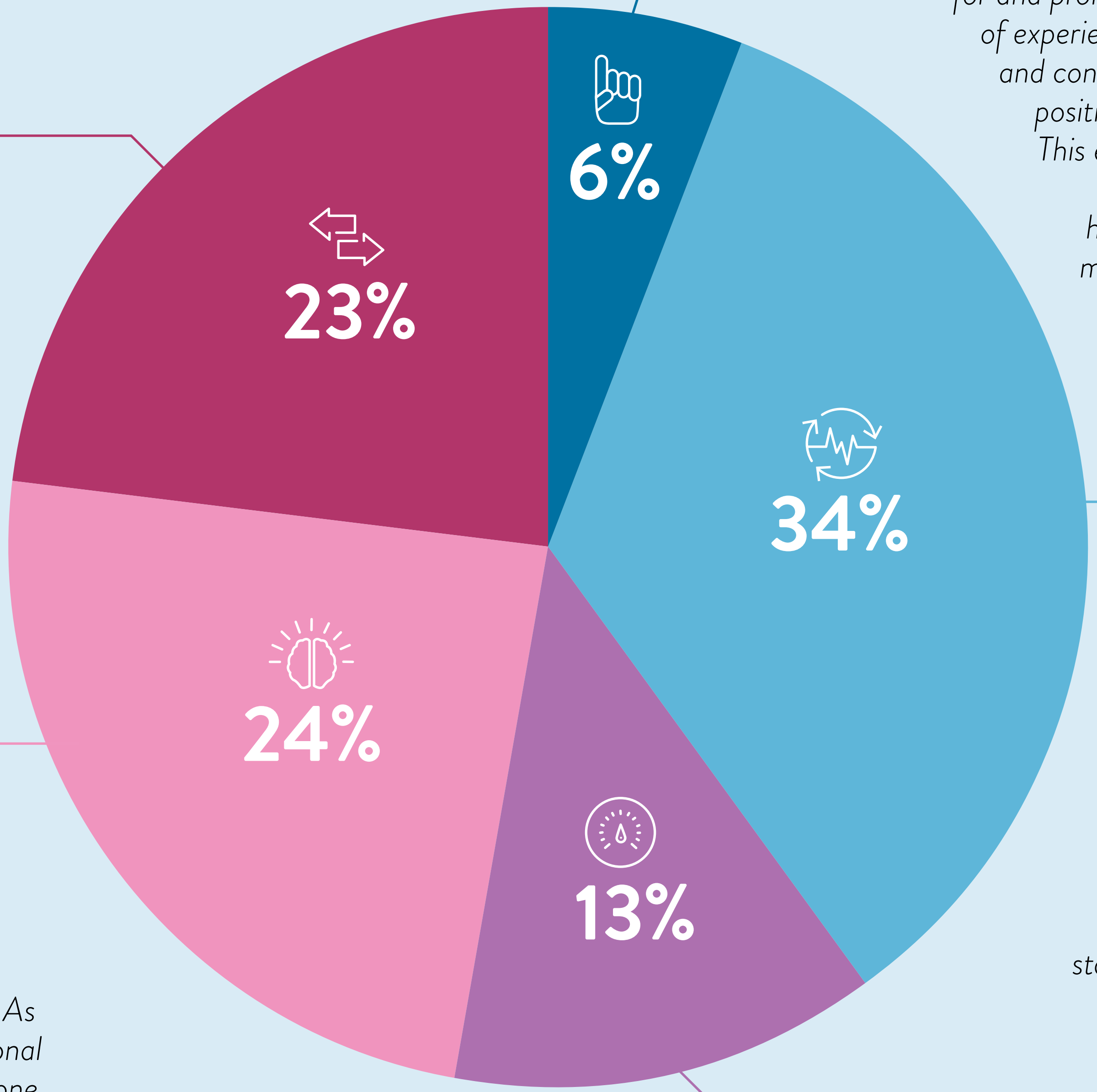


Source: New Frontier Data 2020 U.S. CBD Survey

PART 2: Archetypes

Based on analysis of dozens of behavioral and attitudinal variables, New Frontier Data identified the following nine consumer and nonconsumer archetypes, which identify unique and distinct groups within the adult population.

Consumers



EXUBERANT & INTENSE

Exuberant & Intense consumers are characterized by their extreme enthusiasm for and prolific use of CBD. These consumers have cultivated a broad range of experiences—seeking out and enjoying a variety of CBD product forms and consuming CBD multiple times a day. They have an overwhelmingly positive impression of CBD and are eager to recommend it to others. This enthusiasm is reinforced by their social circle, many of whom are also CBD consumers. Exuberant & Intense consumers are the highest spenders on CBD, with half spending in excess of $100 a month on CBD products. Those in this group are starting to form brand preferences and are more aware than other archetypes of what brands they are purchasing. A majority expect their consumption to increase in the next six months.

INTEGRATIVE & CONSISTENT

Integrative & Consistent consumers are the more moderate, more numerous cousins to the Exuberant & Intense. They have an overwhelmingly positive impression of CBD, support its medical efficacy, and enthusiastically share their positive views with their circles. Despite their relative youth, they tend to be more established consumers—with many having first tried CBD over a year ago. In that time, they have used a variety of forms, preferring infused foods and topicals in addition to the classic oil. Integrative & Consistent consumers have found their rhythm with CBD, spending less than $100 a month and largely expecting their consumption to stay the same over the next six months. Integrative & Consistent consumers primarily use CBD to unwind.

SKEPTICAL & LIMITED

Skeptical & Limited approach CBD with a bit more trepidation. These consumers generally use CBD to manage pain, consuming on a daily-to-weekly basis as pain arises. While they agree that they have personally experienced benefits from CBD and that the cannabinoid has valid medical uses, they are collectively concerned about its safety and therefore support mandated lab testing. Skeptical and Limited are the second highest spenders on CBD, a majority spending less than $100 on CBD per month but with about 1 in 12 typically spending over $150.

RECEPTIVE & RESERVED

Receptive & Reserved are interested in CBD, supportive of its medical applications and accessibility, but are characterized largely by their limited (open) personal connections to other CBD consumers. While most consumers are connected to several other CBD consumers, Receptive & Reserved report only knowing one or two friends or family—if any at all—who use CBD. As such, they are the least likely to source CBD from a personal connection or to have been recommended CBD by someone they know. Without social reinforcement, some Receptive & Reserved consumers only ever used CBD once or twice before discontinuing use, and others report that their consumption has decreased in the last six months. They typically use CBD for pain and unwinding, and most spend less than $50 a month on CBD products.

AMBIVALENT & EXPERIMENTAL

Ambivalent & Experimental have never purchased CBD, sourcing instead from personal connections, and many have only ever used CBD once or twice. Of those who have ever consumed CBD, the Ambivalent & Experimental are among the least likely to express interest in learning more about CBD and have the least positive impression of CBD. As with consumers in general, unwinding and treating pain are their most common motivations for CBD use. This cohort is divided on whether they are likely to purchase CBD in the near future, with about a third each being likely to purchase, unlikely to purchase, and now knowing.

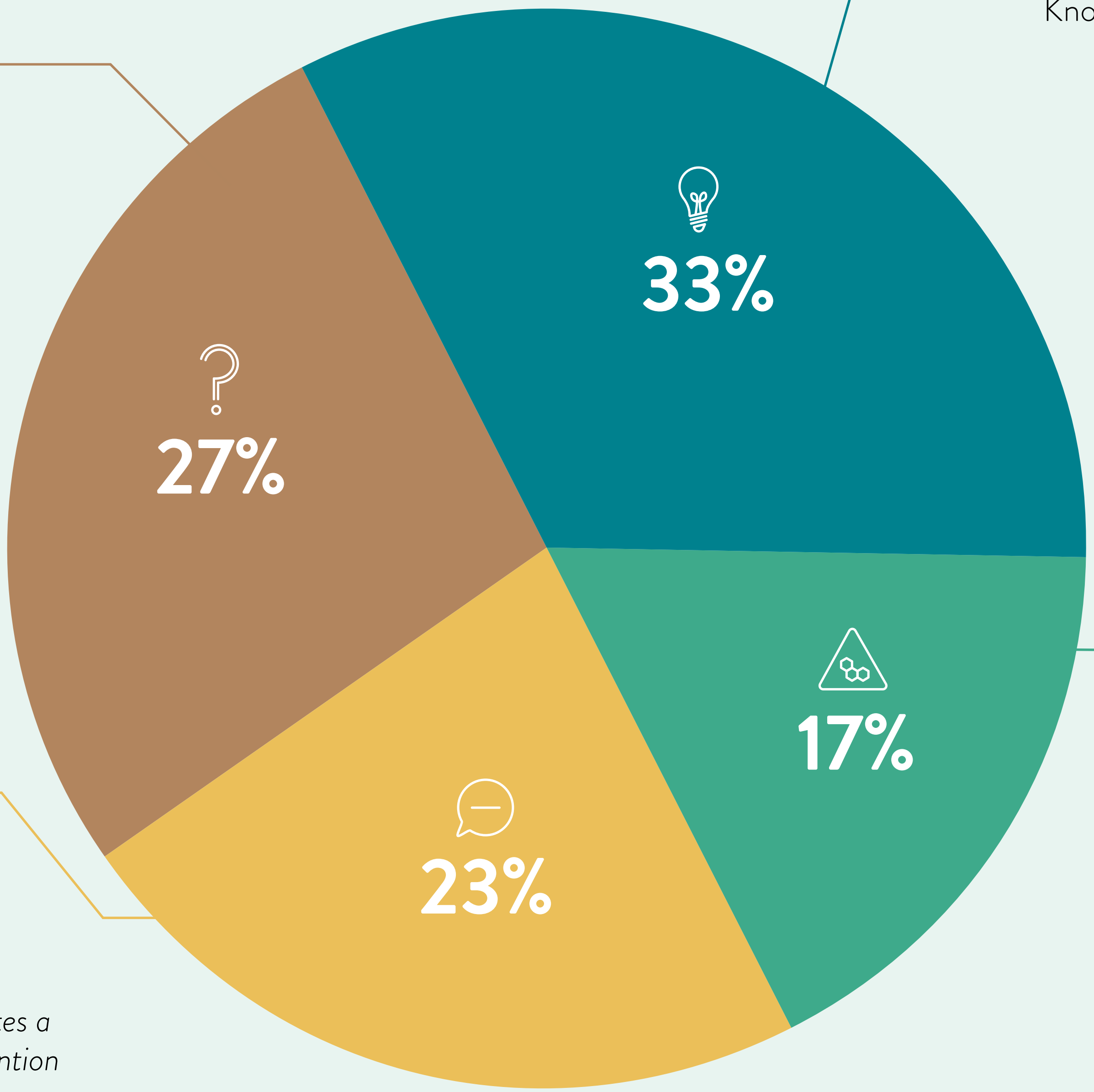
Nonconsumers

UNAWARE & UNINTERESTED

Unaware & Uninterested *are the group least exposed to CBD products and information, which accounts for their stated lack of interest CBD. They universally report not having seen any CBD products available in stores or online, and are least interested in learning more about it. Most indicated that they would not consider trying CBD, and they are, broadly speaking, unlikely to purchase or use CBD products in the current market. However, as the accessibility and diversity of CBD products increases and information about CBD is increasingly available, some of these nonconsumers may eventually consider trying CBD.*

INFORMED & INDIFFERENT

Informed & Indifferent *are nearly as aware of and exposed to CBD as the* Knowledgeable & Primed*, and they are generally informed about CBD's properties and support its health and wellness applications. However, they express little curiosity about trying CBD and have no plans to purchase CBD products. While this segment demonstrates a relatively high degree of awareness about CBD, their abstention from using CBD products and limited interest in learning more about them suggests that this archetype is least likely to be converted from a nonconsumer to a consumer.*



KNOWLEDGEABLE & PRIMED

Knowledgeable & Primed *are the group of current nonconsumers most interested in and likely to try CBD. They have a broad awareness about CBD products, an overwhelmingly positive impression of CBD, and express a strong belief in the benefits and efficacy of CBD. They support broad access to CBD products for consumers. More than half of these nonconsumers say they will purchase a CBD product in the next six months. As such, it is expected that the* Knowledgeable & Primed *are the mostly likely of all nonconsumer archetypes to become CBD consumers in the near future.*

CAUTIOUS & CURIOUS

Cautious & Curious *are broadly curious about trying CBD but have not because they feel they do not know enough about it. This archetype group expresses a general apprehension about the safety, efficacy, and legality of CBD. Specifically, these individuals are by far the most to say they abstain from CBD because they are not sure if it is safe. However, many of these nonconsumers also want to learn more about CBD and, based upon their general openness, some of these individuals may become comfortable enough to try it if their concerns are addressed.*

CONSUMERS:
CBD Information Sharing & Beliefs

	EXUBERANT & INTENSE	INTEGRATIVE & CONSISTENT	SKEPTICAL & LIMITED	RECEPTIVE & RESERVED	AMBIVALENT & EXPERIMENTAL	AVERAGE CONSUMER
Information Sharing						
Know "at least a few" friends and family who consume CBD	88%	99%	81%	0%	60%	63%
Have had a conversation about CBD	95%	98%	98%	91%	96%	96%
Conversation about CBD was mostly positive**	100%	93%	93%	75%	84%	87%
Have been recommended CBD	86%	93%	93%	70%	82%	84%
Have recommended CBD to someone	90%	70%	64%	44%	32%	56%
Interested in learning more about CBD	95%	93%	88%	73%	74%	83%
Beliefs						
CBD has valid medical uses	90%	88%	82%	82%	76%	83%
CBD should be freely available without a doctor's recommendation	93%	88%	82%	76%	70%	80%
CBD can improve general health and wellness	98%	86%	68%	67%	67%	75%
Have overall positive feelings about CBD	98%	94%	83%	76%	74%	84%

***Among those who have had a conversation about CBD. Source: New Frontier Data 2020 U.S. CBD Survey*

While they do not know many other CBD consumers, 60% of Receptive & Reserved say they know "one or two" friends or family who use CBD. The rest are not aware of any of their connections using CBD, making them the least CBD-social consumer archetype.

More than 9 in 10 of each archetype (and 96% of consumers overall) have had a conversation with someone about CBD, and the majority of those conversations expressed mostly positive views. This word of mouth is a major driver of CBD's popularity.

Ambivalent & Experimental consumers are more than 2.5x as likely to have been recommended CBD than they are to have recommended it to someone else.

Consumers Agree: Regulated CBD is safer than unregulated CBD.

CONSUMERS:
Frequency, Reasons & Outcomes of CBD Use

	EXUBERANT & INTENSE	INTEGRATIVE & CONSISTENT	SKEPTICAL & LIMITED	RECEPTIVE & RESERVED	AMBIVALENT & EXPERIMENTAL	AVERAGE CONSUMER
Frequency & Recency of Use						
Typically use CBD at least once a day	86%	16%	40%	13%	12%	21%
Have only ever used CBD once or twice	0%	12%	9%	33%	51%	25%
First used CBD more than a year ago	38%	39%	24%	28%	26%	31%
Last used CBD in the last week	83%	33%	49%	31%	14%	33%
Primary Reason for Use						
Medical	19%	10%	5%	7%	7%	9%
Pain	31%	33%	73%	40%	38%	41%
Unwinding	38%	36%	9%	33%	40%	33%
General Wellness	12%	21%	13%	19%	16%	18%
Outcomes						
Have replaced an OTC medication with CBD	55%	29%	24%	8%	7%	20%
CBD has positively impacted quality of life	98%	80%	67%	57%	43%	65%

Source: New Frontier Data 2020 U.S. CBD Survey

Exuberant & Intense consumers use CBD most frequently and at the most different times during the day—especially in the morning and at night. For consumers generally, the evening is the most popular time to consume.

Half (51%) of Ambivalent & Experimental consumers no longer use CBD, having only tried it once or twice. That is double the average discontinuation rate of 25%.

29% of Exuberant & Intense consumers first tried CBD in the last month.

Three quarters of Skeptical & Limited consumers use CBD primarily to manage pain, making them the archetype with the most unified motivation for consuming CBD.

Nearly half of consumers (46%) use CBD with a goal of managing a chronic condition or its symptoms.

CONSUMERS:
CBD Forms & Dose

	EXUBERANT & INTENSE	INTEGRATIVE & CONSISTENT	SKEPTICAL & LIMITED	RECEPTIVE & RESERVED	AMBIVALENT & EXPERIMENTAL	AVERAGE CONSUMER
CBD Forms Tried						
Oil/tincture	76%	66%	64%	62%	55%	63%
Topicals	33%	41%	36%	32%	32%	36%
Food	40%	47%	13%	23%	24%	31%
Vape pen	26%	23%	4%	8%	16%	16%
Pills/capsules	33%	20%	11%	11%	10%	15%
Flower	38%	17%	5%	8%	10%	13%
Drinks	21%	15%	7%	6%	6%	10%
Dose						
Less than 10 mg per day*	7%	17%	16%	21%	18%	17%
More than 50 mg per day*	52%	22%	20%	16%	11%	22%
Do not know how many mg consume per day*	10%	19%	25%	25%	42%	23%
Expect amount consumed to increase in next 6 months	57%	33%	22%	22%	24%	28%

Among consumers who use CBD at least once a month. Source: New Frontier Data 2020 U.S. CBD Survey

__Exuberant & Intense__ are the group that has consumed the widest variety of CBD products.

__Skeptical & Limited__ are the group that has consumed the fewest different CBD product types.

18% of *Receptive & Reserved* and 16% of *Ambivalent & Experimental* claim their consumption has decreased in the last six months.

Consumers prefer sweet edibles to savory edibles.

CONSUMERS:
CBD Purchasing

	EXUBERANT & INTENSE	INTEGRATIVE & CONSISTENT	SKEPTICAL & LIMITED	RECEPTIVE & RESERVED	AMBIVALENT & EXPERIMENTAL	AVERAGE CONSUMER
CBD Purchasing						
Primary source of CBD	Online	Smoke Shop	Online	Online	Personal Connection	
Have purchased CBD	✓	✓	✓	✓	✗	77%
Spend less than $50 per month on CBD	31%	58%	56%	69%	N/A	45%
Spend more than $100 per month on CBD	50%	15%	20%	8%	N/A	13%
Have purchased CBD for a family member	21%	30%	22%	14%	N/A	23%
Brands						
Always buy the same brands	29%	21%	39%	28%	N/A	21%
Buy new brands at least as often as familiar brands	26%	30%	16%	20%	N/A	19%
Rarely know what brands are being purchased	5%	24%	22%	30%	N/A	18%
Prefer to buy from brands that produce their own product (not white labeled)	74%	53%	43%	40%	N/A	37%
Purchasing Beliefs & Satisfaction						
Confident that purchased products have desired effects	93%	77%	59%	59%	N/A	53%
Generally satisfied with purchased CBD products	90%	80%	70%	58%	N/A	56%
Likely to purchase CBD in next 6 months	93%	82%	74%	56%	37%	65%

Source: New Frontier Data 2020 U.S. CBD Survey

Most consumers, even the brand-loyal Skeptical & Limited consumers, switch brands at least occasionally, indicating that product preferences are still shifting and have yet to settle in the U.S. CBD market.

Price is the leading reason consumers switch brands.

Ambivalent & Experimental consumers have never purchased CBD but 37% claim they are likely to purchase CBD in the next six months.

11% of consumers have gifted CBD.

CONSUMERS:
Health & General Consumer Behaviors

	EXUBERANT & INTENSE	INTEGRATIVE & CONSISTENT	SKEPTICAL & LIMITED	RECEPTIVE & RESERVED	AMBIVALENT & EXPERIMENTAL	AVERAGE CONSUMER
General Health Behaviors						
I am a health-conscious person	88%	84%	89%	76%	77%	82%
I make an effort to maintain a healthy diet	83%	81%	91%	77%	75%	80%
Moderate exercise at least 3 days per week	71%	61%	65%	47%	54%	57%
Drink alcohol at least once a week	60%	41%	37%	34%	32%	38%
Consume caffeine/energy drinks every day	62%	40%	35%	43%	37%	41%
Use tobacco at least occasionally	62%	29%	16%	19%	24%	26%
General Consumer Behavior						
Sustainability is an important consideration in the products I buy	60%	59%	51%	42%	47%	51%
I am willing to spend more money to save me time	64%	43%	33%	31%	31%	37%
I am usually the first of my friends to try new products and services	60%	40%	22%	31%	21%	32%

Skeptical & Limited consumers are the most likely to report trying to eat healthy.

Exuberant & Intense consumers are the most likely to consume alcohol, tobacco, and caffeine regularly.

In addition to being CBD super-consumers, Exuberant & Intense consumers are early adopters of all types of products, motivated by sustainability and time savings.

Source: New Frontier Data 2020 U.S. CBD Survey

NONCONSUMERS:
CBD Beliefs & Knowledge

	KNOWLEDGEABLE & PRIMED	CAUTIOUS & CURIOUS	INFORMED & INDIFFERENT	UNAWARE & UNINTERESTED	AVERAGE CONSUMER
Beliefs					
CBD has valid medical uses	82%	50%	50%	30%	55%
CBD can improve general health and wellness	70%	32%	23%	16%	38%
CBD can be just as effective as prescription medications in treating medical conditions	57%	26%	25%	17%	33%
There has not been enough research to determine the medical efficacy of CBD	33%	54%	35%	26%	35%
There has not been enough research to determine the safety of CBD	30%	55%	34%	26%	34%
Lab testing for CBD should be legally mandated	73%	70%	56%	36%	59%
CBD should be freely available without a doctor's recommendation	75%	24%	19%	14%	37%
There is some stigma around CBD because of its association with marijuana	74%	70%	59%	35%	59%
Have a positive general impression of CBD based on what they have heard about it from others	88%	36%	29%	16%	49%
Knowledge					
Believe CBD is legal to purchase and possess in the US	83%	64%	72%	46%	69%
Believe – or are unsure whether – CBD causes a high	23%	41%	47%	63%	41%

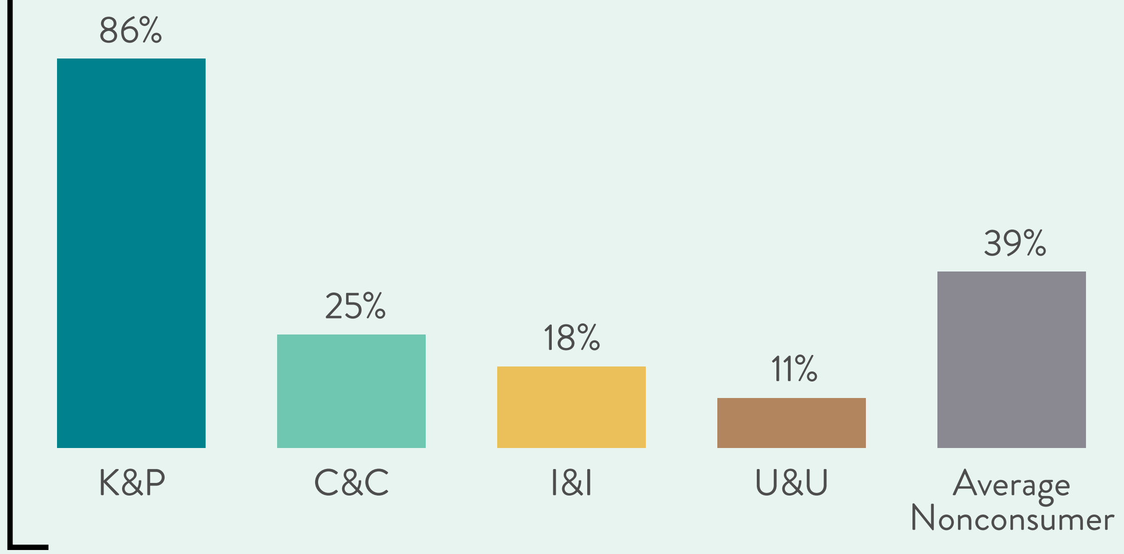
Source: New Frontier Data 2020 U.S. CBD Survey

Knowledgeable & Primed are the likeliest—by a wide margin—to believe CBD can improve general health and wellness.

Cautious & Curious are the most likely archetype to indicate there is not enough research into the medical efficacy and safety of CBD.

Unaware & Uninterested have the least positive impression of CBD.

Knowledgeable & Primed consumers overwhelmingly have the most positive feelings about CBD.



Unaware & Uninterested are the most likely to believe or be unsure whether CBD causes users to feel high.

NONCONSUMERS:
CBD Awareness & Information Sharing

	KNOWLEDGEABLE & PRIMED	CAUTIOUS & CURIOUS	INFORMED & INDIFFERENT	UNAWARE & UNINTERESTED	AVERAGE CONSUMER
Awareness					
Became aware of CBD more than a year ago	62%	50%	59%	37%	54%
Have seen a CBD product in person	69%	44%	52%	0%	46%
Have never seen CBD (neither in person nor online)	5%	25%	0%	100%	26%
Information Sharing					
Know a friend/family member who uses CBD	65%	33%	35%	14%	41%
Have had a conversation about CBD	84%	61%	64%	24%	59%
Conversation about CBD was mostly positive**	82%	40%	40%	33%	59%
Have been recommended CBD	49%	25%	17%	6%	28%
Have recommended CBD to someone	17%	1%	3%	1%	7%
Interested in learning more about CBD	86%	47%	20%	15%	47%

Informed & Indifferent are aware of and exposed to CBD, they are just not particularly interested in it.

Unaware & Uninterested are the only archetype to report having never seen CBD products.

A quarter of the Cautious & Curious have been recommended CBD, second only to Knowledgeable & Primed.

Knowledgeable & Primed are the archetype most interested in learning more about CBD.

***Among those who have had a conversation about CBD. Source: New Frontier Data 2020 U.S. CBD Survey*

NONCONSUMERS:
Abstaining from CBD

	KNOWLEDGEABLE & PRIMED	CAUTIOUS & CURIOUS	INFORMED & INDIFFERENT	UNAWARE & UNINTERESTED	AVERAGE CONSUMER
Abstaining					
Would not consider trying CBD	0%	21%	38%	58%	28%
Abstaining Reasons					
Lack of interest	5%	26%	50%	55%	32%
Don't know enough about it	35%	73%	10%	13%	30%
Don't have a medical need for it	19%	40%	28%	17%	24%
Not sure it is safe	6%	89%	10%	5%	20%
Not sure it is effective	17%	71%	5%	2%	19%
Don't know long-term effects	12%	64%	11%	7%	19%
It is too expensive	22%	12%	7%	3%	11%
Not sure it is legal	7%	31%	5%	4%	9%
Not sure what is labeled as CBD actually contains it	11%	23%	5%	2%	9%
Don't have access	11%	12%	3%	3%	7%
Worried it will make me feel high	3%	19%	5%	3%	6%
Have a moral objection to CBD use	1%	10%	9%	6%	6%

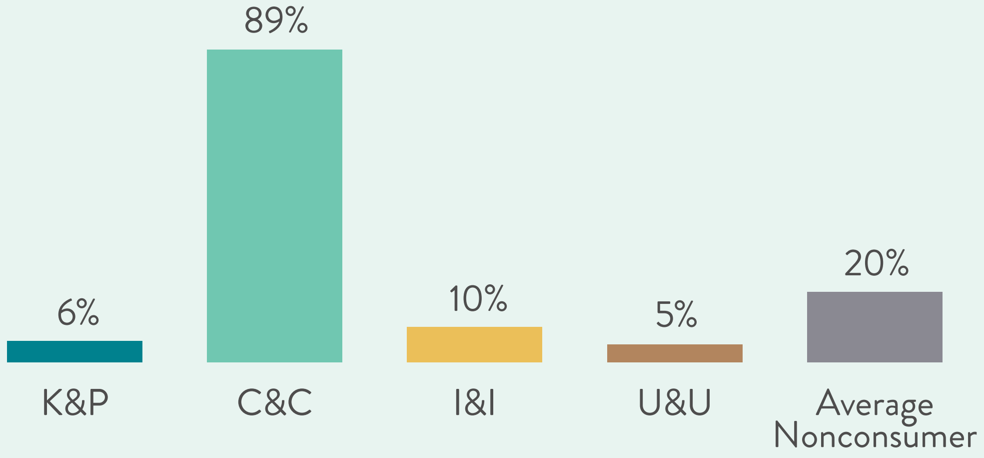
Source: New Frontier Data 2020 U.S. CBD Survey

The *Cautious & Curious* are broadly wary of CBD products.

A majority (58%) of the Unaware & Uninterested would not consider trying CBD.

Informed & Indifferent have not avoided CBD because they lack information about it, but because of a plain lack of interest or medical need.

Cautious & Curious are most likely to abstain from CBD because they are not sure if it is safe, more than all other archetypes.



Nearly a quarter (22%) of Knowledgeable & Primed have not used CBD because it is too expensive.

NONCONSUMERS:
Interest in CBD & Potential Use

	KNOWLEDGEABLE & PRIMED	CAUTIOUS & CURIOUS	INFORMED & INDIFFERENT	UNAWARE & UNINTERESTED	AVERAGE CONSUMER
Interest					
Somewhat-to-very curious about trying CBD	83%	30%	3%	9%	35%
Likely to try CBD in the next 6 months	56%	13%	1%	4%	22%
Reasons to Consider Use					
Pain management	58%	48%	33%	21%	41%
Stress relief	42%	32%	13%	9%	25%
Treating a medical condition	26%	32%	24%	14%	23%
Improving sleep quality	30%	23%	8%	7%	17%
Increasing overall wellness	23%	16%	6%	3%	12%
Most Appealing Form of CBD					
Pills/capsules	27%	30%	22%	20%	24%
Oil/tincture	29%	20%	18%	8%	19%
Drinks	13%	12%	10%	15%	13%
Food	13%	8%	8%	5%	9%

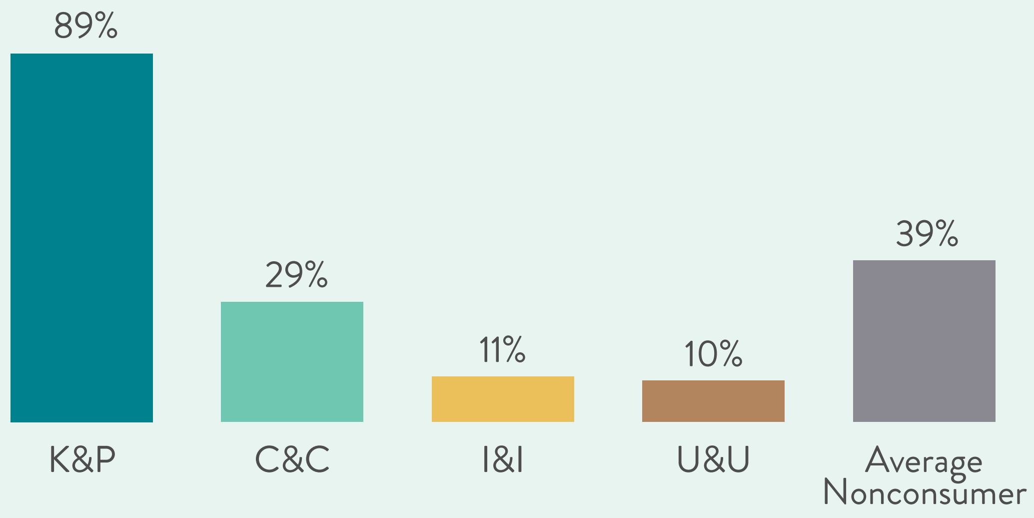
Source: *New Frontier Data 2020 U.S. CBD Survey*

Informed & Indifferent are the least curious about trying CBD across all archetypes.

Knowledgeable & Primed are the most likely to purchase CBD in the next 6 months

Across all archetypes, pain management is the most common reason individuals would consider trying CBD.

Nearly a third among Cautious & Curious consumers said they would try CBD if it came from a trusted source, emphasizing the importance of social networks for increasing awareness and validating CBD products.



Pills/capsules are the most appealing form of CBD for nonconsumers generally, followed by oils/tinctures and drinks.

NONCONSUMERS:
Health & General Consumer Behaviors

Cautious & Curious are the most likely (89%) to say that health is an important consideration when making purchasing decisions.

	KNOWLEDGEABLE & PRIMED	CAUTIOUS & CURIOUS	INFORMED & INDIFFERENT	UNAWARE & UNINTERESTED	AVERAGE CONSUMER
General Health Behaviors					
I am a health-conscious person	80%	80%	76%	70%	77%
I make an effort to maintain a healthy diet	79%	79%	77%	70%	76%
Moderate exercise at least 3 days a week	55%	55%	54%	48%	53%
Drink alcohol at least once a week	39%	29%	25%	20%	29%
Consume caffeine/energy drinks every day	40%	37%	41%	30%	37%
Use tobacco at least occasionally	26%	13%	14%	14%	17%
General Consumer Behavior					
I don't buy new products if I have an adequate (if old) version of the product already	61%	68%	58%	48%	58%
Sustainability is an important consideration in the products I buy	57%	52%	44%	36%	48%
I often make unplanned/impulse purchases	46%	37%	32%	26%	36%
I am willing to spend money to save time	40%	34%	30%	25%	32%

Knowledgeable & Primed have the highest percentage of regular alcohol and tobacco consumers.

Almost half (46%) of Unaware & Uninterested report that they never consume alcohol.

Cautious & Curious are the least likely to needlessly upgrade to new products.

Knowledgeable & Primed are the archetype most swayed by sustainability when making general consumer purchases.

***Among those who have had a conversation about CBD. Source: New Frontier Data 2020 U.S. CBD Survey*

key
TAKEWAYS

Awareness of CBD is nearly universal, though younger consumers are far more likely to express interest in learning more. A reported 86% of American adults have heard of CBD, but consumers under 35 years were far likelier than older consumers to be interested in learning more. That affirms that early adoption of CBD will likely be driven primarily by younger consumers who are far more interested in exploring how they may integrate CBD into their lives.

There is an active discussion of CBD happening across the country. A majority of adults (73%) and almost all CBD consumers (96%) reported having a conversation about CBD with someone else. Furthermore, the conversations were broadly positive (66%), suggesting that word-of-mouth messaging plays an important role in positively influencing both awareness and perceptions of CBD across the country. Notably, with 7% of nonconsumers reporting such discussions as negative, the industry is likely to face a largely positive reception as it grows.

CBD consumers are evangelists for the products. A majority (56%) of CBD consumers recommended CBD to someone else, underscoring the strong positive experiences most CBD consumers report with the products they consume. During the early stages of the CBD sector's maturation, brands that can effectively build deep loyalty among early adopters and effectively incentivize word-of-mouth sharing by consumers will benefit from an energized base of consumers already willingly spreading the word.

The majority of CBD consumers believe it has valid medical uses, and that it should be freely available without a doctor's prescription. Despite the strongly held view among most CBD consumers of the therapeutic value of the products, CBD companies are going to be tightly constrained in their ability to message on the application of their products toward specific conditions due to strict FDA restrictions on promoting CBD as a medical treatment. Until CBD brands can scientifically prove efficacy based on validated clinical studies, the products will be limited to focusing on general wellness outcomes rather than treatment of specific medical conditions.

Both industry and regulators will need to be diligent in monitoring for medical claims made by unregulated and unscrupulous CBD brands. In a fast-evolving market in which unregulated products are capitalizing on the intense consumer interest and limited market regulations, it will be important for industry stakeholders to be vigilant for companies that are sowing confusion in the market with unproven or false product claims. If operators are allowed to gain traction, it will not only make it more difficult for compliant operators to compete, it could negatively impact consumer perceptions and their experiences as they try products that fail to live up to the claims.

CBD use quickly becomes routinized amongst those who consume it. Approximately one-fifth (18%) of adults have tried CBD, but of those who have, more than half (53%) reported using it at least a couple times per month. That suggests how many consumers who try it quickly see positive benefits and begin integrating regular use into their lifestyles. Consequently, the companies and brands that are able to attract early adopters with well aligned products are likely to see positive growth as use becomes routinized for a large proportion of those consumers.

Gender is a major determinant of adoption behavior, with men being significantly more likely to become routine consumers than are women. Forty-six percent of male consumers use CBD at least once a week compared to 36% of women, underscoring the importance of CBD brands understanding the role of gender in shaping product demand. Furthermore, women were significantly more likely to try CBD only once or twice before discontinuing use compared to men (30% vs 19%) suggesting that CBD brands have been thus far less well aligned to the needs and preferences of women.

CBD is still a very new product for most consumers, and consumption habits remain far from entrenched. Two in five CBD consumers first tried it in the past six months (41%) and 68% within the past year. The newness of the CBD experience for most consumers suggests there remains significant opportunity for well-developed brands to attract consumer attention and capture market share from existing market leaders, as most consumers have not been using the products with sufficient longevity to create durable brand loyalty that is difficult to dislodge.

While tinctures currently lead the market, brands should anticipate a significant shift to infused products (regulations permitting). CBD oils and tinctures are the most widely used products, and the favorite form for the plurality of consumers. However, with the declining cost and increasing sophistication of infusion technologies, New Frontier Data expects demand for novel food, beverage, and topical products to grow significantly in the coming years, cannibalizing share from tinctures.

The FDA's final rulings on CBD infused foods will be a critical determinant of the CBD-markets growth trajectory. A favorable ruling on infused foods will opening up the market opportunity for CBD everywhere (i.e., the infusion of CBD across the spectrum of food and beverage products), with edibles quickly rising to become the dominant product category. However, if the FDA places stringent rules around how CBD can be infused into ingestible products, tinctures and topicals will likely remain the dominant products, resulting in slower adoption and industry growth due to the more limited options available on the market.

Younger consumers are more likely to have tried a diversity of product forms, affirming the exploration of CBD products that is ongoing. In such a nascent market with still unformed preferences and rapid expansion in product options, younger consumers in particular are displaying a high willingness to "shop the market" to trial new products as they become available. The effectiveness of the product in achieving the intended wellness benefit is not the only consideration shaping their adoption. Pricing, convenience, and quality are also considerations. Brands should therefore not only be focused on developing products that "work well" but rather take the holistic experience of their target audience into consideration. Given how competitive the CBD market will become in the coming years, efficacy alone will not be sufficient basis on which to build a durable competitive market against increasingly sophisticated and well capitalized competition.

While younger people are more likely to have tried CBD, and in more different forms, consumers over age 35—and especially over 55—are much more frequent users than their younger counterparts. More consideration may be required in marketing CBD to older populations who may not be as digitally connected or savvy as younger cohorts. There may be an opportunity to leverage younger caregivers, who are more informed and engaged, to introduce CBD for the older adults who they are caring for.

Most consumers use lower doses of CBD. 43% of regular consumers use less than 30 mg of CBD per day, with one-quarter (26%) consuming between 10 and 30 mg per day. While the quantities consumed are not at the "micro dose" threshold for most consumers (i.e., less than 10 milligrams) it does suggest that most consumers are less interested in ultra-potent CBD products. The preference for the lower-dose end of the market also affirms the wellness—rather than medical—orientation of most CBD consumers.

Smokable CBD flowers will likely remain a niche product category as consumer demand grows. Some 13% of CBD consumers have ever smoked CBD flowers, with 8% reporting it as their favorite form. Given the growing availability of more convenient product forms, coupled with the broader trend away from smoking as a social norm, New Frontier Data expects that, over time, fewer new CBD consumers will choose the smokable products as their primary way of consuming CBD. Smokable CBD flower will likely remain most popular among consumers who are already smokers, but it far less likely that non-smoking adults will opt to begin consuming CBD by smoking it.

The COVID-19 pandemic presents a significant opportunity for consumers to use CBD to manage the stress and anxiety fueled by widespread economic and social disruptions. Three of the top four reasons consumers use CBD are to relieve stress, reduce anxiety, and relax. With the COVID-19 pandemic sparking unprecedented disruptions to the economy and society, levels of stress and anxiety are rising dramatically. As consumers adapt to a new normal of stay-at-home orders, social distances, non-essential business and school closures, and surging unemployment, CBD is well positioned to offer distressed adults a way to cope. Furthermore, CBD brands can position themselves as a non-pharmaceutical alternative with a low risk profile to products which are already widely used, but which can often have undesirable side effects.

Online channels are the primary sources for CBD for many consumers, but in an increasingly crowded and unregulated marketplace, quality is key. With CBD products still only available in a limited number of brick-and-mortar locations, most consumers turn online to buy their products. However, with hundreds of brands rushing to the market, and little in the way of product standards for CBD products, consumers are understandably most concerned about the quality of the CBD they are purchasing. This creates an opening for brands to aggressively leverage quality as defining and differential advantage, focusing on themes including:

- The provenance of the hemp used to make the CBD
- The testing done to ensure no contaminants or adulterants in the products
- The quantity of CBD and specified dosing per serving
- The quality standards for all other ingredients used to manufacture the products
- Any certifications or other validating standards met to ensure best-in-class products
- Product satisfaction guarantees (as budget permits)

Personal connections are a leading source of CBD, creating strong opportunities for word-of-mouth marketing. Friends and family members were the most commonly cited source of CBD for consumers, presenting a strong opportunity for brands to use word-of-mouth marketing incentives, such as referral discounts, loyalty programs, and high production value consumer testimonials to encourage consumers to share their products within their networks. When effectively deployed, word-of-mouth campaigns have the added benefit of building deeper brand loyalty among the consumers who sharing their experiences enabling brands to increase retention of their most engaged customers.

As the market matures, price-based competition will become more acute as brands vie for market share. With about a third of all CBD purchasers (34%) saying they switch brands based on price, the CBD market will quickly separate into premium, mid-tier, and value thresholds, with lower cost brands competing largely on price, while higher end brands compete on quality, perceived brand value, scientifically-validated efficacy, or other standards (including all-organic inputs). However, brands across all tiers should prepare for a future of aggressive price competition, and preemptively prepare strategies to ensure they can effectively secure their market position without devaluing their brand proposition in a race to the pricing floor.

Medical consumers are the most brand loyal, but capturing the market requires deeply understanding their needs. CBD consumers who are using the products to treat or manage a medical condition are most likely to be brand loyal – they are less inclined to switch products once they have something that works well for their needs. However, in an increasingly crowded marketplace, attracting these medical consumers will take a strong foundation in science, an intense focus on quality, and deep understanding of their needs. In the next few years, New Frontier Data expects that medically focused CBD brands will invest heavily in scientifically affirming the efficacy of their products, making it more difficult for less research-focused brands to compete for the medical consumer. Medically focused brands should, however, also note that science alone will not win them the market. A well-developed brand and resonant marketing messaging will remain critical to attracting and retaining this desirable consumer group.

Men spend more on CBD than do women; but the female-focused CBD market presents significant untapped potential. While men were significantly more likely to spend more than $100 per month than women (21% vs 12%), increased focus on development of female-oriented products, ranging from cosmetics to feminine hygiene products could unleash far greater spending potential for female consumers. Given the under-addressed opportunities within the female-focused markets, brands should not be replicating the strategies of products already on the market, but rather invest in deeply understanding the driving needs of female consumers and developing products and messaging fully aligned with those needs.

Consumer archetypes illustrate the nuanced differences between CBD users whose continued evolution brands will need to understand and adapt to. The significant differences in behaviors, intentions, and beliefs about CBD between consumer archetypes illustrates that brands should be evolving away from a one-size-fits-all approach. Operators will need to understand the specific spending habits, preferred forms, and motivations for use of their target consumers. Brands which try to take this monolithic approach to CBD consumers will find their competitive position undercut by companies that are more precise in their consumer targeting.

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