**CROSS-CATEGORY REPORT** 

## Predicting the future for



பீ BLACK SWAN DATA™



## The rise of CBD and what's next?

In this cross-category report we turn the spotlight on one of 2018's strongest growing ingredient trends – Cannabidiol (CBD).

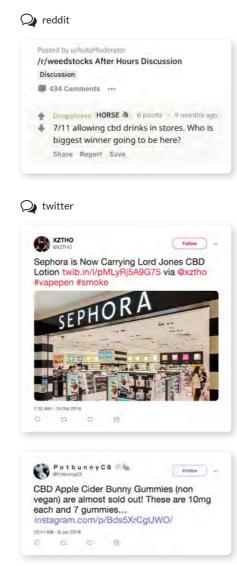
Here you'll discover our insights into the CBD conversation, specifically how it's growing and shifting across four categories: Beverages, Alcohol, Snacking and Personal Care. We also share our methodologies and some emerging CBD-like ingredient trends that may be interesting for your category.

## A marijuanaissance

With so many perceived health benefits, including pain relief, preventing dementia and anti-inflammatory, it's no surprise that we're seeing a CBD boom.

CBD is being added to a huge range of products from smoothies and brownies, to skincare products, beers and cocktails. Thanks in part to celebrity endorsements, CBD products are also viewed as luxury products, emerging in high-end boutiques, spas, and hotels.

However, CBD is hardly new news. Several products have already launched (Brittany Carbone's TONIC oils and Cindy Capobianco's Lord Jones gumdrops) and as a trend it's showing signs of moving into maturity.



#### Key stats





4

Searches for 'CBD' outweigh those for 'Cannabis' or THC according to Google Trends

**Coca-Cola** and **AB InBev** are two major CPG players looking into developing CBD-infused beverages





800MG

If you're a Food, Beverage or Personal Care innovator looking to gain a first-mover advantage, read on to see what **other ingredient trends** are the ones to watch

## Discovering the next CBD

In today's ever-changing consumer landscape it's not enough to have insight into what consumers are thinking and doing right now. To successfully launch an innovative product, you need foresight on what consumers will think and do next.

## How we answer this challenge:

Huge amounts of raw, unstructured data pulled in directly from source

2 Irrelevant content is filtered out

3 NLP topic expansions find all relevant topics

4 Topics grouped and classified into 'lenses'

Trends identified and analysed under each lens

Trends ranked with a TrendPrediction Value (TPV) based on their future growth potential

 Associations such as brands,
benefits, themes & ingredients are surfaced to provide more context

By using our AI approach to Social data you can predict what consumers want and need **before they do** and discover the next CBD first

#### Introducing Trend Prediction Value (TPV)

TPV is our ranking metric which objectively prioritizes trends for review, supported by our expert Data team. TPV ranks trends by their potential to grow, using their historic, current and predicted conversation.

TPV asks three questions at once:

Is the trend growing as past successful trends have grown?

Is it the right size now?

## $\left. \begin{array}{c} \\ \end{array} \right|$ Is it forecast to grow?

A high TPV can be interpreted as a trend that's both in the right phase of its growth (emerging or growing) and is predicted to grow over the next 6 months.

TPV is what enables us to surface new and emerging CBD-like ingredients that are demonstrating growth.



### Trend associations

As well as scientifically identifying trends, our algorithms identify associations consumers have with these trends under sublenses – e.g. benefits, themes and brands. So you get to understand the bigger picture of what's happening within your category.

These are then given a percentage value of how strongly they're associated.

For example, 0% value means that two sublenses are found together by chance, so there's no association. While 100% value means that two sublenses are only found together in the data, giving the highest chance of association.

# CBD - THE POSTER BOY

**TPV RANK\*** 

## **GROWING**

MATURITY PHASE

85к **CONVERSATIONS** 

One of over 100 Cannabinoids found in Hemp, CBD makes up around 40% of the plant's extracts. It can be inhaled or ingested as CBD oil, vapes, cigarettes and dried Cannabis.

CBD is closely linked to Tetrahydrocannabinol (THC), but does not make a person feel 'stoned'. In fact, CBD can actually neutralise the psychoactive effects, which has destigmatized the product and is making consumers 'canna-curious'.

Q) reddit

I'm not able to enjoy life without weed due to severe nausea but want to quit.

💵 8 Comments 🏓 Share 🚥

staystoic 1 point - 6 months ago THC is great, but I find CBD to be great for nausea as well, without the stoned part. Also, look into edibles and beverages. Far more discreet and efficient. Share Report Save



Jaydn W get an energy drink lol AST AM - 12 AU 2018

2 Literat 11

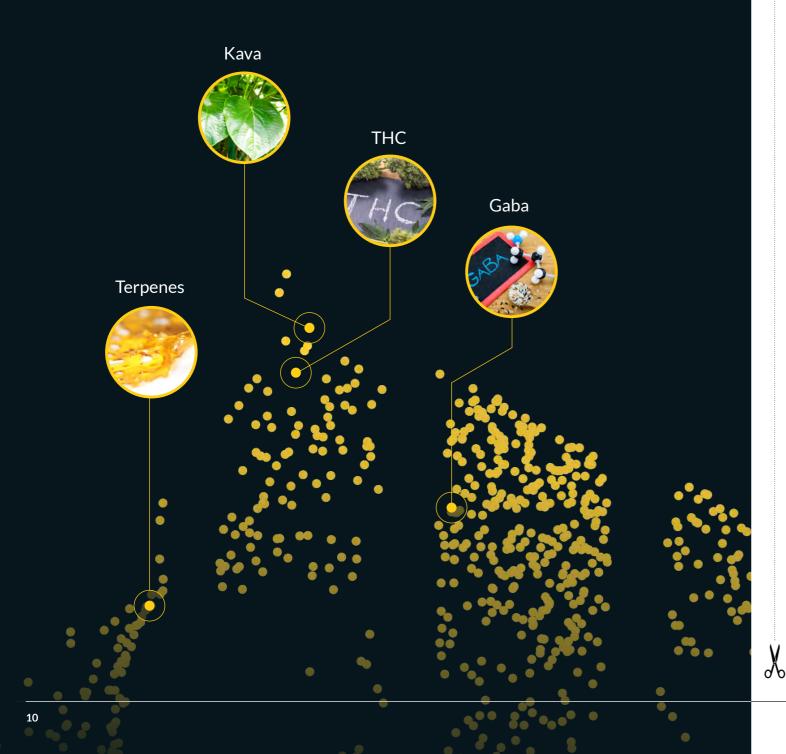


\*Correct TPV ranking for US Beverages in January '19

## Ingredients to watch

We track over 1,300 ingredients using Trendscope<sup>™</sup> – our unique trend prediction platform. Here are some established and early emerging CBD-like ingredients we're seeing that may be interesting to your category.





## GABA The outside bet

GABA is a chemical naturally created in the human brain associated with sleep aid and stress reduction. Whilst less well-known than CBD and Kava, its similar properties could make it an outside bet to follow a similar trajectory.

Ranking just outside the top 200 ingredient trends, it typically ranks beyond where we normally look in terms of interesting new trends. However, with a steady conversation growth rate, we predict it's set to continue in the next six months. Therefore, it could be of interest if you're looking to exploit a niche or get ahead of the market.

#### Key stats

US Beverages in January '19

Its five o'clock somewhere ...

. Ideleted 1 point 1 Vear ago

drink with you today. Share Report Save

Sleep will come. The first couple of nights I

just dozed off a couple of times. The brain

chemistry takes a bit of time to adjust. I am

taking gaba, valarian root, and melatonin one hour before bed and it helps. Sleep really started improving a week in. I won't

Il Comments

🔎 reddit

Maturity phase: Mature 4.776 conversations +5% YoY growth \*Correct TPV ranking for

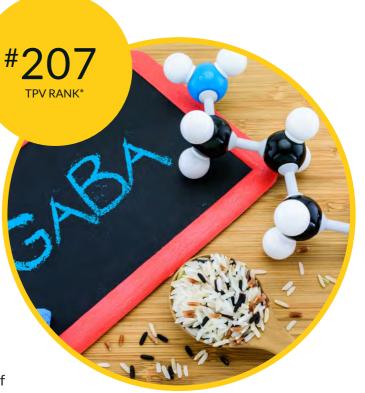
#### Associat consume with GAE

Q twitter BrooklynTea Happy #TeaTuesday. Our next featured

oolong. This tea is exposed to nitrogen to increase the amino acid responsible for deep relaxation, anti-anxiety and stress relief. Gamma-Amino Butyric Acid #GABA is an

amino ... ift.tt

12 0: 0



ed	BENEFIT	ASSOCIATION
er benefits	Sleep Aid	35%
BA	Healthier Brain	29%
	Reduces Stress	27%
	Natural Energy	26%
	Boost Memory	25%



## Kava A risky reward

Described as 'Chamomile on steroids', Kava has historically been brewed in hot drinks as a cure for insomnia. It's also associated with stress reduction, boosting mood, digestive health, and even an increased libido.

Kava has been banned in Europe and Canada because of negative health effects linked to excessive usage. However, it currently remains legal in the US, and a number of smaller cafes and shops are promoting Kava based products.

Ranked just ahead of CBD in Trendscope at #3, we predict that it has a high likelihood of mirroring CBD's rise.



ASSOCIATION

44%

44%

33%

28%

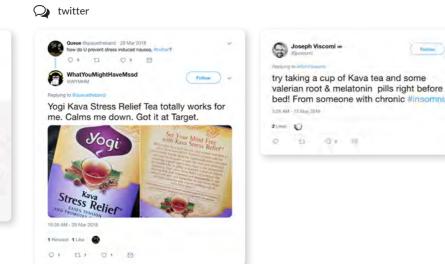
17%

#### Key stats Maturity phase: **Growing** 16,844 conversations +13% YoY growth \*Correct TPV ranking for US Beverages in January '19

	Associated consumer benefits with Kava	BENEFIT
		Insomnia Cure
		Reduces Stress
		Sleep Aid
		Pain Relief
		Medicinal

#### 📿 reddit

Posted by u/The5thHorseman666 1 year ago Am I expecting too much? \*c 9 Comments \*\* Hairpants\_Scowler \* point \* 1 year ago For me kava is not a replacement for alcohol. That being said, it makes me not care that I'm not having a drink. That's huge for me. It does wonders for my anxiety and insomnia and keeps me level headed and focused at work. Share Report Save



## **THC** The biggest risk

Other Cannabinoids are also potentially fertile grounds for growth. THC, (Tetrahydrocannabinol) the psychoactive element of Cannabis, is widely discussed and ranks #9 in US Beverage conversations. Although known for its hallucinogenic properties, it's also associated with more functional benefits such as pain relief, healthier lungs, sleep aid, and anti-inflammation.

Currently THC has been legalized in Canada and 10 US states for recreational use and other states for medicinal use. While in others, it's legalized with a limited THC content. So although legalization is becoming more widespread, it's still a hot topic for debate.

Key stats Maturity phase: Growing 44,224 conversations +28% YoY growth *Correct TPV ranking for US Beverages in January '19	Associated consumer benefits with THC

#### **Q** reddit

Posted by winstitisch 1 year seo

 NickyDamelle 2 peints 1 year ago
In my experience, adding THC to my CBD therapy has been most effective with pain/headaches/depression. This is not to

say that CBD won't help, especially when it comes down to inflammation causing pain. CBD is very good for inflammation/arthritis/anxiety. THC more so with pain/depression/insomnia. If she prefers sublingual, there are oils that she can put directly under her tongue or add to coffee, smoothies, salad dressings, etc to mask some of the taste. There are some Producers/Dispensaries that offer capsules. Keep in mind that it can take up to a month for her to feel the benefits.

Share Report Sava

#### Q twitter

Gladys Kelly Updataset This THC-Packed Tea Was My Anxiety's Saving Grace Before My Last Flight





BENEFIT	ASSOCIATION
Pain Relief	35%
Medicinal	34%
Detoxifying	15%
Uplifting	14%
Fat Burning	5%





## Terpenes Small but mighty

Terpenes are another Cannabinoid that could be primed to grow. These are an essential oil derived from Cannabis designed to enhance the effectiveness of other Cannabis extracts. They also offer numerous medical benefits, including pain relief, anti-inflammation, anxiety, and cancer prevention.

Conversations around Terpenes remain extremely small and sit in the 'emerging' maturity phase. However, the growth in the broader awareness around Cannabinoids could mean that they are set for strong growth in 2019.

Key stats Maturity phase: **Emerging** 

3,260 conversations

+181% YoY growth

\*Correct TPV ranking for US Beverages in January '19

## 



#### Q reddit

Posted by u/banksnons 6 months ago 2 how am i supposed to be hitting cbd e-juice?

23 Comments ····

WheelsMan1 1 point 6 months ago

Pain management. I can't use thc now. I add terpenes tho, which greatly add to the entourage effect. When cannabinoids other than cbd are at such a low level, how much other cannabinoids are actually present compared to cbd in the levels were talking about. I agree that cannabinoids all work together, but terpenes are what actually define a strain and play a huge role.

#### 📿 twitter

Walden Waldenscarnshit Did you know that terpenes aren't exclusive to cannabis? You can thank terpenes for distinctive flavors in coffee and wine. #terpenes #esters #cannabis #coffee #wine #foodie #science #flavors #cannascience #terroir #wineandweed #terroiraffectsterps #wake... ift.tt/2GKNLrV



0 121 02 12

#### San Francisco Chronicle O

Cannabis learns to play well with other drink ingredients. Terpenes, aromatic compounds in cannabis, are also receiving attention for purported effects that range from alertness to relaxation. trib.al/aT8v7sK



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5 Richwests 9 Likes 🕼 👙 🌢 🎯 🗳 🌢 🎯 🕼

# Summary

-``Q`(-

Kava The risky reward

Associations: Sleep aid, stress reduction, boosting mood, digestive health, and increased libido

Maturity phase: Growing

Our prediction: Highly likely to mirror CBD's rise

## Terpenes Small but mighty

**Associations:** Pain relief, anti-inflammation, anxiety, and cancer prevention

Maturity phase: Emerging

Our prediction: Could be set for strong growth in 2019

14

#### **THC** The biggest risk

-``@``

Associations: Pain relief, healthier lungs, sleep aid, and anti-inflammation

Maturity phase: Growing

Our prediction: Fertile ground for growth



-<u>^</u>-

Associations: Sleep aid and stress reduction

Maturity phase: Mature

Our prediction: Set to grow steadily over the next 6 months

## The CBD story so far

Q twitter

We've looked at our approach to trend prediction. Now discover how our insights correlate with how the CBD conversation is shifting across four categories: Beverages, Snacking, Personal Care and Alcohol.

#### 2016

CBD emerges at similar times within Beverages, Skincare and Snacking. Earliest mentions of CBD-infused bottled waters, general personal care products and CBD chewing gum. Low conversations about CBDinfused beer in Alcohol.



02

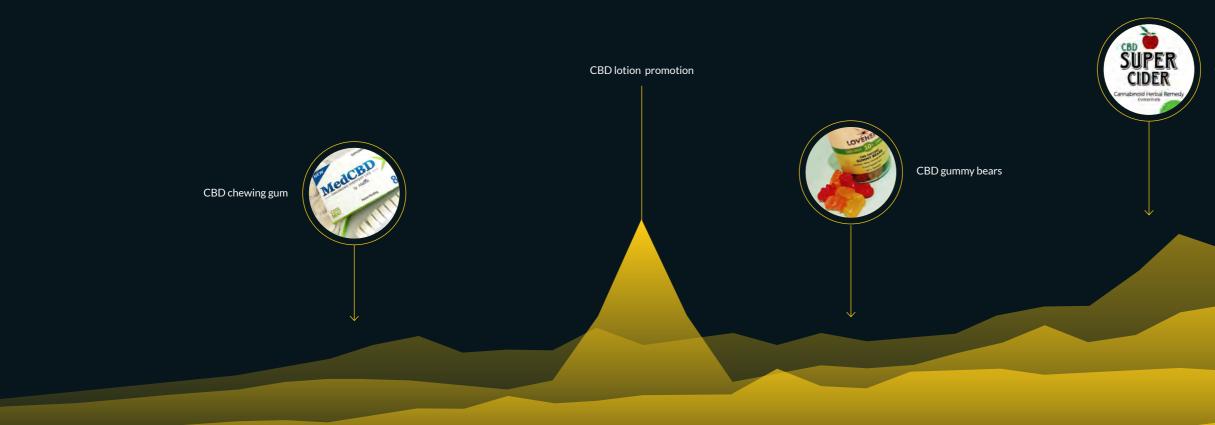
#### 2017

CBD emerges in gummy bears and indulgent snacks e.g. donuts. Apart from a spike in Personal Care driven by a CBD lotion promotion, Beverages takes over conversations with CBD coffee. More stories emerge around CBD-infused beer. Q twitter



#### 2018

CBD beverages diversify and conversations are over 5,000 per month by the end of the year. Steady growth is seen within Snacking moving into 'healthy' snacks and Personal Care with specific use cases and health benefits. Within the Alcohol category, CBD moves into cider, non-alcoholic beer, whisky and vodka.





CBD organic cider

BEVERAGES

SKINCARE

SNACKING

BEER

SPIRITS

# 

#### Perhaps more interesting than how the CBD conversation is evolving is what's driving it?

Our data shows that there are three key drivers behind the boom in innovation and product development around CBD. These are:

An anxiety economy

The legalization of Cannabis and Cannabinoids

3





2

These three factors combined have created fertile territory for the growth of CBD.

#18 TPV rank in US Beverages\*

#### Pain Relief

Maturity phase: Mature 13,580 conversations -4% YoY growth

## An anxiety economy

The nature of 21st century life has created what's being dubbed an 'anxiety economy'. There's a perceived growth in political, financial, and environmental problems, on top of sleep problems, the need to be 'beach body ready', and the constant presence of social media and smart phones.

Anxiety is now the most common mental health disorder in the US, affecting all, but particularly younger generations.

Already this has manifested itself in a number of products, e.g. fidget spinners and weighted blankets, and this is no different in CPG. Many of the benefits showing the highest levels of growth, and TPV rankings in our datasets echo this, with the likes of 'Reduced Stress', 'Mood Booster', 'Mental Health', and 'Sleep Aid' coming up high across our Beverage, Snacking, Personal Care, and Alcohol datasets.

CBD taps into all of these areas, being likened to Cannabis without the high, or a social lubricant like alcohol, minus the hangover. Across the conversations we're seeing consumers turning to a CBD latte or CBD gummy bears to reduce stress before a big meeting, having a CBDinfused beer with friends after a taxing day, and drinking a hemp tea or applying CBD oil to induce a great night's sleep.

#### #1 TPV rank in US Beverages\*

#### **Reduced Stress**

Maturity phase: Growing 27.096 conversations +17% YoY growth



#### #23 TPV rank in US Beverages\*

#### **Better Mental Health**

Maturity phase: Growing 16,808 conversations +26% YoY growth

#### #27 TPV rank in US Beverages\* **Sleep Aid**

Maturity phase: Growing 4,776 conversations +14% YoY growth

## Herbal supplements

The use of herbal supplements and remedies continues to expand, with consumers increasingly turning to Food, Beverages, and Personal Care items as a way of providing specific functional and health benefits.

In 2017, the herbal supplements market was valued at \$5.26bn, and is anticipated to grow a further 6.2% by 2025.

Herbal supplements are typically ingredients that have seen strong conversation growth in recent years, such as Turmeric, Echinacea, Ginseng, and Moringa. CBD could follow a similar trajectory to these ingredients due to the range of functional benefits that consumers are associating with it, alongside those traditionally associated with Cannabis and Cannabinoids.

Some of the benefits consumers most closely associate with CBD are those showing

#### #15

TPV rank in US Beverages\*

#### Anti-Cancer

Maturity phase: Mature 48,232 conversations +5% YoY growth

#### #5

TPV rank in US Beverages\*

#### Immune

Maturity phase: Growing 185.080 conversations +7% YoY growth

#### #8

TPV rank in US Beverages\*

#### **Stronger Bones**

Maturity phase: Growing 17,724 conversations +13% YoY growth

- strong growth in conversations, and
- are predicted to grow
- further over the next 12
- months. 'Pain Relief' and 'Anti-

Inflammatory' are particularly applicable to the Skincare category, where many believe CBD has shown to be most effective. For example, CBD has been used by consumers to tackle issues such as dry skin, eczema, psoriasis, and acne.

When added to Beverages or Snacks and ingested, there are suggestions that CBD's effectiveness is reduced because it's dissolved in the body's fat. However, many still praise its health benefits thanks to its high content of Vitamins A. D. and E. which are believed to help the immune system and bone health, and provide antioxidizing and anti-cancer properties. CBD oil is also said to contain essential fatty acids that can strengthen the brain.

## Legalization

The legality around CBD remains a grey area. However, the relaxing of laws around Cannabis, plus Canada and a number of US states legalizing its use, has enabled CBD to become more widely spread and destigmatized.

#### 2014

CBD legalized for medicinal purposes by 11 US states where medicinal Cannabis was not legal

#### 2017

CBD is illegally produced and marketed in the US, violating two federal laws

#### Q twitter



#### 🔎 reddit

✤ UserCheckNamesOut 2 points 8 months ago. I'm in a legal state. Can you elaborate on what form of cbd's are working for you? Side effects? I'm not new to cannabis, but I thought cbd's were the part of the plant. that make people lethargic.

Share Report Save



# MARIJUANA

#### 2019

New York City forbids the sale of CBD edibles in restaurants, bars and other establishments under the city's Department of Health jurisdiction

#### 2018

Farm Bill signed into law in December - effectively legalizing Hemp

Where Cannabis has not been fully legalized at a state level, there are certain regulations regarding its THC content. Hemp is only legal if the plant has a THC content <0.3%.

CONSERIN

Having only recently been legalized, there's a lack of robust and scientifically proven knowledge around CBD's benefits. Even with legalization, regulatory consistency remains an issue. And so far, the FDA have only approved one Cannabis-derived drug, Epidiolex, used to treat the rare forms of child epilepsy, Lennox-Gastuat and Dravet.

## What's next?

To summarise, CBD showed very strong growth in 2018, and in 2019 this looks set to continue, both within categories where CBD has already established itself, as well as moving into new product areas.

Beverages show the most fertile ground for further growth and innovations, with 3 of our top 5 TPV ranked products in the US containing

#2

**CBD** Coffee

Maturity phase: Growing

4,084 conversations

+83% YoY growth

CBD (CBD Coffee (#2), CBD Water (#4), Cannabis Drink (#5).

In the Beer & Cider category, Hemp is ranked #22 by TPV for ingredients. Cannabidiol ranks #2 globally in the Personal Care category and #7 in the US for Snacking. This suggests that all of these categories remain ripe for innovation using the ingredient, and a growing range of products will utilize the supplement.



Maturity phase: Growing 6,328 conversations +32% YoY growth

## #22

Hemp Maturity phase: Growing 20,060 conversations +7% YoY growth

#2 TPV rank in Global Personal Care<sup>3</sup>

Cannabidiol

Maturity phase: Growing 4,190 conversations +72% YoY growth

## Emerging categories

CBD is starting to emerge in Pet Products, particularly treats, where the ingredient is thought to help maintain balance in the body and keep it in a normal, healthy state. Brands, such as Isle of Dogs, and NaturVet, have already entered this space.

420 Cyber, Inc.



📿 reddit

Postell by u/inatecardib999 8 months age 🧧 What is slowly gaining popularity that most people don't know about yet? 🗱 2.0k Comments 🚥 + 16semesters 1 coint - B months ago CBD products like chocolates are sold at a lot of famers market I've been to in WA/OR. They are also sold in independent grocers (chains generally don't touch the stuff). The CBD soda is sold primarily at bars I've seen. Ablis is a popular brand. They also make CBD water and CBD

kombucha. CBD beers include http://www.coalitionbrewing.com/cbdbee 1/ but I've seen others that names are escaping me at breweries in the Portland metro area. Share Report Save



Cannuka



Follow v



cannabisfn.com/lagunitas-spar ... " Lagunitas Sparks Excitement with the First Ever THC, IPA-I. E

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\*Correct TPV ranking for US Beverages, US Beer & Cider, Global Personal Care in January '19

Baby Food is another category of growth, with parents administering CBD oil in drinks and foods for a wide range of benefits, from teething pain to treating seizures. However, no products have been launched yet.

Quitting smoking is also an area where the CBD conversation is evolving. The Society of Cannabis Clinicians (SCC) report that CBD oil can help tobacco smokers quit quicker and easier. With an increasing number of Americans looking to quit smoking, this is another fertile area of growth.

Follow

How CBD Can Help You Quit Smoking? |



## Continuing the conversation

As more research is carried out around CBD, and more of its functional benefits are proven, will larger brands enter the market with Cannabidiol-based products? The likes of Coca-Cola and AB InBev are already researching the potential use of the ingredient in their products.

But who will market the first breakthrough CBD product? Or will the issue around legality prove too big to surmount? Could an outside bet like Kava emerge or even THC instead?

Black Swan Data do predictions, not prophecies.

This report was created by our Insight team to showcase a sample of the type of work we do by combining Social data and trend prediction to understand a category landscape. To find out more, please get in touch with our team.



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