



Health

Wellness



Cannabis & Aging

March 2020



Beauty



CREATING BREAKTHROUGHS LLC

Creating Breakthroughs, LLC is a St. Louis based marketing and market research consultancy led by Earnestine Benford.

“We seek to hear the voice of our clients and their customers because we understand there is a “Human” behind every engagement.”

Global B2C/B2B consumer marketing and market research experience.

Held senior level roles in Fortune 100 companies e.g. The Coca Cola Company, Sara Lee Corporation and Disney Consumer Products.

Trained as a focus group moderator at Burke Institute.

Earnestine received her B.A. from Smith College in Neuroscience and M.B.A. in Finance from Washington University.



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CREATING BREAKTHROUGHS LLC

Resources



Published Content



Subject Matter Experts



**Qualitative
Senior Living Facilities**

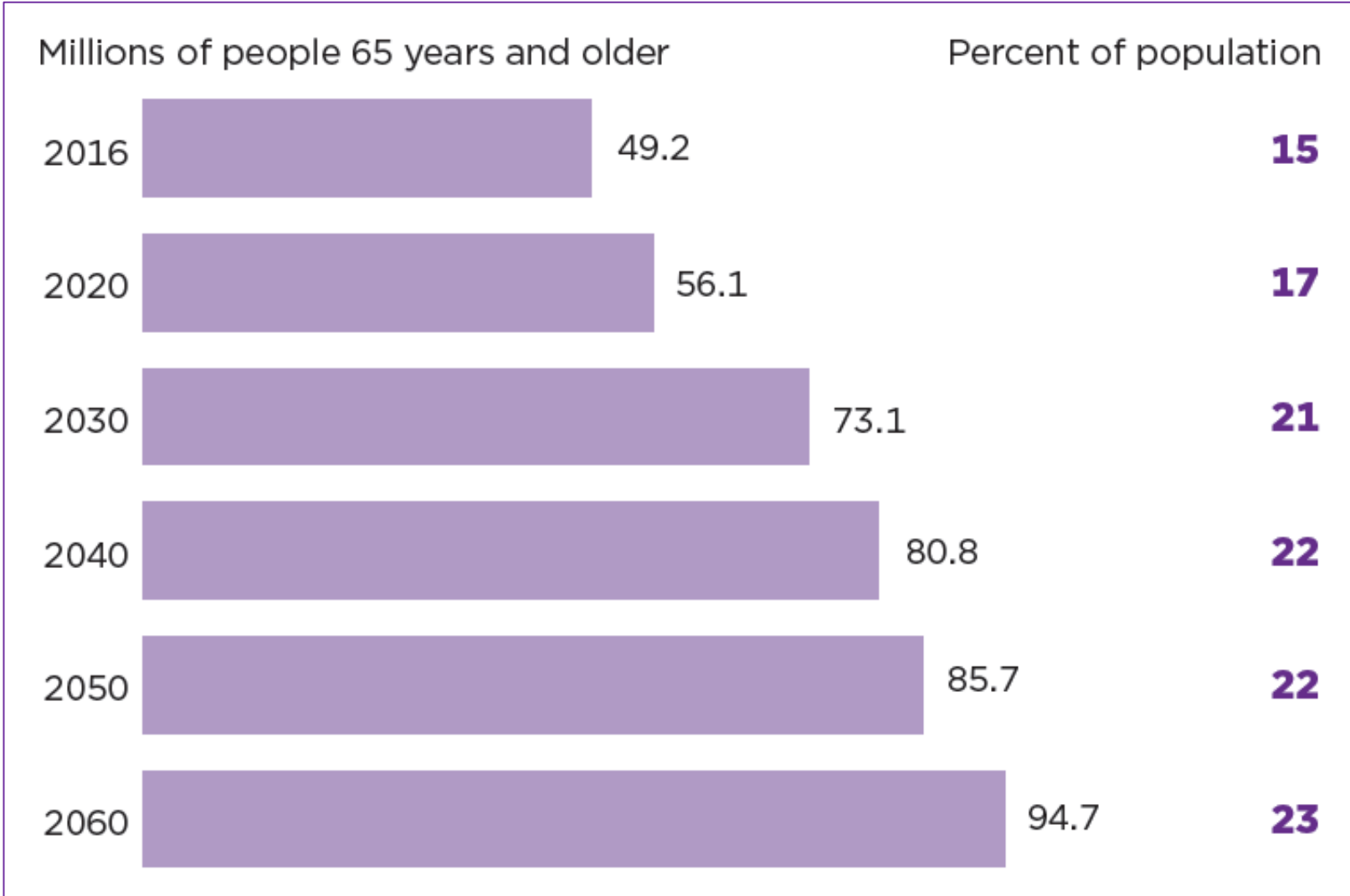
Contents

- The Aging of America: The Gray Tsunami
- A Natural Collaboration: The Endocannabinoid System and Cannabinoids
- A Big Pot of Gold: Industry Size Projections
- Boomers And Medical Cannabis
- Clinical Research Studies: Facts vs. Perception
- CBD Beauty & Wellness
- Summary



The Aging of America: The Gray Tsunami

The Gray Tsunami : One In Four Americans 65+ By 2060

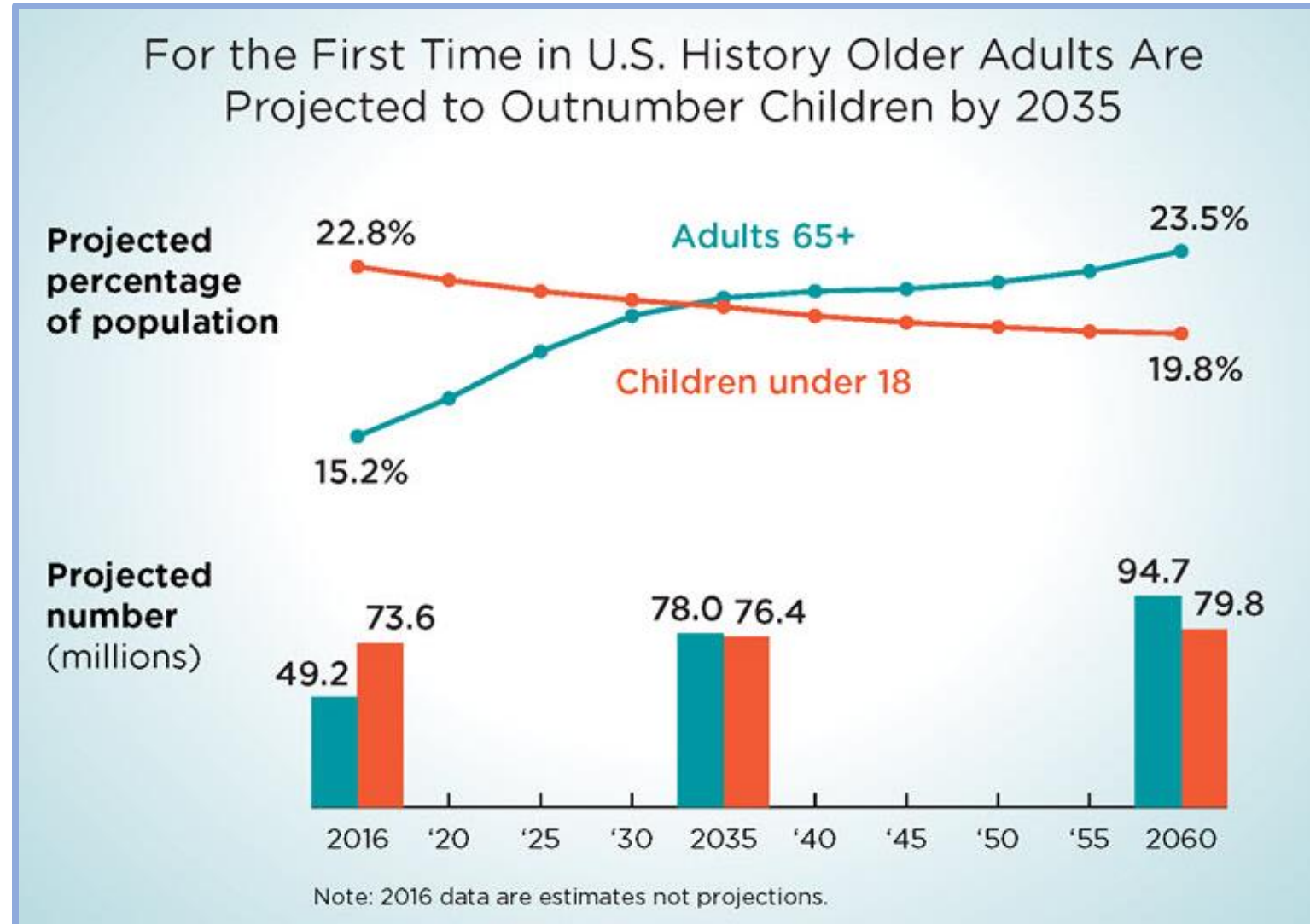


Projections Of
Older Adult
Population
2020 to 2060:
+68% Increase

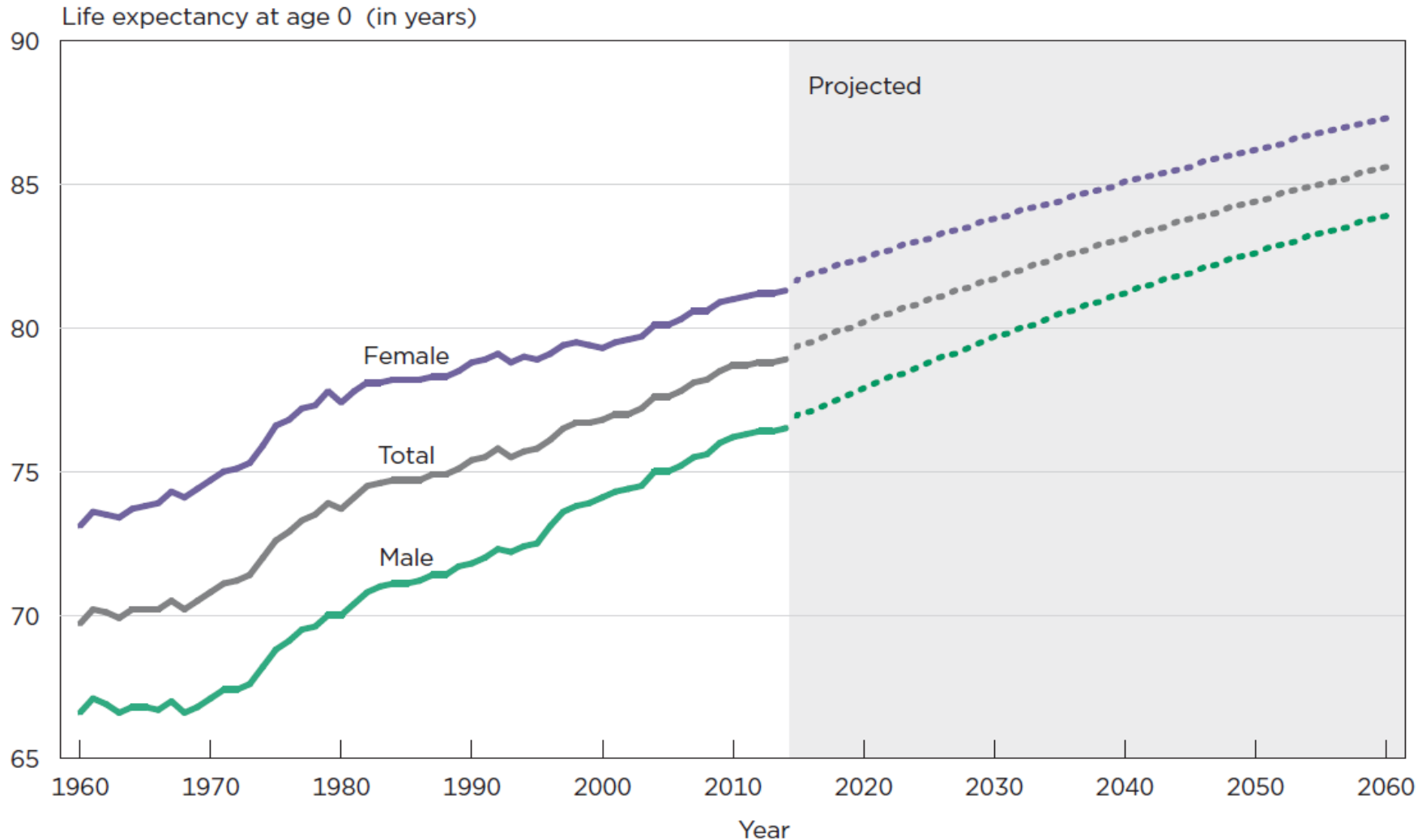
The Gray Tsunami: 2035

More Adult 65+ Than Children Under 18

Median Age
Projected to
increase from
38 to 43
by 2060



The Gray Tsunami : Driven By Increased Life Expectancy



Projected Life Expectancy To Increase From 79.7 to 85.6

The Gray Tsunami : Wave I

Baby Boomers

By 2030, All Baby Boomers Will Be Age 65 or Older



Birth Years: 1946 – 1964
Current Age: 56-74
Size: 76 Million

The Gray Tsunami : Wave 2

MILLENNIALS



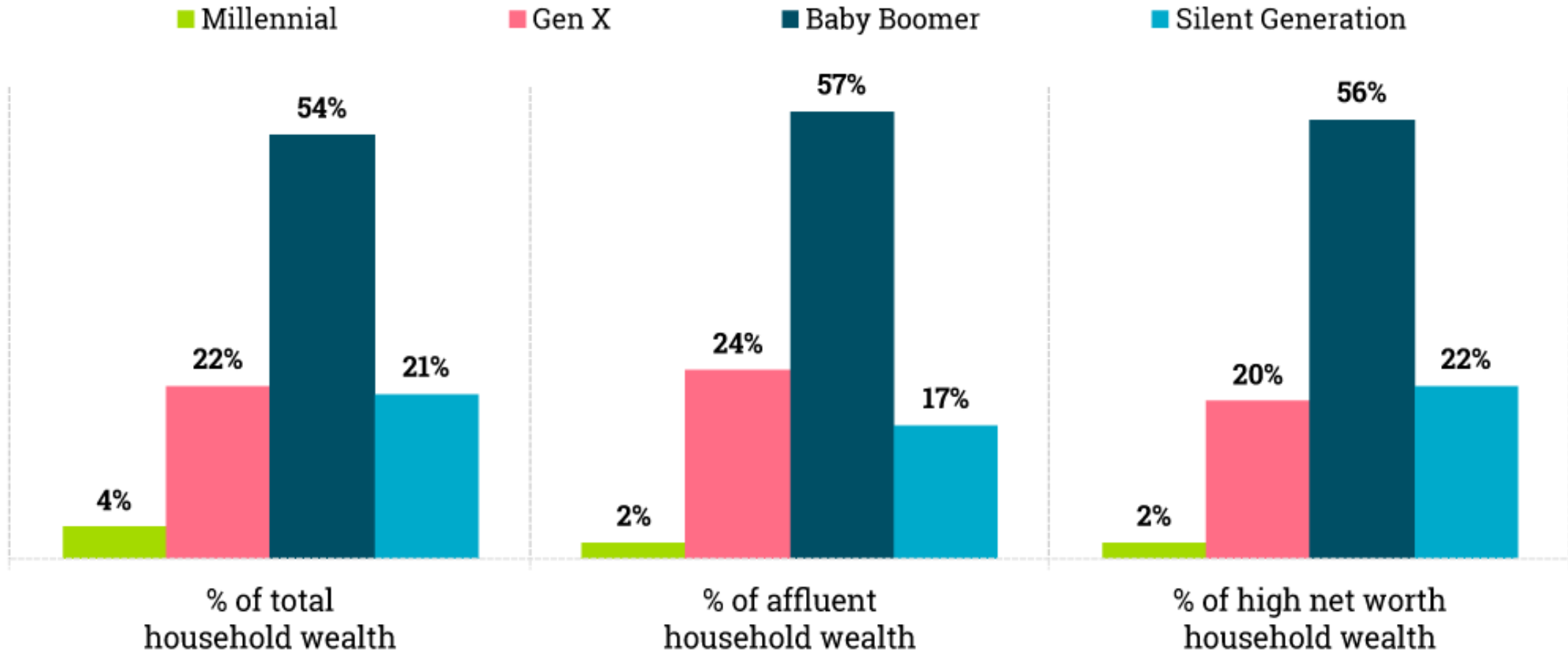
**Life Stage
Transition**



**Birth Years:
1981 – 1996
Current Age:
24-39
+15 Years:
39-54
Size: 82 Million**

Boomers Control Significant Wealth

US Household Wealth Distribution, by Generation



Published on MarketingCharts.com in April 2019 | Data Source: Packaged Facts

Affluent: \$150k+ household income; High net worth: At least \$1 million in net worth

Boomer Incomes Comparable to Millennials

Median incomes by age for 2019 in the United States:

MILLENNIALS

Age 25: \$31,026

Age 35: \$46,000

Age 45: \$50,100

Baby Boomers

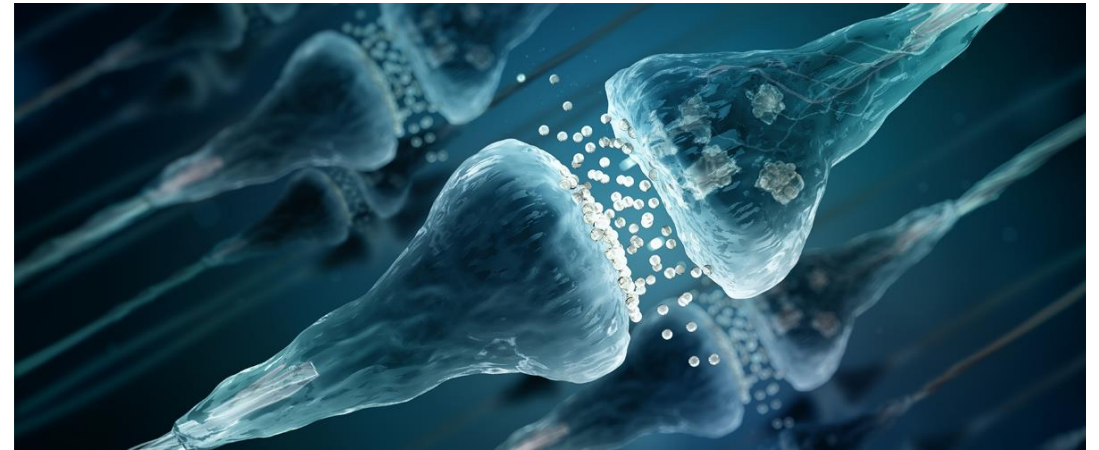
Age 55: \$50,000

Age 65: \$49,009

A Natural Collaboration: The Endocannabinoid System and Cannabinoids

The Endocannabinoid System: Circa 1992

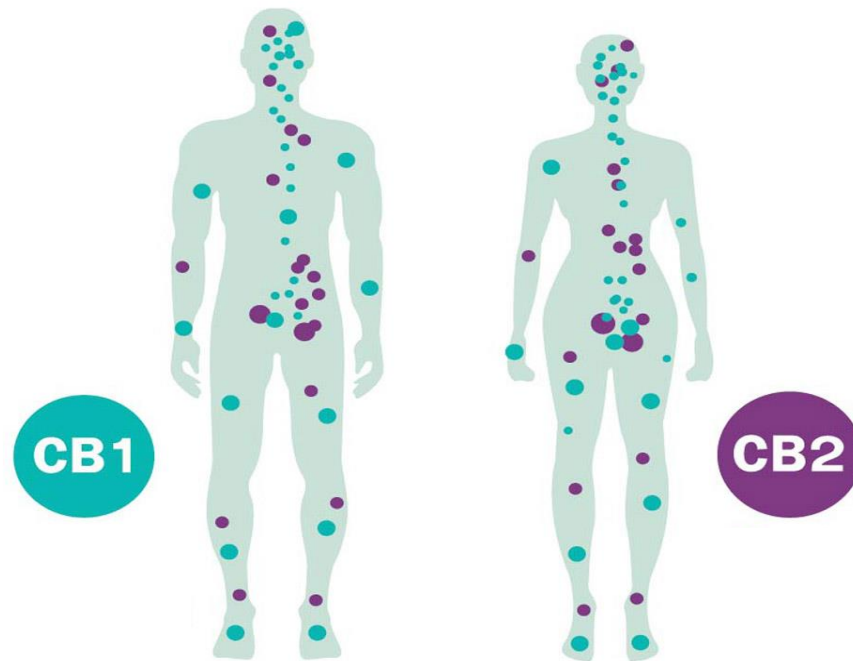
- The endocannabinoid system (ECS) is one of the body's largest neurotransmitter networks in the Central Nervous System.
- It is comprised of cannabinoids and cannabinoid receptors.
- Found in all mammals, it is responsible for keeping in balance a variety of physiological functions including:
 - Immune system response
 - Pain
 - Mood
 - Movement and coordination
 - Sleep
 - Appetite, hunger, and metabolism
 - Memory and cognition
 - Temperature
 - Sensory processing



The Endocannabinoid System

**Known Endogenous Cannabinoids: 2 AG and Anandamide
Are Produced in our bodies naturally and bind with CB1 and CB2 Receptors**

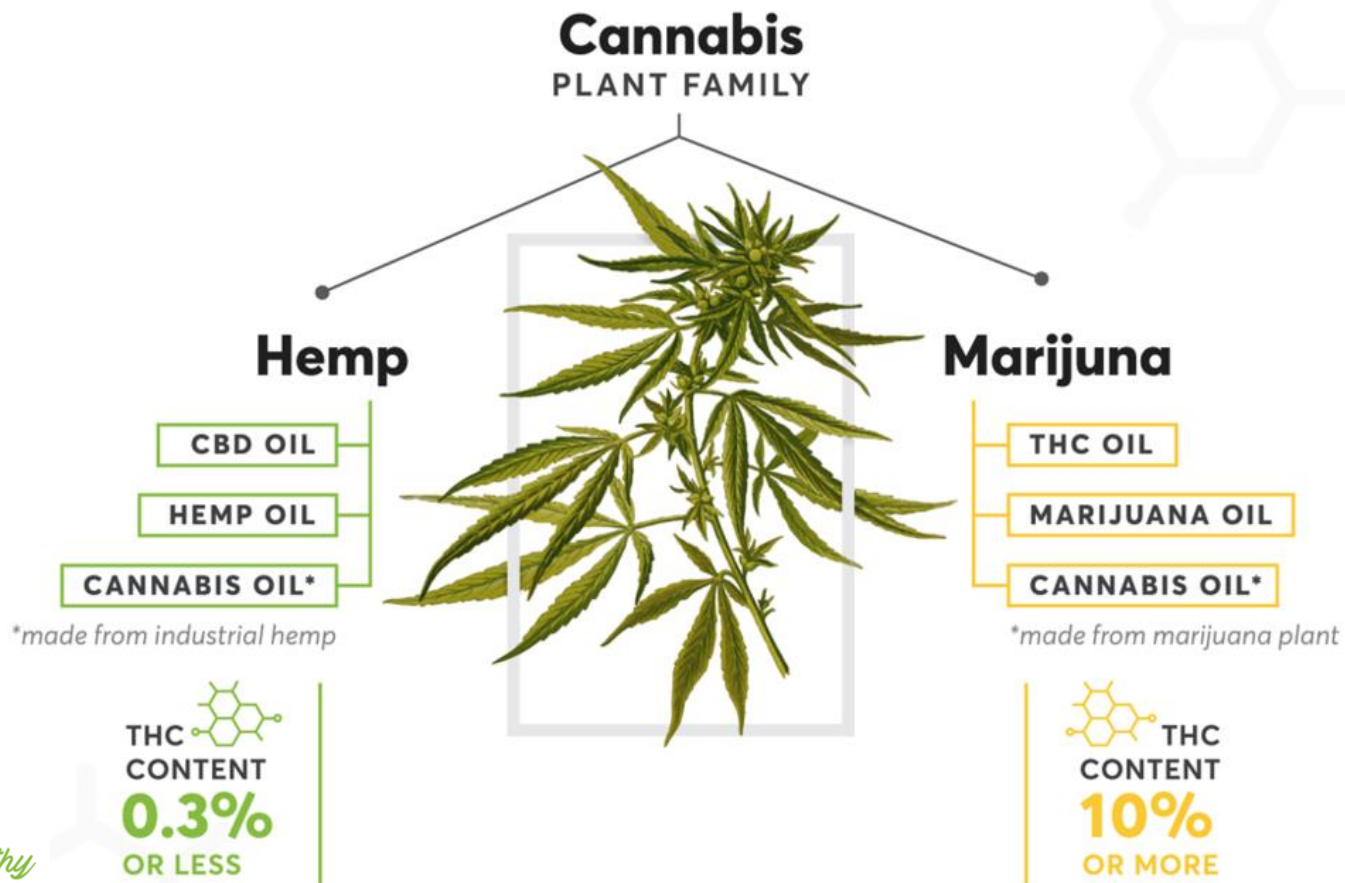
**CB1 receptors are
primary found in the
brain + central nervous
system and to a lesser
extent in other tissues.**



**CB2 receptors are
primary found in the
peripheral organs
especially cells
associated with the
immune system**

Plant Based Cannabinoids-Phytocannabinoids Interact With The Endocannabinoid System

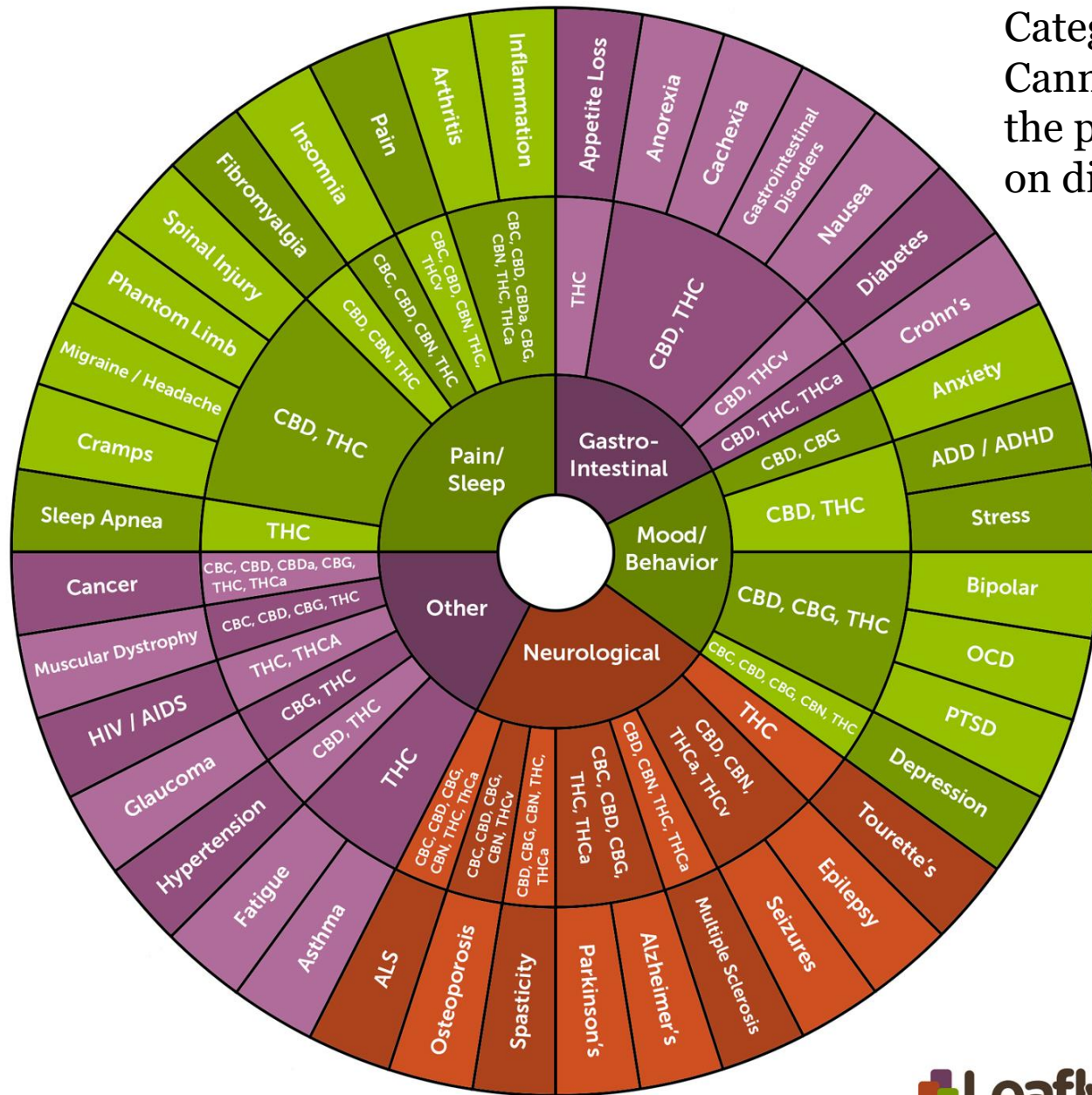
Best Known Phytocannabinoids: CBD & THC
Occur naturally in Cannabis Plants And Interact with CB1 & CB2 Receptors



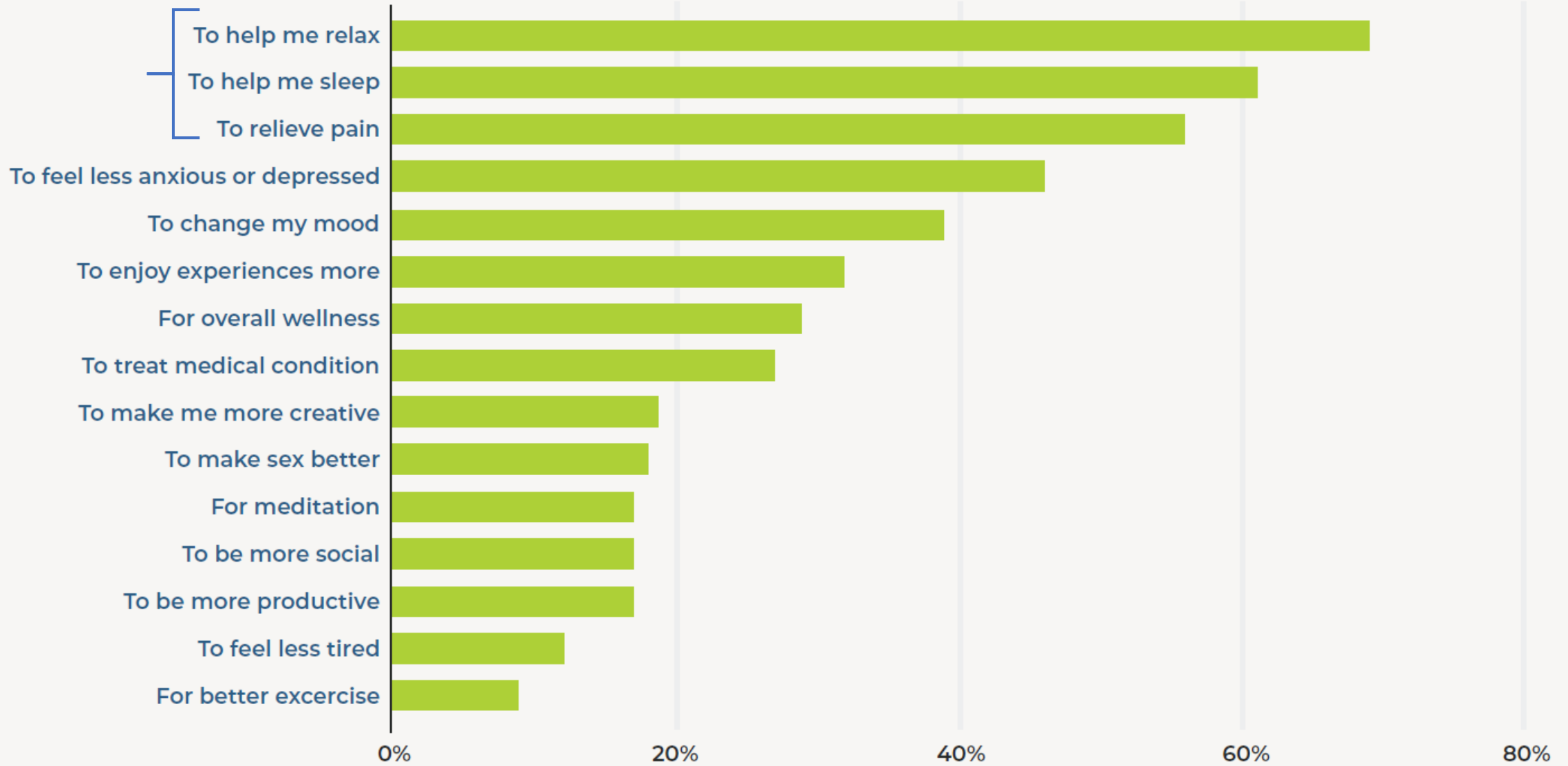
CBD: Cannabidiol
&
THC: Tetrahydrocannabinol
Are cannabinoids most associated with medicinal and recreational properties

Cannabis contains over 500 distinct compounds which includes over 100 Cannabinoids, Terpenoids, flavonoids and Omega Fatty Acids

Categorization of Cannabinoids by the potential impact on disorders.



WHY PEOPLE USE CANNABIS



CBD and THC Are The Tip Of The Spear

Other Cannabinoids Are Being Researched and Developed To Produce Specific Outcomes:

- Appetite suppressant (THCV)
- Pain Relief (CBN)
- Slow Bacteria Growth (CBG)
- Appetite Loss (THCA)



“There are many strains/products that have been and are being developed to serve a wide range of specific needs. I wouldn't necessarily say that they are being developed specifically for seniors but rather that they may predominantly serve senior groups with those needs. A few examples of this are products that developed for:

Joint pain | Low energy | Erectile dysfunction | Hypertension

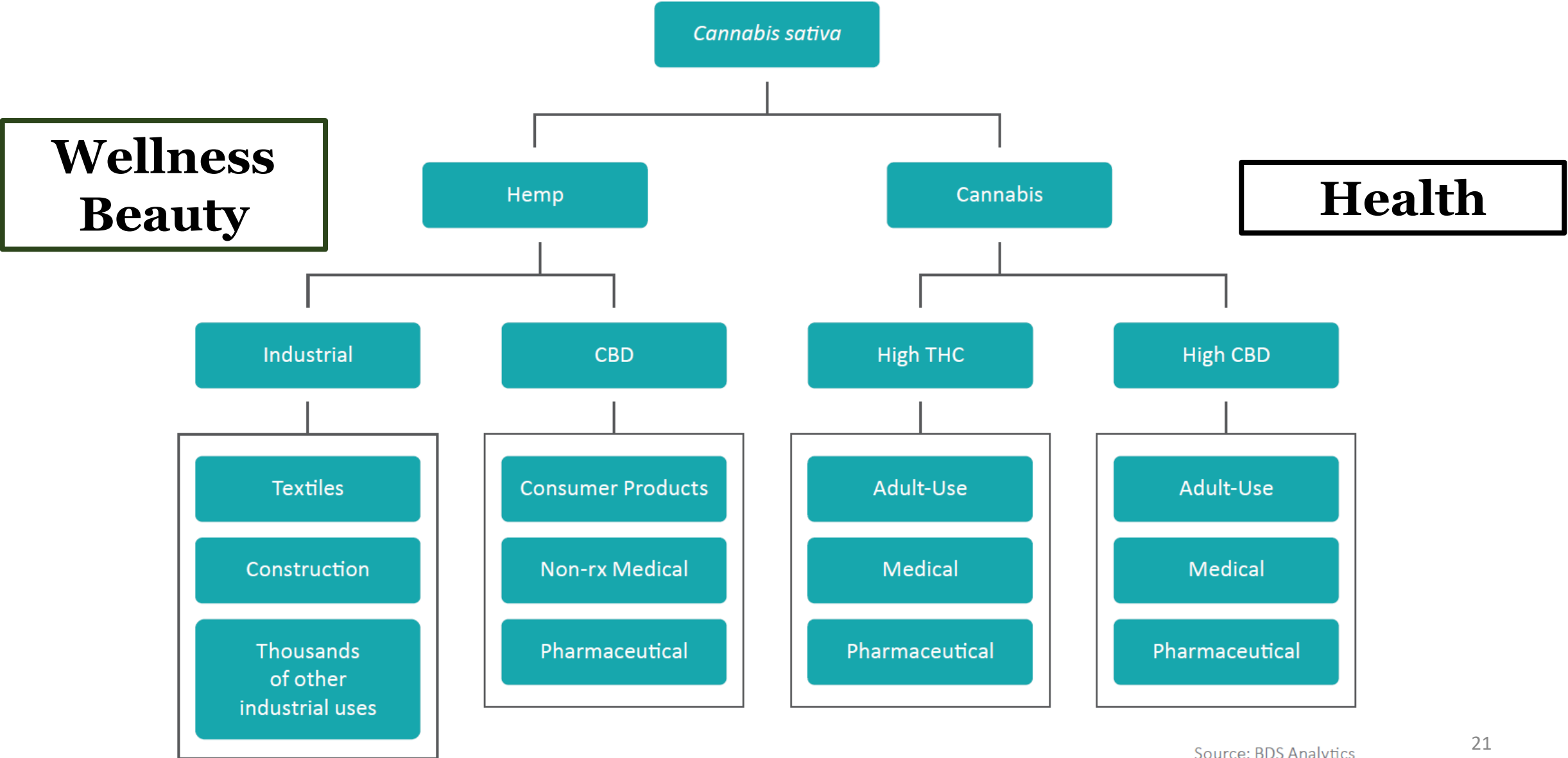
In general, it is well within the realm of our current capabilities to create products that could serve a wide range of senior needs through selective breeding programs or post-production formulations.”



[Nick Johnson LinkedIn](#)

Nick Johnson
Cannabis Commercial
Agriculture, Operations, Product
Design, Project Management

Hemp - Cannabis: THC and CBD Roadmap



Consumers Lack Information & Understanding

56% Of U.S. Adults (21+) do not understand the difference between THC and CBD

59% are confused about the effects of hemp-derived products

Only **22%** of U.S. Adults (21+) knows what cannabinoids are and can articulate the definition



“Over the decades, we've lost our connection to the cannabis plant because of misleading information we've been deliberately given. As cannabis comes out of the shadows, we are better able to see what it is: a powerful medicinal plant, rich in cannabinoids, terpenes and flavonoids, even more so than other plants that we've used for centuries for health and healing.

The abundance of these chemical compounds can address a myriad of conditions, particularly inflammation, anxiety and pain with minimal negative side effects. With less chronic or acute anxiety and pain, our quality of life can vastly improve.

Finally, more people are getting the chance to access good, natural medicine to live a healthier life.”



[Ellementa](#)

Aliza Sherman
Ellementa CEO



A BIG “POT” OF GOLD!

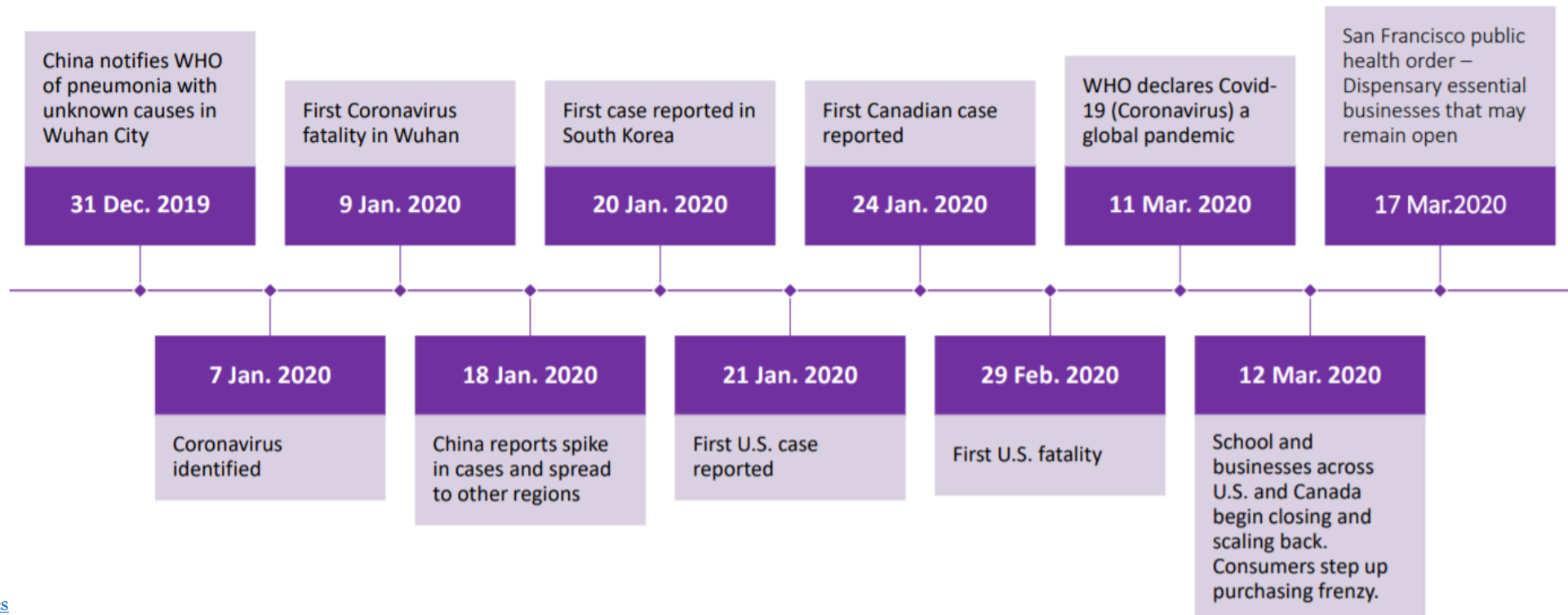
\$41 Billion In Global Sales By 2024
Prior To COVID-19



COVID 19 Preliminary Impact On Industry

- The industry estimates included in this document were published prior to the COVID-19 crisis.

Timeline of COVID-19 Crisis



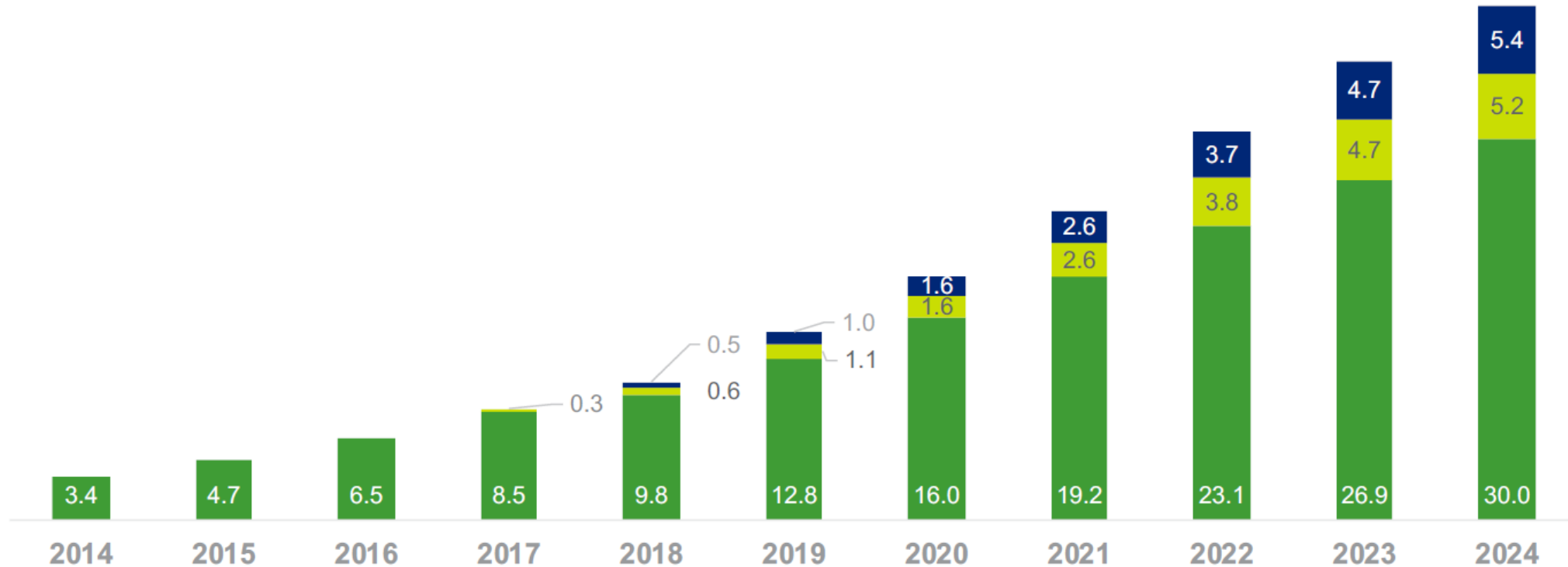
COVID-19 Preliminary Impact On Industry

- At this juncture *most* dispensaries (medical/recreational) are considered “Essential Business” which means they can stay open. All medical dispensaries so far are being considered Essential.
- Increased purchases have been recorded broadly in the face of uncertainty about product availability. Some describe as “stocking up”.
- The increased sales have reduced weeks of supply on hand in key product categories e.g. Flower
- However, in CA and NV where shelter-in-place (for CA) and non-existent tourism traffic (for NV) has resulted in dramatic declines in sales.
- Online/delivery sales have increased.
- Currently, supply chain overall is not in jeopardy but that could change depending on the duration of shutdowns, social distancing, etc.
- Cannabis legislation, e.g. SAFE Banking act, has slowed because of the focus on COVID 19.
- The willingness to invest has slowed because of economic uncertainty.

U.S Will Represent Over 70% Of Global Market

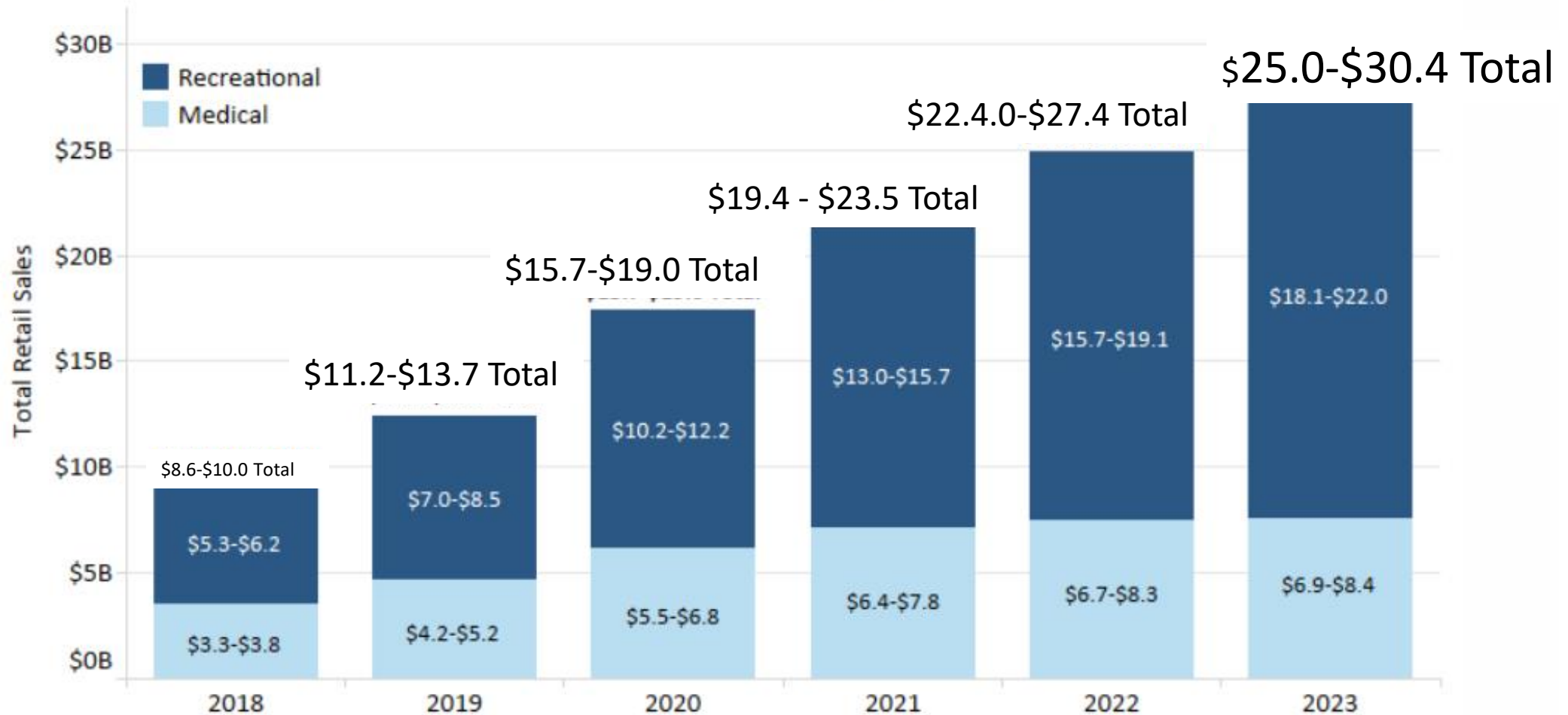
BDS Analytics Projects a Global Market of ~\$41B In 2024;
The U.S. Will Continue to be the World's Largest Market

Global Legal Regulated Marijuana Spending by Region (\$USD Billions)



\$30 Billion U.S. Retail Cannabis Sales By 2023

U.S. Cannabis Retail Sales Estimates: 2018 - 2023
(In Billions Of U.S. Dollars)



Source: 2019 Marijuana Business Factbook

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New Legal Cannabis Markets Rapidly Increasing

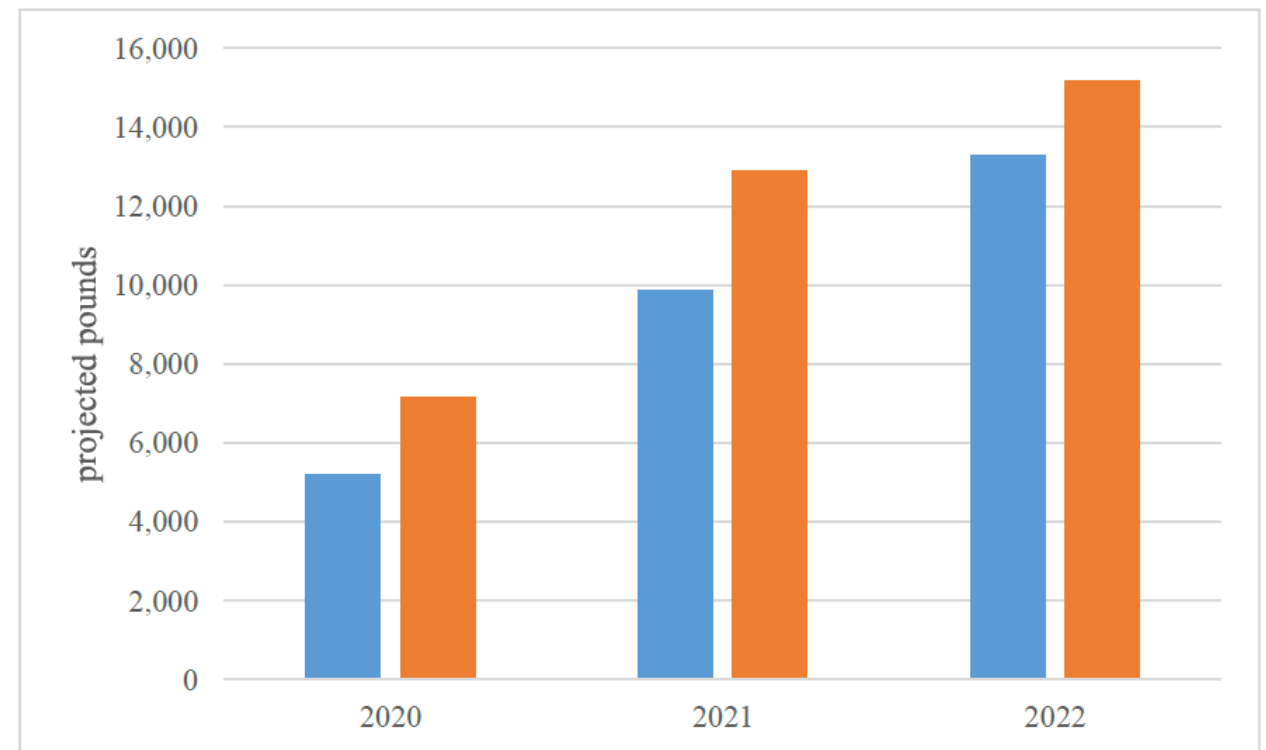
2020 - Medical Marijuana Now Legal In Missouri

Researchers Projected 19,029 Patients & 7,000 Pounds Consumed in 2020

Projected Number of Qualified Medical Marijuana Patients in Missouri, 2020 - 2022

Year	Projected Number of Qualified Patients
2020	19,029
2021	22,542
2022	26,102

Consumption Estimated Range: Blue is Low and Orange is High



Actual Patients Exceeded Projections by 84%



More than 35,000 in Missouri approved to buy medical cannabis

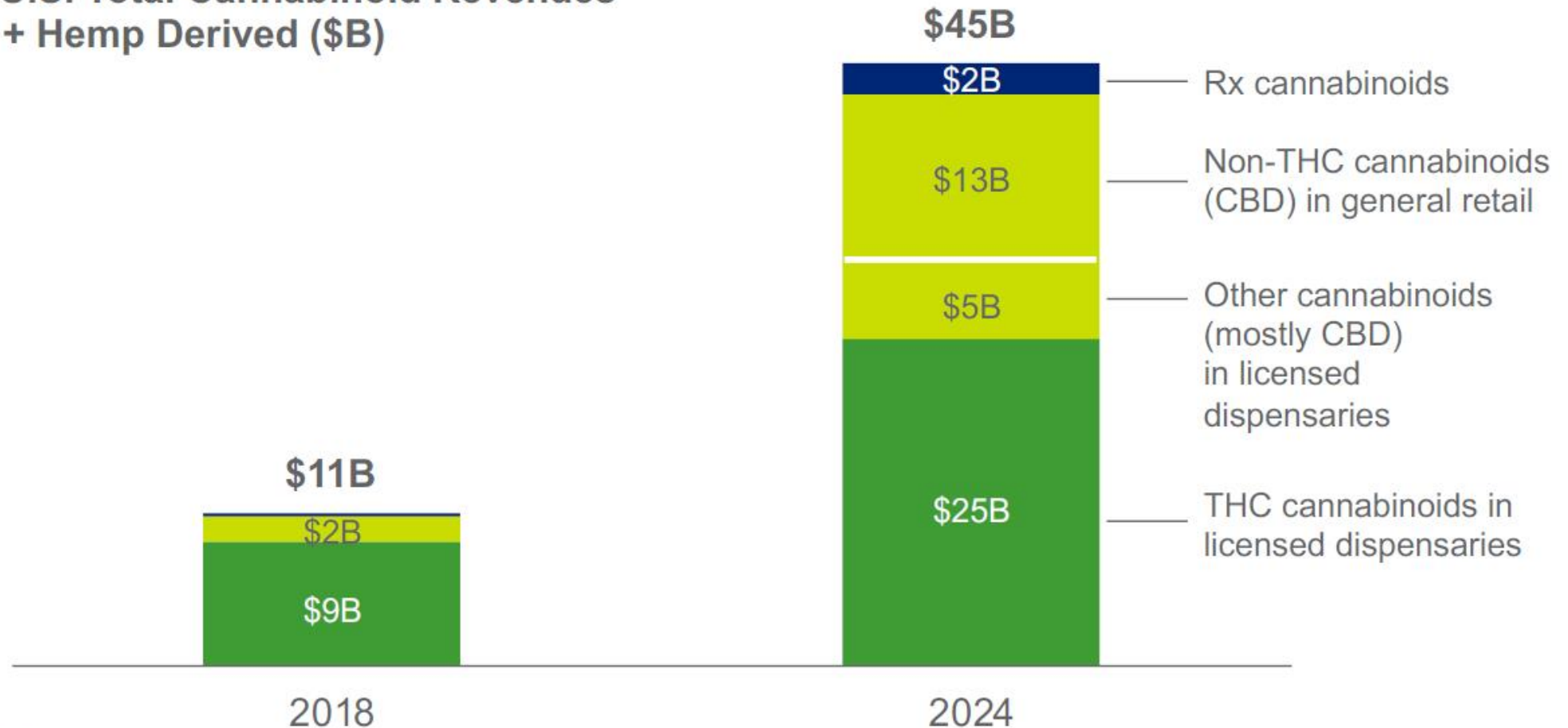
Published March 3, 2020



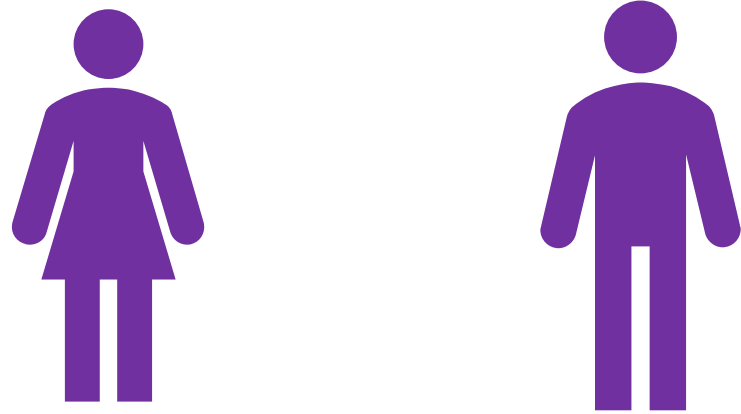
CBD Adds Another \$20 Billion In Projected Sales

With Cannabinoids Like CBD Crossing into General Retail, BDS Analytics Projects a ~\$45B U.S. Total Cannabinoid Market in 2024

Projected U.S. Total Cannabinoid Revenues
Marijuana + Hemp Derived (\$B)



Current CBD Consumer Profile



45% Female / 55% Male

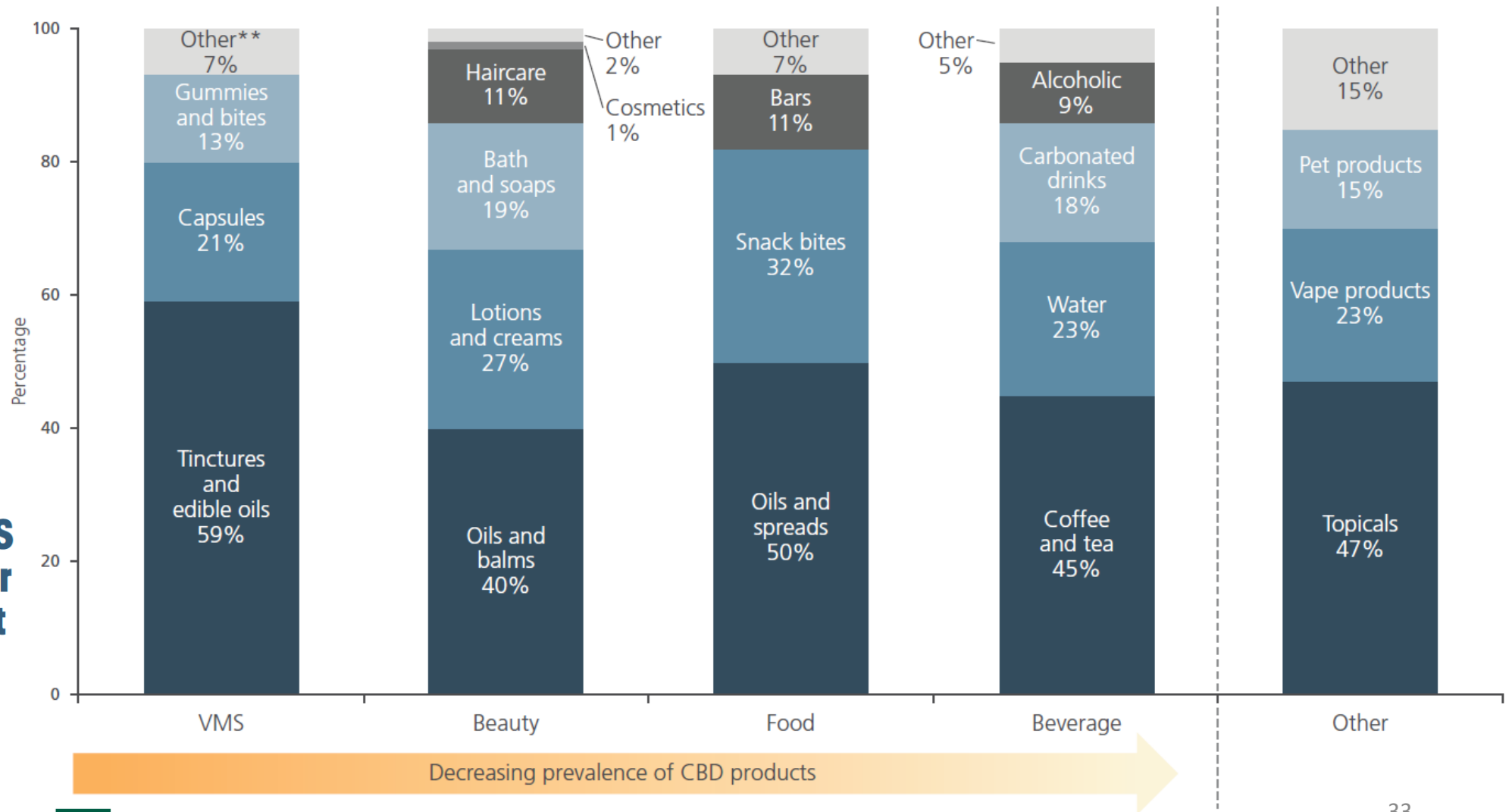
Average Age: 43 Years Old

40% College Degree or Higher

50% Full-Time Employed

CBD Enters Consumer Packaged Goods Markets

CBD product formats across end markets* (January 2019)

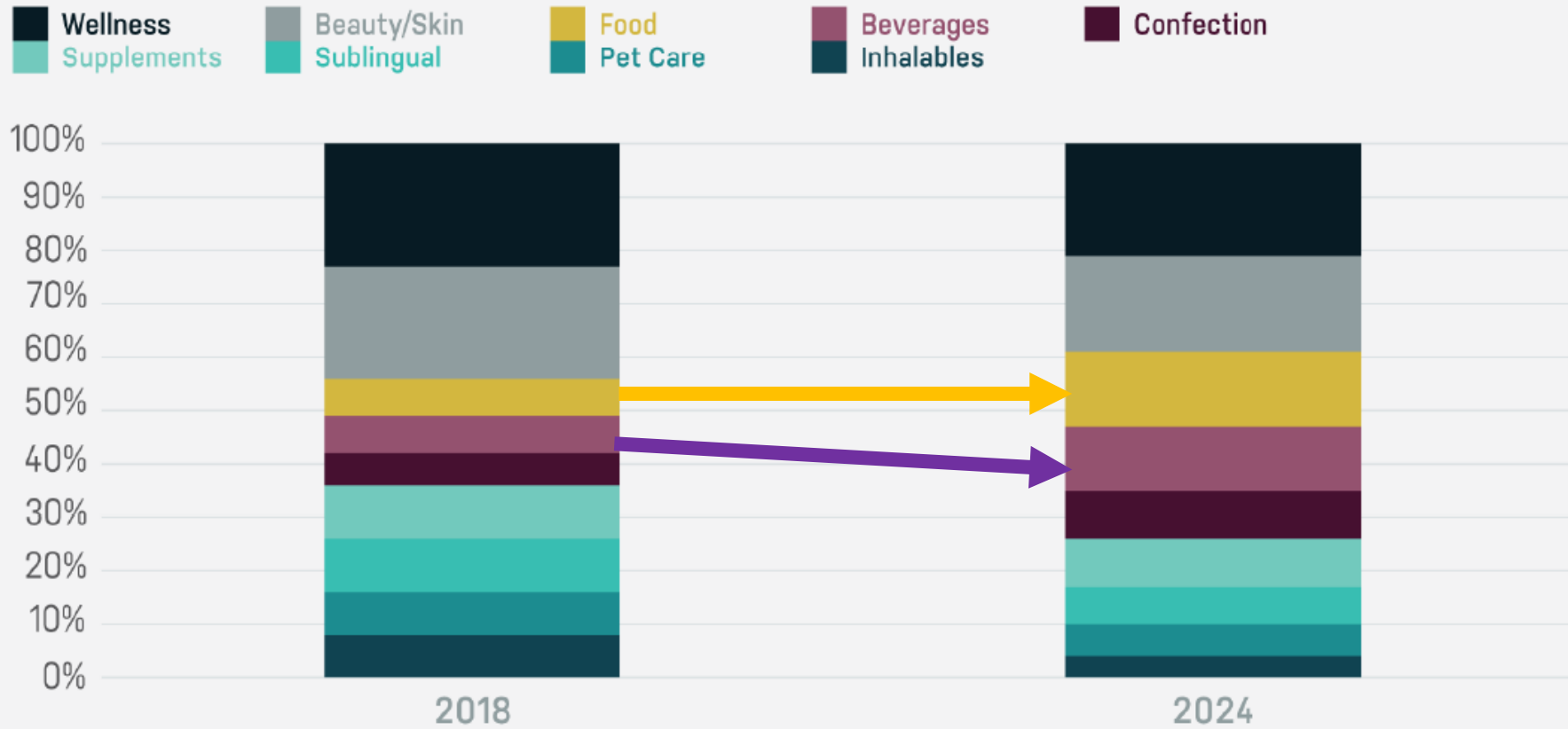


The passing of the US Farm Bill in December 2018 was the catalyst to an explosion of commercial interest in CBD.

CBD: This Cannabis Extract Is Creating a Different Kind of Buzz was written by Maria Steingoltz, Managing Director, and Erin Connor, Consultant, in L.E.K.'s Consumer Products practice. Maria and Erin are based in Chicago. For more information, contact consumerproducts@lek.com.

Food & Beverages Category Share Will Increase

US CBD Spending, Category Share 2018 vs. 2024



Source: BDS Analytics Industry Intelligence

Persona Name: Robert: AKA - What's Next?

Persona Description: Actively engaged in life made better

Goals: Explore new experiences. Surprise myself and others.

Challenges: While I am in good health overall at times my active lifestyle comes with a few aches and pains that slow me down.

Robert's Story

I have been married to the love of my life for 40 years, I have a wonderful family and enjoyed a successful career. I am grateful for a life well lived and now have the personal freedom to see what else I can do...what new things can I do next.

Thanks to my wife I am use to a fairly healthy diet and I love to be active. Never been big on medication. My wife had problems with her health and had a bad experience with prescription medications. She's ok now.

I'd prefer to use more natural ways of relieving minor aches and pain rather than asking my doctor for pills. I keep hearing about that CBD, not sure what that stands for or what's in it ...but I saw a golf buddy using it on his hands and arms. Not sure about what it does to you, so I am not sure about trying it. I am afraid that instead of helping, it will have a bad effect and prevent me from doing the things I love.

Wish I could find out more, maybe I should try it – anything to help my golf score! I think I will ask my buddy about it.



Demographics:

Age: 67

Education: College

Financial Security: Retired/High

Location: Orlando, FL

Residence: Private

Health Concern: Low

Marital Status: Married

Children: Adults

Grandchildren: Yes

As The CBD Market Grows So Will The Need For Broad Based Regulation

As CBD products become more widespread, so will the need for standard requirements ensuring quality, safety, efficacy and consistency.

The CBD Product Market Will Mature

CBD is being added to products across the retail spectrum from food to make-up, but with little legal oversight or requirements, the products can easily be mislabeled or ineffective. Clever Leaves chief executive Detwiler says in 2020 CBD standards will begin to emerge based on customer demand. “Consumers are getting more savvy on the benefits of CBD and they will begin to insist on knowing exactly what they are paying for and what they are getting when they purchase ‘CBD’,” Detwiler said.

Product Consistency and Transparency Key To Consumer Confidence Moving Forward

- Within the Consumer-Packaged Goods industry, consistency in production, quality, safety standards and labeling helps consumers know what to expect and is regulated by U.S. Government Agencies e. g. FDA
- The Schedule 1 drug classification of cannabis shifts the regulatory responsibility from the U.S. Government to the “legal” state government.
- Independently, states like California have enacted a clear set of [rules for the industry](#). These rules include guidelines so that products sold legally in California meet a certain standard for quality, consistency, and safety regardless of form. But the “rules” are not consistent from state to state.

Product Consistency and Transparency Key To Consumer Confidence Moving Forward

- Even with these regulations in place testing method standardization across labs are inconsistent within legal states.
- Efforts to guide the industry include The National Cannabis Industry Association's [Cannabis Testing Policy](#) report offers a roadmap to address the critical issue in the industry.



Boomers And Medical Cannabis

Aging Well: Boomers Living Longer, Living Better



Marijuana use among baby boomers rose tenfold over decade as seniors seek out pot for medical treatment



The New York Times

THE NEW OLD AGE

Older Americans Are Flocking to Medical Marijuana

Oils, tinctures and salves — and sometimes old-fashioned buds — are increasingly common in seniors' homes. Doctors warn that popularity has outstripped scientific evidence.

Baby boomers were once demonized for using marijuana, but now they're swearing by it as a miracle cure

Lindsay Dodgson May 31, 2019, 2:01 AM



Day-tripping to the dispensary: Seniors in pain hop aboard the canna-bus



THE WALL STREET JOURNAL.

THE FUTURE OF EVERYTHING

THE CLINIC THAT HELPS SENIORS FIND THE RIGHT MARIJUANA TREATMENT

Could pot help keep seniors off opioids and other prescription drugs?



SOCIAL & POLICY ISSUES JUNE 12, 2019

In U.S., Medical Aid Top Reason Why Legal Marijuana Favored



Almost Half of Boomers “Don’t Have Problem with Medical Cannabis”

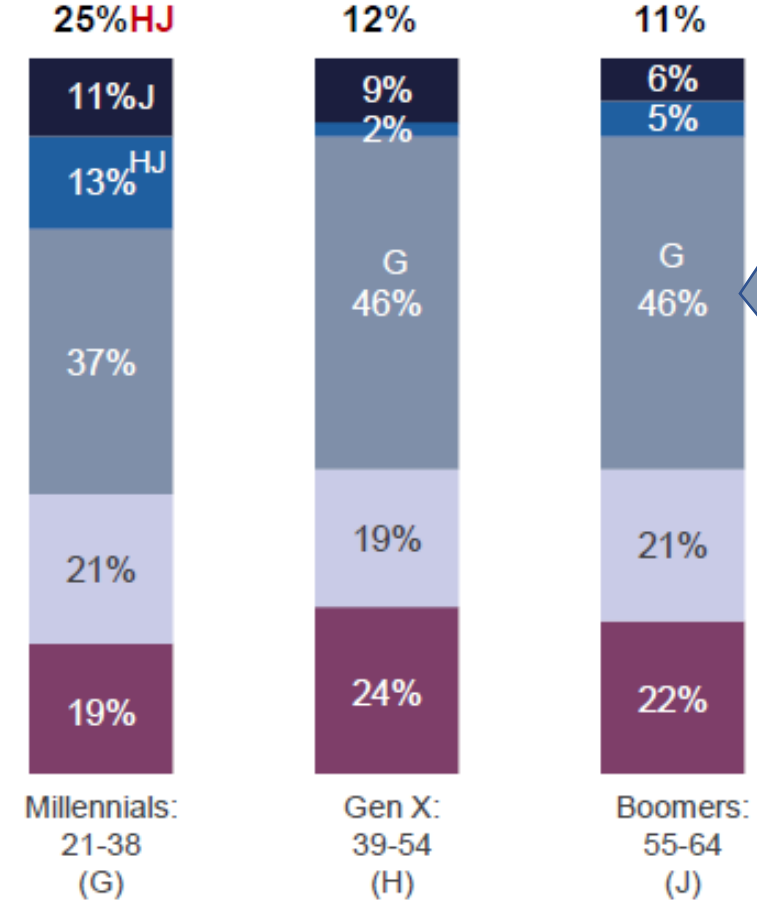
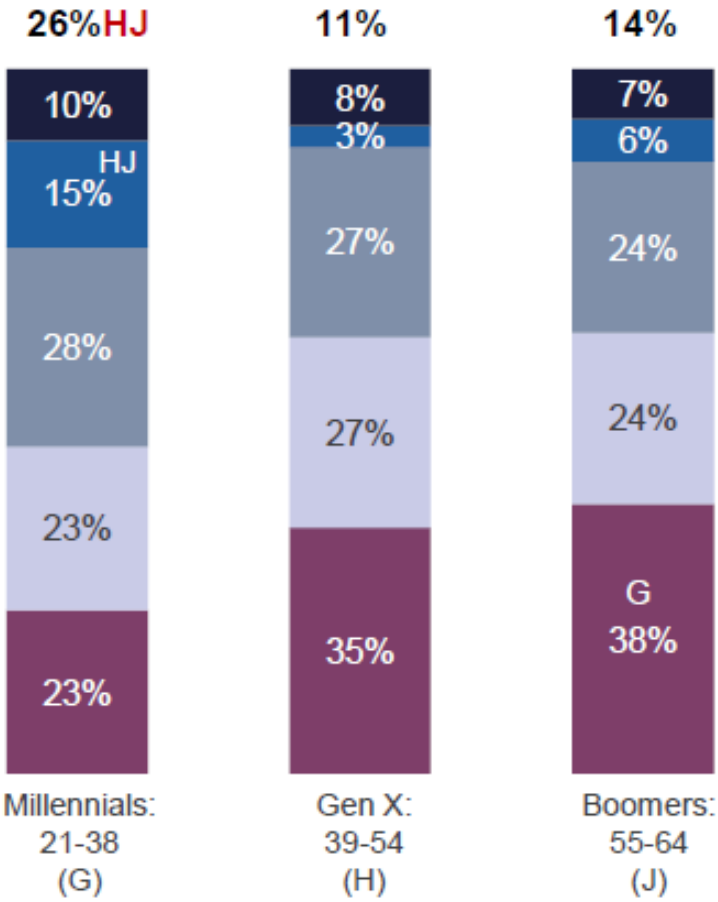
Marijuana/Cannabis Usage and Perception by Generation

(21-64 years of age)

Recreational Cannabis

Medical Cannabis

- This is something I do regularly
- This is something I do on occasion
- I don't have any problem with this
- I'm against doing this myself, but don't mind if others do
- I'm completely opposed to this



Attitudes on Medical & Recreational Cannabis in Older Adults (60+) in Colorado

Medical cannabis use	Do not agree				Strongly agree
	[1]	[2]	[3]	[4]	[5]
I currently believe that use of marijuana for a medical purpose is acceptable. (N = 265)	5%	3%	15%	18%	59%
When I was 18, I believed that using marijuana for a medical purpose was acceptable. (N = 256)	53%	9%	21%	6%	12%
Medical marijuana use is risky. (N = 263)	28%	23%	28%	11%	10%
Using medical marijuana leads to the use of harder drugs (N = 262)	47%	16%	16%	6%	15%
The important people in my life have positive attitudes toward using medical marijuana. (N = 261)	18%	11%	20%	20%	31%
Regardless of my current state law, I am in favor of legalized marijuana for medical benefits (N = 256)	8%	2%	13%	20%	60%
Recreational marijuana use is risky. (N = 266)	18%	17%	17%	15%	33%
Using recreational marijuana leads to the use of harder drugs (N = 264)	35%	16%	16%	12%	22%
The important people in my life have positive attitudes toward using recreational marijuana. (N = 264)	31%	14%	24%	15%	17%
Regardless of my current state law, I am in favor of legalized marijuana for recreational use (N = 257)	31%	12%	13%	16%	28%

Boomers Make Up 30% Of Cannabis Market

BOOMERS:

An important and growing segment, BUT they do not fit “neatly” in a box



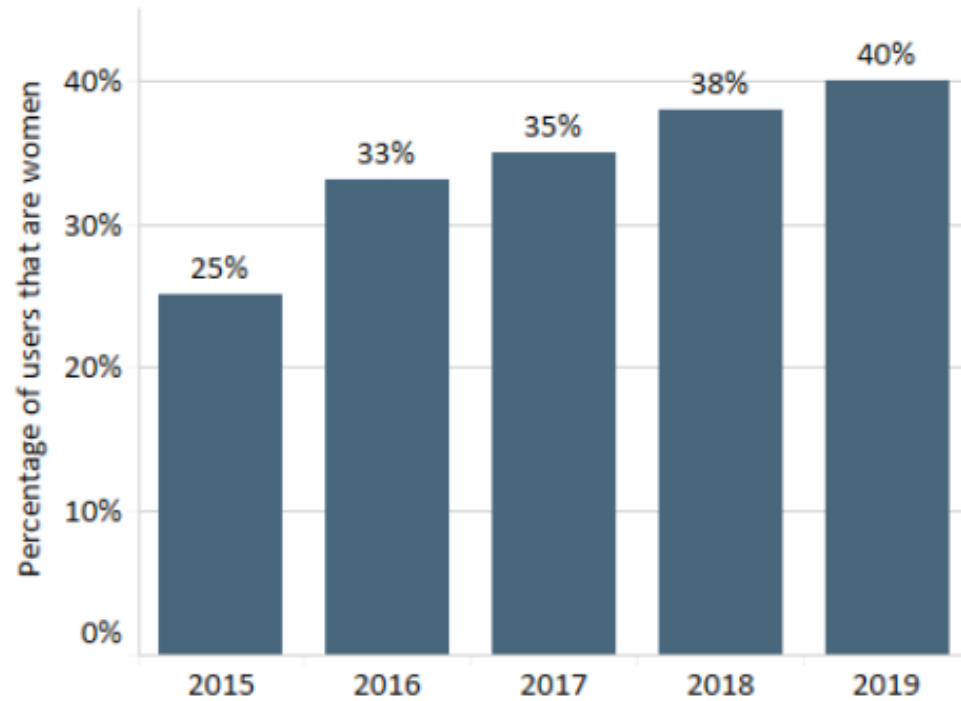
“When we talk about boomers there is a strong perception that they’re using for more of a health and medical benefit rather than a recreational and social benefit,”

“But we do see a sizable portion consuming for recreational and social as well.”

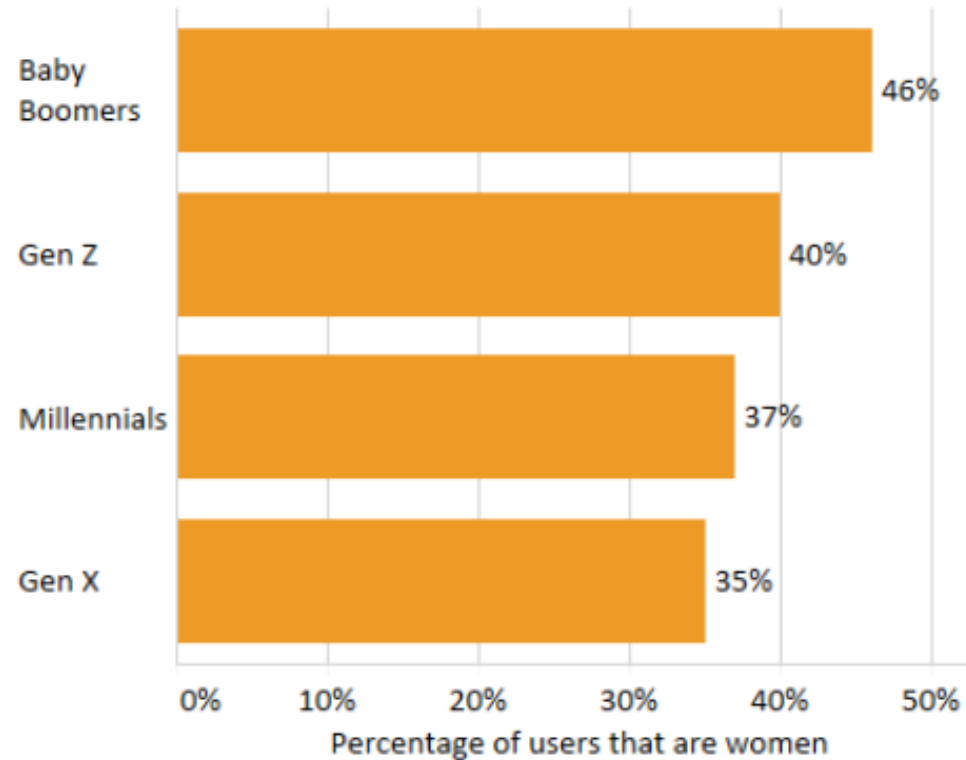
BDS Analyst Emily Sanchez

Women Engaging The Industry Continues To Grow

Proportion of Women Users by Year: 2015 - 2019



Proportion of Women Users by Generation



Source: Eaze

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U.S. Cannabis Consumer Insights: Boomers

- 67% Consume for Health/Medical Reasons
- 59% Consume for Social Recreational Reasons
- 60% Inhale Pot
- 50% Consume edibles
- 38% Use topicals
- They are significantly more Medically motivated
 - 90% believe it relieves pain and/or has medical benefits
- Likely to consume to replace Rx/OTC
- Likely to want to ease aches and pains



Boomers look to Industry For Education

“They’re familiar with cannabis in another generation of it, so many aren’t familiar with all the new ways of consumption and new types of products.”

- Education-related social media
- Among Boomers who shop dispensaries, **60%** name budtenders as their main information source
- **40%** rely on cannabis websites
- **25%** read cannabis-related publications to obtain information.

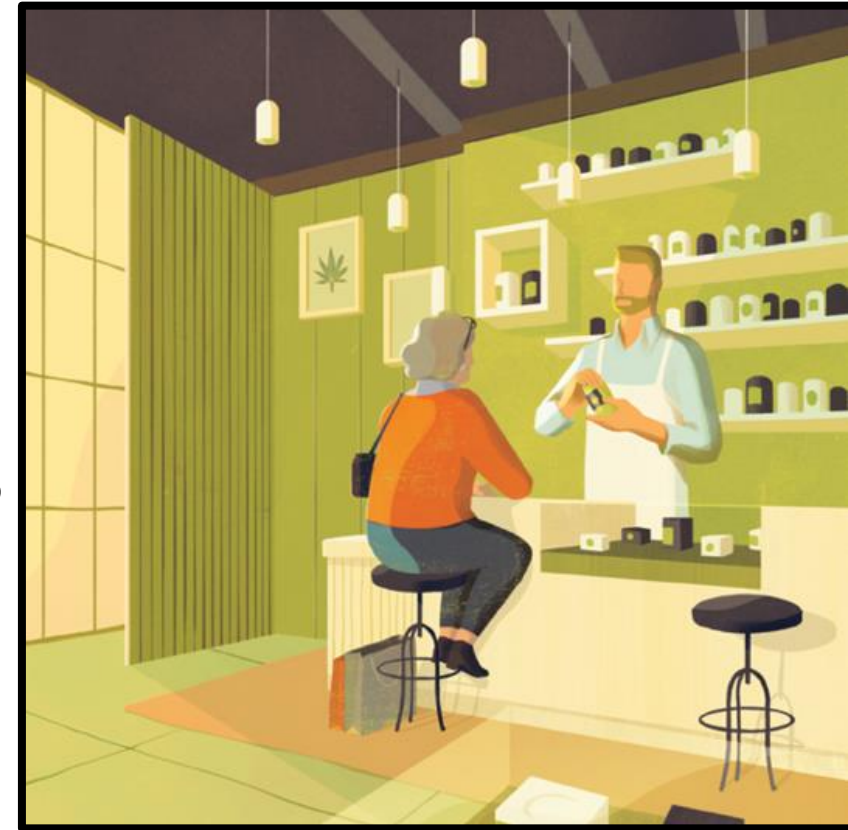
“Boomers are more likely to get info from these sources than by talking with a doctor or going to health publications or websites,” Jessica Lukas, BDS Analytics

Boomers Expect Personalization, Professional, Trustworthy Service

“Customer service is everything to the baby boomer. They grew up in brick and mortar,” she explains. “Hands-on communication and interaction with people working in dispensaries is mission critical. Boomers need to be able to ask questions and get the help that they want,”

Jennifer McLaughlin, Calyx Peak Companies

No. 1 driver for how boomers choose their dispensary is a trustworthy and professional staff.



Persona Name: Suzanne: AKA - Relief Please

Persona Description: Grateful despite life's struggles

Goals: Experience life without pain and shaking again

Challenges: Battling Parkinson's Disease for decades. Opioids and Percocet just barely covers the pain.



Suzanne's Story

I was 50 when the shaking and pain started. My prescription meds help but at times those side effects are worse than my shaking and pain.

Last year I ran into friends at the supermarket, they suggested I try marijuana. I laughed and told them...I don't want to get high, that's for the young people. But they insisted it could help. I asked my daughter to look it up on the computer to find out more. She did.

Eventually, I went to my doctor and got one of those cards to get my weed (smile). I tried a chocolate bar, I love chocolate, but I ate too much...my head was swimming. Then I went back to the store and got some drops they call tincture. That worked much better at night and in the morning.

I don't take as many of the opioids anymore and the drops I take are cheaper. I don't feel like I did when I was 49 but I feel better than last year. I am grateful for my friends and daughter for helping me find some relief.

Demographics:

Age: 70

Education: High School

Financial Security: Retired/Low

Location: Denver, CO

Residence: Lives with Daughter

Health Concern: High

Marital Status: Widower

Children: Adults

Grandchildren: Yes

Retirement Communities Have Great Appeal to Boomers Who Choose Not To Age In Place



Boomer Aging In Place

Medical Marijuana Is A Challenge For Senior Living Operators | Many Don't Know Where To Start

Associated Press

Seniors at this upscale retirement community are really into cannabis-infused products

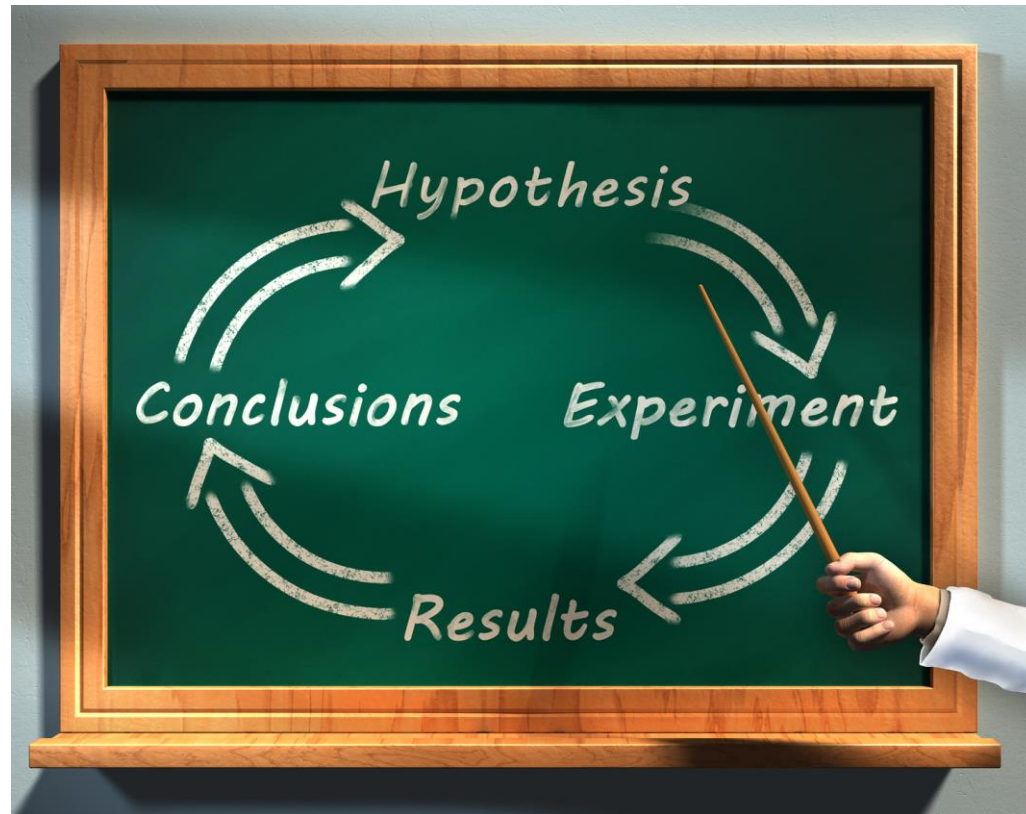
Published: March 25, 2019 at 3:16 p.m. ET



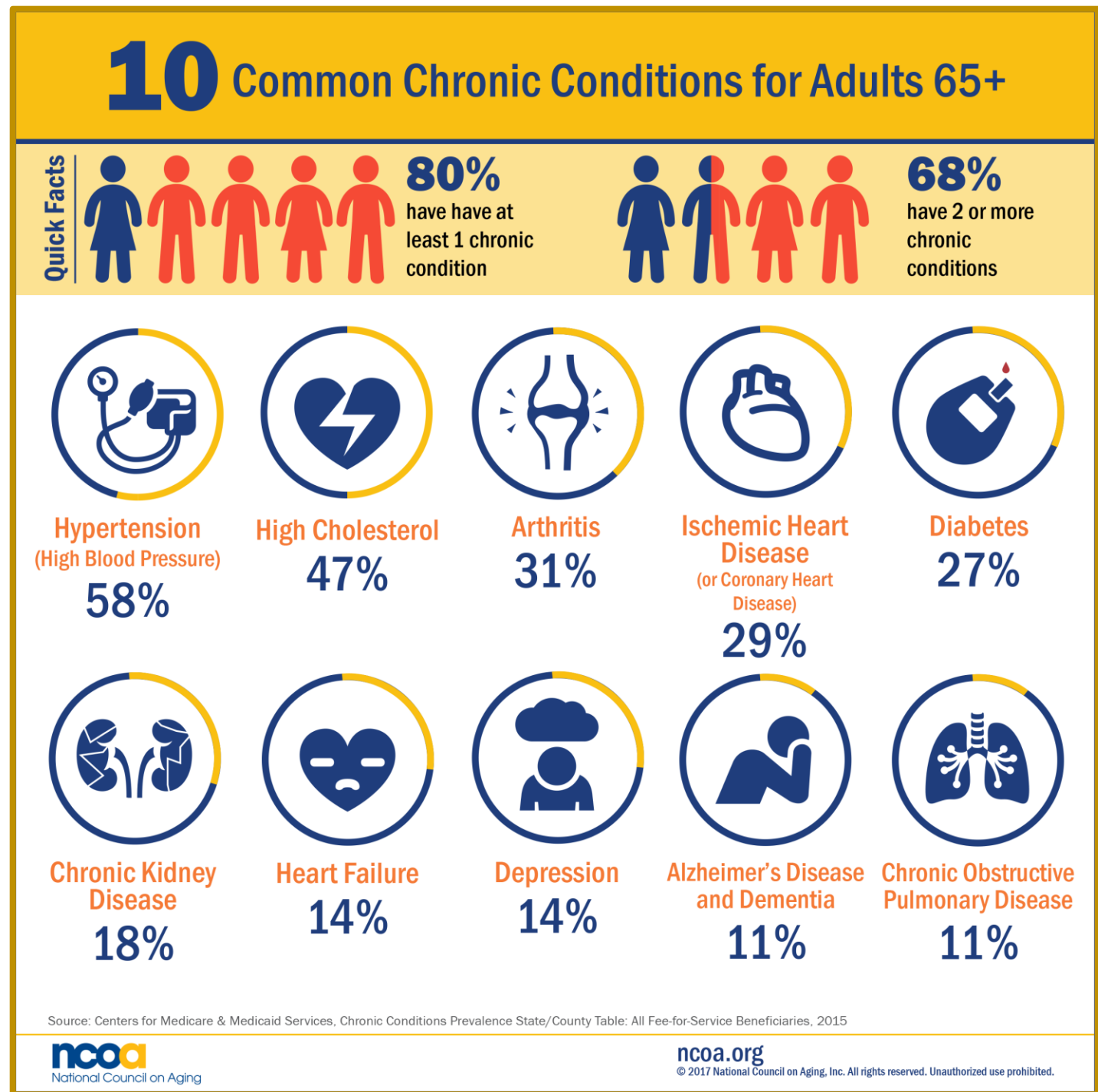
Legal Liability: Schedule One Classification
Federal Funds At Risk: Medicare / Medicaid
Private financing/liability insurance Uncertainty
Delivery Problems
Administration of Cannabis
Physician Resistance

Many industry officials say the fastest-growing group of customers are baby boomers or even those a little older

Clinical Research Studies: Facts vs. Perception



Major Health Concerns Accompanying Age



When Is Medical Marijuana Appropriate?

Studies report that medical cannabis has possible benefit for several conditions.



- Alzheimer's disease
- Amyotrophic lateral sclerosis (ALS)
- HIV/AIDS
- Cancer
- Crohn's disease
- Epilepsy and seizures
- Glaucoma
- Multiple sclerosis and muscle spasms
- Severe and chronic pain
- Severe nausea

“Medicinal cannabis may be helpful in certain medical situations like cancer care. However with the increased availability of cannabis, not all physicians that the patient may see are aware of their use. Also there is the possible interactions with other drugs that a patient may be on. This is especially important in the elderly.

There needs to be better education on Cannabis, the different formulations in the medical community and evidence-based indications for use among the public. ”



Dr. Eleanor Walker
Director, Breast Radiation Oncology
Medical Director, HFHS Center for Integrative Medicine



Medical Cannabis Users' Comparisons between Medical Cannabis and Mainstream Medicine

Major Outcomes:

- 78% Reported using cannabis to help treat a medical or health condition
- Cannabis users reported a greater degree of use of medical cannabis and greater trust in medical cannabis compared to mainstream healthcare
- In comparison to pharmaceutical drugs, users rated cannabis better on effectiveness, side effects, safety addictiveness, availability and cost
- 42% stopped taking a pharmaceutical drug
- 38% used less of a pharmaceutical drugs
- 30% reported that their healthcare provider did not know they used medical cannabis
- Other issues identified included lack of access to mainstream healthcare, self-initiated treatment of health issues, little knowledge of psychoactive content, and heavy cannabis use

Cannabidiol in Anxiety and Sleep: A Large Case Series

Major Outcomes:

- The final sample consisted of 72 adults presenting with primary concerns of anxiety (n = 47) or poor sleep (n = 25).
- Anxiety scores decreased within the first month in 57 patients (79.2%) and remained decreased during the study duration.
- Sleep scores improved within the first month in 48 patients (66.7%) but fluctuated over time. In this chart review, CBD was well tolerated in all but 3 patients.
- Cannabidiol may hold benefit for anxiety-related disorders. Controlled clinical studies are needed.

Medical Cannabis (MC) for the Treatment of Fibromyalgia

Major Outcomes:

- 26 patients were included in the study.
- The mean dosage of MC was 26 ± 8.3 g per month, and the mean duration of MC use was 10.4 ± 11.3 months.
- After commencing MC treatment, all the patients reported a significant improvement in every parameter on the questionnaire
- 13 patients (50%) stopped taking any other medications for fibromyalgia.
- Eight patients (30%) experienced very mild adverse effects.

Medical cannabis treatment had a significant favorable effect on patients with fibromyalgia, with few adverse effects.

Major Outcomes of Clinical Cannabis Studies

[Cannabis Medical Studies](#)

Cannabis patients reduce the use of other medicinal drugs and alcohol

Legalisation of cannabis for adult use is associated with reduced opioid use in the USA

Cannabis may be an effective pain reliever and substitute for opioids according to a survey

Cannabis may have negative effects on cancer therapy if given together with immunotherapy

In driving simulator tests 3 hours after cannabis consumption there were no longer significant faults.

Chronic pain is the main reason for the medical use of cannabis in the USA

Cannabis may be helpful in anxiety disorders according to large survey

Major Outcomes of Clinical Cannabis Studies

[Cannabis Medical Studies](#)

cannabidiol (CBD) was shown to be effective in the treatment of epilepsy due to Tuberous sclerosis complex

Cannabidiol is effective in febrile infection-related epilepsy syndrome in a case series

Cannabis improves pain and movement in patients with Parkinson's disease

Moderate relationship between THC concentrations and reduction of pain

No differences in the number and type of adverse events were found, and no falls occurred after administration of THC.

THCV significantly decreased fasting plasma glucose and improved the function of cells in the pancreas

Major Outcomes of Clinical Cannabis Studies

[Cannabis Medical Studies](#)

Inhaled cannabis reduces neuropathic pain in patients with spinal cord injury

Cannabis showed beneficial effects in bipolar disorder

Cannabis reduces the stretch reflex in patients with multiple sclerosis

Cannabinoids-positive patients had lower median disease scores on admission

THC reduced pain intensity and odynophagia (painful swallowing, in the mouth or oesophagus).

Improvement in behaviour and alertness, language, communication, motor skills and sleep

Cannabis reduced neuropathic pain

Qualitative Analysis of Cannabis Use Among Older Adults in Colorado

Major Outcomes:

- Lack of Education and Research about cannabis
- Lack of provider (healthcare) communication
- Difficulty accessing to medical cannabis
- The outcomes of cannabis use
- A reluctance to discuss cannabis use

Conclusions:

Older adults want more information about cannabis and desire to communicate with their healthcare providers. Older adults who used cannabis for medical purposes reported positive outcomes but highlighted difficulties in accessing medical cannabis. They also revealed how a stigma continues to be attached to using cannabis.

Qualitative Analysis of Cannabis Use Among Older Adults in Colorado: Study Verbatims

- Lack of Education & Research About Cannabis

“Why aren’t the universities offering courses or information on marijuana in their newsletters , in their community bulletins ... all those community courses? And in the newspapers, there are a lot of newsletters and things that we get or pick up that are focused on seniors, once lectures are planned at libraries or universities then use all those materials to publicize”

Qualitative Analysis of Cannabis Use Among Older Adults in Colorado: Study Verbatims

- Lack of Healthcare Provider Communication.
- Concerns about the lack of knowledge among providers about the use of cannabis for medical purposes.

“I think they should be a lot more open to learning about it a discussing it with their patients. Because at this point, I have told my primary care I was using it on my shoulder. And that was the end of the conversation. He didn't want to know why, he didn't want t know about effects, didn't want to know about side effects, didn't want to know anything”

Qualitative Analysis of Cannabis Use Among Older Adults in Colorado: Study Verbatims

- Access To Medical Cannabis. Some individuals noted that their primary physicians were unable or unwilling to provide a certificate/medical card.

“I’ve got an appointment to see a doctor to get a card because I’m spending so much money at (XX Retail Store) that I think it’s more cost effective to go and get the card”

Qualitative Analysis of Cannabis Use Among Older Adults in Colorado: Study Verbatims

- Outcomes Of Use

“For 20 years I suffered with intense pain with migraines. Did everything. Did the Botox, did every drug you could possibly take, and all kinds of things and nothing worked, except marijuana – and it got rid of the pain”

“I’ve had some injuries from biking and skiing and fortunately I was up here and it was recommended to me and it worked, because I didn’t want to take pharmaceutical drugs, but I would take something to take some of this pain and inflammation away”

Qualitative Analysis of Cannabis Use Among Older Adults in Colorado: Study Verbatims

- The Stigma associated with cannabis use.

“That’s personal, and people are, some people are still offended by marijuana. They really are – and I think it’s hard to get that information out, because of stigma, anonymity. ‘you’re a little pot head’ Nobody wants that label”

Amid Growing Evidence Of Efficacy, A Word of Caution About:

Increased Complications and Customized Solutions

Evidence for the efficacy of medical cannabis for the treatment of various symptoms, including pain, sleep disturbances, mood disorders and neurological symptoms, in older adults is scanty.

Older adults have an increased risk of side effects from cannabinoids because of their impaired metabolism, decreased reserves and the potential for drug–drug interactions and comorbidities.

Despite the lack of high-quality supporting evidence, medical cannabis may provide some benefits in selected older patients.

Any use of medical cannabis in older patients should be individualized and account for the unique characteristics of each patient, including the symptoms requiring treatment, symptom severity, comorbid conditions and possible adverse effects. Patients and families should participate in clinical decisions regarding medical cannabis only after an open and informative dialogue with the treating healthcare team.

Schedule 1 Substance Label Challenges Ability To Conduct Medical Research In U.S.

Real Medical Testing Will Increase

Until cannabis is taken off the Schedule One substance list, medical research will be challenging to undertake...Israel still leads the world in global cannabis research, and Israeli scientists like chemist Raphael Mechoulam, a researcher at Hebrew University and pioneer in cannabis research, are being hired or given research grants by American organizations.

Forbes Cannabis Industry Predictions 2020

"The cannabis industry shows great promise to develop solutions that improve the quality of life for seniors. Cannabis continuously shows promise as a natural alternative that provides patients with a holistic approach that can help with chronic diseases and disorders such as managing chronic pain.

Most importantly, the cannabis industry is focused on providing patients with a personalized experience that meets their needs in ways that major healthcare systems simply are not. At BeLeaf the patient experience is at the center of everything we do. We are developing solutions that give them full control over managing what works for them by providing important education and information around how cannabis interacts with the Endocannabinoid system in the human body. These options allow individuals to decide what dosage and method of delivery works best for them based on the results.

Lastly, more research is needed in the industry to continue to develop solutions, which is why BeLeaf is working closely with researchers from St. Louis University to continue to better understand the many benefits cannabis can provide patients."



Melissa Cowin
Director of Marketing & Sales

Clinical Research Summary

- Clinical research is underway globally.
- Results appear promising with regards to a wide array of medical conditions.
- Schedule 1 classification hinders clinical studies and more mainstream acceptance in the U.S.
- The U.S. medical community is cautious about prescribing cannabis perhaps because of lack of education about cannabis, compelling evidence, sanctions from the medical community broadly and/or legal status.
- Some companies are responding to the need for overall education on cannabis, how it interacts with the body, dosage, deliver methods and customized solutions.
- Consumers are not waiting for the science to confirm what they believe in their hearts. This is especially for those seeking help for medical concerns.



Research company Mintel cites CBD as ‘the go-to ingredient in health and wellness’, emerging across multiple categories. CBD is hotly touted as the next super-natural ingredient because of its broad spectrum of capabilities, making it a potential alternative to traditional cosmetic ingredients.

CBD: Beauty & Wellness

Boomers Redefine What Aging Looks Like And Are Very Interested In Looking And Feeling Their Best



≡ ELLE

Covergirl Maye Musk Is Not Your Average Grandmother

In beauty retailing, [AARP](#) notes that baby boomers' share of spending on personal care products and services is 53 percent, which means they spend more in the category than millennials or Gen Xers combined.

The Market Impact of CBD In Beauty

Touted as the latest super-natural ingredient, CBD is considered to have a broad spectrum of possibilities for use in skincare, body care, make-up and haircare, and as a potential alternative to traditional cosmetic ingredients.



**CBD SKINCARE
MARKET IN 2018**

US\$710M



**PROJECTED
SALES BY 2024**

US\$959M



**CBD SKINCARE COULD
ACCOUNT FOR AROUND**

**10% OF GLOBAL
SKINCARE
SALES WITHIN
5-10 YEARS.**

The 1 -2 -3 On CBD in Consumer Products

CBD can interact with the endocannabinoid system of the skin. Generally accepted CBD product composition guidelines/definitions are:

- Isolate: CBD at 99% - All other components e.g. terpenes, waxes are filtered out
- Broad Spectrum: Full range of cannabinoids and terpenes but THC compounds removed
- Full Spectrum : Contains full range of beneficial cannabinoids and terpenes with less than .3% of THC -not enough to produce a high

While most of the focus is on CBD, new cannabinoids are on the horizon e.g. CBG is believed to have antioxidant, antibacterial and antifungal properties.



**At present, there
are no industry
standards for
monitoring the
quality and
strength of CBD
within cosmetic
products.**

”

The CBD Skin Care Market: New Innovative Applications and Treatment

- Market growth is driven by growing awareness of the benefits of hemp derived CBD infused personal care products
- CBD has been found to have some cosmetic possibilities as an antioxidant, with anti-inflammatory, anti-microbial, anti-sebum over production and collagen promoting properties
- CBD is considered safe and effective for all skin types
- It is particularly useful for people who struggle with sensitivity, inflammatory conditions, acne, psoriasis, dermatitis and dry skin.
- The potential healing properties of these ingredients are expected to encourage more CBD based product development

Major Players

- L'Oréal S.A. (France)
- Cannuka, LLC (US)
- Elixinol Global Limited (Australia)
- Medical Marijuana Inc. (US)
- Endoca BV (Netherlands)
- Redwood Wellness, LLC (US)
- Leef Organics (US)
- Green Growth Brands (US)
- The CBD Skincare Company (US)
- Kana Skincare (US)
- Vertly Hemp (US)
- Myaderm (US)
- Marijuana Company of America, Inc. (US)
- CBD For Life LLC (US)
- Estée Lauder Companies (US)



Major Categories

Oils & Balms
Lotions &
Creams
Bath & Soaps
Haircare
Cosmetics

CBD Based Beauty Proliferation: Mass To Luxury Retailers



Barneys New York “The High End” Luxury Cannabis Lifestyle Shop



BARNEYS
NEW YORK



NOW TRENDING
CBD-Infused Beauty

Curious about cannabidiol?
By now you've seen this botanical making beauty headlines. Beauty junkies everywhere are embracing the non-psychoactive benefits of the cannabis plant to enrich skin-soothing salves, serums & more. Read on to find out how to work the nutrient-rich buzz-worthy ingredient into your routine.

[SHOP TRENDING BEAUTY](#)



Neiman Marcus
Online Look Book

Inside NYC's Newest Luxurious CBD Wellness Center, Standard Dose

CITY GUIDE, HAUTE BEAUTY, LIFESTYLE July 17, 2019 by Natasha Bazika



Away Spa, W Austin, Austin, TX

[Away Spa's](#) "On the Road Again" treatment is inspired by Austin icon and marijuana advocate Willie Nelson.

The Body Treatment aims to ease any ailments and get your body "On the Road Again" and includes a soothing full body massage with CBD oil to relieve muscular pain and inflammation, then a foot scrub and paraffin soak followed by a hot stone neck massage and de-puffing "Cold Stone Face Treat."

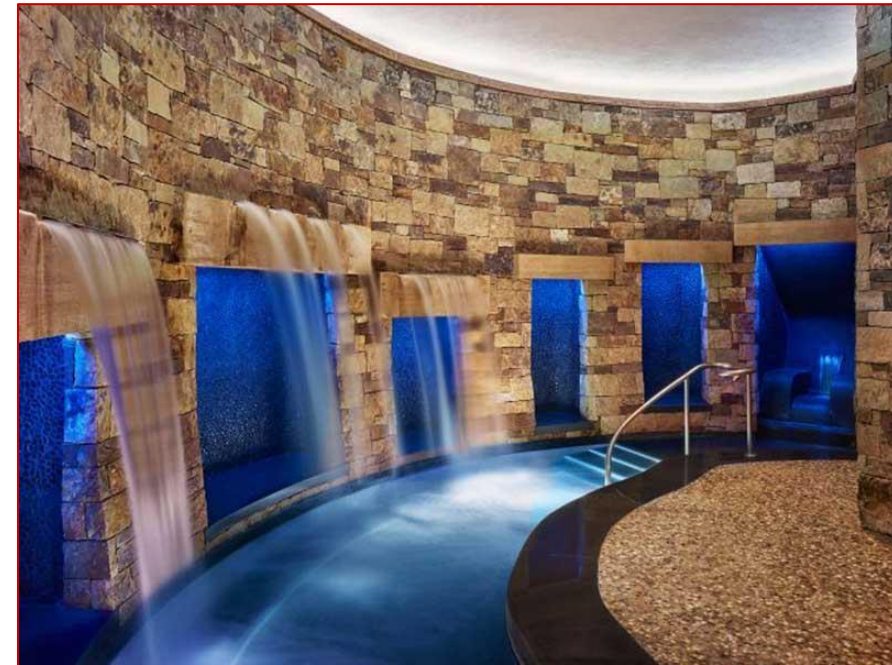
105 min, \$295



Remède Spa St Regis, Aspen

Colorado's luxury [Remède Spa](#) at the St Regis Aspen has teamed up with That's Natural! CBD Hemp Oil to offer a Healing CBD Hemp oil-fused massage. "This service alleviates symptoms of pain & tension on a deeper level, decreases inflammation, reduces muscle soreness & tension and also calms anxiety & stresses." \$210 - \$295

Lux Cannabis Spa Experiences



Habitude Spa, Seattle, WA

[Habitude](#) in Seattle is a more bohemian setting. One of the locations is even situated in a working art gallery. Habitude offers a full CBD focused spa menu of 60-minute treatments called Spa Canna.

\$162 - \$202

Persona Name: Michelle: AKA - Timeless Beauty

Persona Description: Age Ain't Nothing But A Number

Goals: Embrace a youthful, optimistic outlook on life

Challenges: Making sure my body and skin look as good as I feel

Michelle's Story

I am a fan of being an empty nester and personal wellness. I eat right, mostly plant based, exercise, take in a spa day here and there. I enjoy going out with friends and love fashion. I believe in taking good care of my body, skin and hair using natural and organic products.

During my last trip to the spa, my message therapist suggested I try a new cannabis oil as an add on to my normal message. I had heard of all the new cannabis products, living in LA it's everywhere. But I really didn't know much about it...but I did know and trust my therapist, so I say "Sure, why not".

Well 60 minutes later I could not believe how good I felt and asked her about other products that she thought I would like. Well \$300.00 later I had hair and skin products that I was excited to hurry home and start trying.

I love the results and switched out some things for this new line right away. They are not cheap but..."I'm worth it"! Afterall I have a lot of life to live, beautifully.



Demographics:

Age: 58

Education: College

Financial Security: Working

Location: Long Beach, CA

Residence: Urban Highrise

Health Concern: None

Marital Status: Single

Children: Adults

Grandchildren: Not Yet



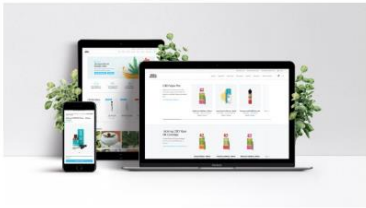
This CBD Skincare Line is Everything You Need to Take Off Your Mask

Civilized Staff



You Have an Endocannabinoid System — Now You Have to Take Care of It

Annie Nelson



The CBD Market is Saturated, but BWell's Here to Help You Navigate It

Civilized Staff



Manhattan Physio Group Brings CBD Into the Fold

Civilized Staff



The Ultimate Cannabis Gift Guide for Athletes

Civilized Staff

Online Wellness Platforms: Women & Cannabis

Civilized.



Culture

Is the Cannabis Space Inclusive Enough of Seniors?

Online Wellness Platforms: Informing Women and Business



Ellementa is the Fastest Growing Women's Network Focused on Health, Wellness, and Cannabis. *Find the right products. Feel Better.*



ELLEMENTA RESEARCH & REVIEW LABS

Market Research

Women. Cannabis. CBD. Wellness



CANNABIS 101, LEARN

Cannabinoids are why cannabis is medicine



CANNABIS 101, LEARN

Consuming Cannabis: Microdosing 101



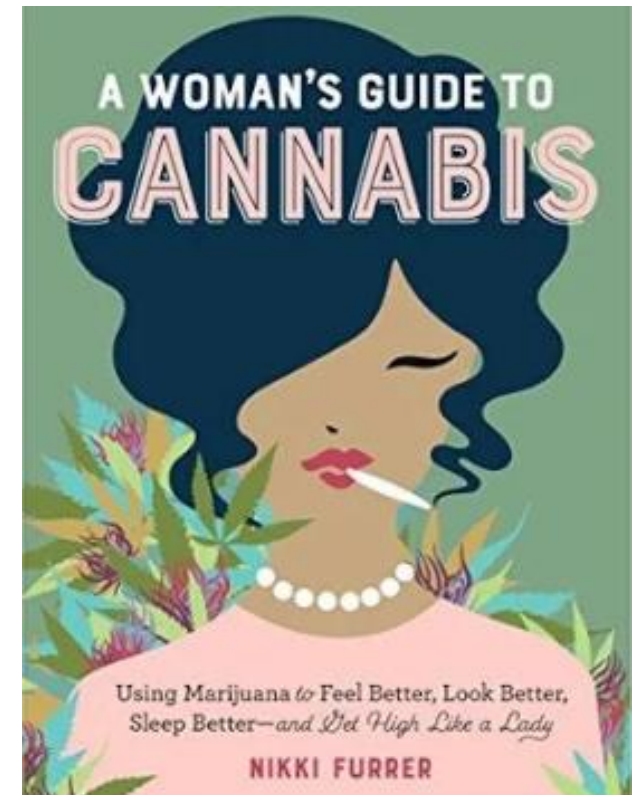
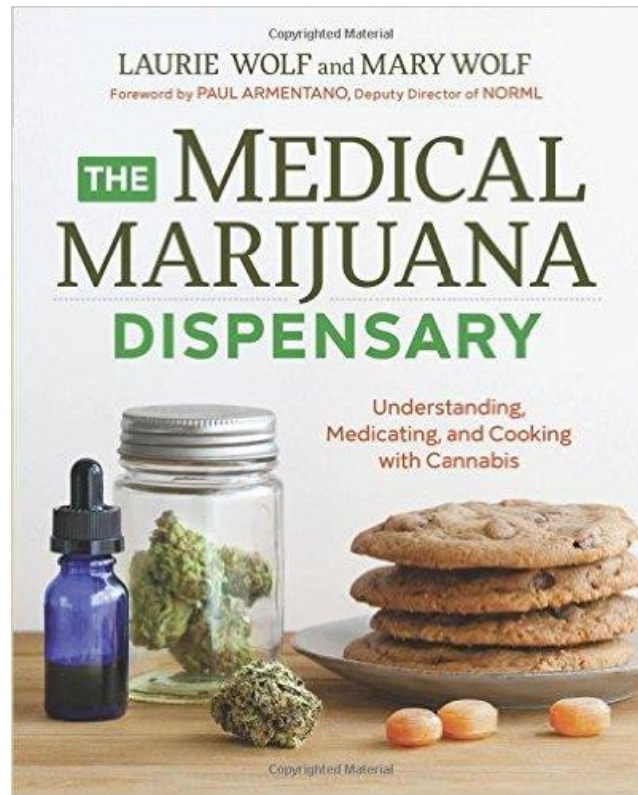
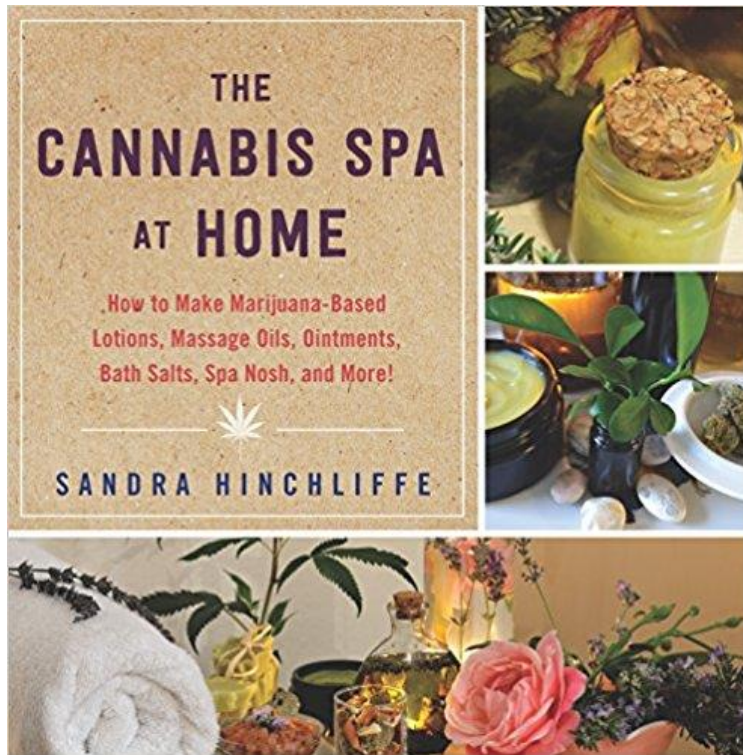
LEARN, LIFE

Cooking: Making Cannabutter or Canna Oil

Qualitative Research

Panel Management

Innovation Process



Health & Wellness Books

So Much More Is Happening
...But Time Has Run Out!

Summary: So That Was A Lot!

- The Graying of America is on the horizon – Boomers Lead The Way
- Attractive Segment: Boomers Still Control Significant Wealth
- Both Medical & Recreational Legalization is Accelerating
- Cannabis Business Sectors Expected To Grow Exponentially
- Boomers Are Advocates/Consumers of Cannabis, Especially Medical
- Trend Toward More Natural Solutions For Age Related Medical Conditions Will Continue To Grow
- The Stigma Attached To Cannabis Even For Health Still Exist

Summary: So That Was A Lot!

- Globally Clinical Research is Underway Investigating Efficacy
- U.S. clinical studies are hampered by Schedule 1 Designation
- Medical Profession Not Fully On Board. More Evidence Based Study Needed
- Private Companies/Brands Must Lead The Way In Providing Urgently Needed Education, Research And Usage Guidelines
- Legal Hemp Derived Consumer Products In Skin, Beauty and Food Will Contribute To Mainstream Acceptance And Normalization

Critical Need!

Product Consistency
and
Efficacy Standards
for All
Cannabis Products



Thank You



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