AMERICAN EDIBLES: HOW CANNABIS REGULATORY POLICY REHASHES PROHIBITIONIST FEARS AND WHAT TO DO ABOUT IT

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ABSTRACT

Why can’t we buy a cannabis muffin with our morning coffee? For much of the past century, the answer was simple: cannabis was illegal. Now, however, with more and more states legalizing cannabis for adult use, the answer is far less clear. Even in those states that have legalized cannabis, the simple action of buying and eating edibles at the same location has somehow remained a pipe dream despite consumer demand. Digging a little deeper, we can see how contemporary alarmism, by rehashing the same prohibitionist rhetoric demonizing cannabis for over eighty years, has once again arisen with a new target: cannabis-infused edibles. From journalists to policymakers to legal scholars, the rekindling of prohibitionist arguments against edibles has had real world impacts on the regulation of cannabis edibles, to the harm of all involved.

This Article explores contemporary cannabis edibles regulation using historical, scientific, and legal frameworks to explain why current edibles regulation is so problematic, and what to do about it. By delving into the history of cannabis prohibition, this Article shows how the very same arguments propping up prohibitionist edibles policies are rooted in bad-faith arguments made decades ago that themselves were merely thin veils for racism. Applying this historical perspective and a rational understanding of contemporary cannabis edibles, this Article explores how states have used prohibition-inspired regulations to address two main concerns—overconsumption and inadvertent consumption— and how such regulations need to be revisited and revised. This

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Article then argues that social consumption sits at the crux of edibles regulation, and that states must implement social consumption imminently to address the harms that current regulations do not address, or even worse, perpetuate.
INTRODUCTION

It has recently become almost commonplace to observe that when it comes to cannabis prohibition, the real question is no longer whether to legalize the drug but how to legalize it. \(^1\) Less than a decade ago, exactly zero states had legalized cannabis for recreational, or “adult-use,” purposes. That number is now fifteen. \(^2\) To put that number in greater perspective, over one-

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\(^2\) Those states, in order of legalization, are Washington, Colorado, Oregon, Alaska, California, Nevada, Maine, Massachusetts, Vermont, Michigan, Illinois, New Jersey, Arizona, Montana, and South Dakota. The District of Columbia has also legalized cannabis for recreational purposes, although it has not created a regulatory structure or authorized licensed sales of the drug. Many other states have medical cannabis programs of one sort or another. For current information on what states have legalized for what purposes, see Map of Marijuana

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third of the population of the country currently lives in a state where cannabis is legal for recreational purposes. Moreover, it’s not just blue states that have legalized the drug—as successful ballot measures in South Dakota and Montana have recently demonstrated, cannabis legalization is popular with liberals and conservatives alike. Legal cannabis commerce is now thriving—according to one estimate, the industry was expected to exceed a total of $15 billion in sales by the end of 2020, more “than the annual revenue of the NBA, toothpaste and hard seltzer markets combined,” and actual sales numbers exceeded even that. Although Congress has thus far proven stubborn about liberalizing draconian federal laws governing cannabis use and distribution, most experts believe that federal legalization within the foreseeable future is now inevitable.

Unfortunately, as states have addressed the question of how to legalize, they all too often have fallen back upon prohibitionist fears and ended up rehashing old worries about whether the drug should have been legalized in

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4 Democrats and Independents do still favor legalization more than Republicans, but almost half of Republicans support it as well. See Megan Brenan, Support for Legal Marijuana Inches Up To New High of 68%, GALLUP (Nov. 9, 2020), https://news.gallup.com/poll/323582/support-legal-marijuana-inches-new-high.aspx.


the first place. As a result, in many areas of regulation, states have ended up replicating prohibitionist policies in different forms. For example, every state that has created a legal market for recreational cannabis has strictly regulated the marketing and advertising of cannabis products and businesses in order to keep demand low and discourage use by minors even though no state allows anyone under the age of twenty-one to purchase or use cannabis for recreational purposes in the first place. \(^8\) Although a couple of states and cities have on paper authorized social consumption establishments where people can enjoy cannabis in public, they have been extremely sluggish in this area, and the number of such spaces that actually exist in the United States can probably be counted on the fingers of one hand. \(^9\) States have given extensive control to cities and towns to strictly regulate cannabis cultivation and retail establishments and even to ban them within their borders entirely, and many localities have taken advantage of this authority, making legalization a spotty and inconsistent reality even in most states that have legalized the drug. \(^10\) Finally, state regulatory agencies have consistently imposed costly, burdensome, and often pointless regulations on the industry that have made getting into the business and staying there prohibitively difficult for most budding entrepreneurs. \(^11\)

One area where we find this rehashing of old fears, debates, and policies is in the regulation of edible cannabis products, or, as we’ll refer to them here, “edibles.” An increasingly large part of the cannabis market, \(^12\) edibles are simply products infused with cannabis that are intended to be consumed orally. If ingested, edibles pass through the digestive system where their Δ⁹-Tetrahydrocannabinol (“THC”) is metabolized into 11-Hydroxy-Δ⁹-Tetrahydrocannabinol (“11-OH-THC”), which produces a distinct, stronger, and longer-lasting intoxication than a similar dose of inhaled THC. Digesting and metabolizing edibles takes a while, and as a result, the intoxicating effects of edibles do not set in until approximately between thirty minutes and two hours

\(^8\) See text accompanying notes __-__ infra.

\(^9\) See text accompanying notes __-__ infra.

\(^10\) See text accompanying notes __-__ infra.

\(^11\) See text accompanying notes __-__ infra.

after ingestion. Because edibles are easily consumed, are generally designed
to taste good (edibles come in all types and tastes, from gummy bears to potato
chips to sodas to three-course gourmet dinners), and have delayed onsets, they
pose two distinct risks: overconsumption and inadvertent consumption.
Inexperienced users may eat too much of them, and children may eat them
without knowing they contain cannabis. Although the unfortunate effects
wear off before too long and instances of these risks coming to fruition are rare,
examples of people ingesting too many edibles and kids eating edibles have
been widely publicized and tainted public perception.  

Beyond influencing the public, these relatively minor incidents have caused
critics, legislators, and even regulators to sound the alarm about the purported
dangers of edibles and call for strict regulations to "protect" the public from
the harms of legalization. "They need to stop lacing kids' snacks with THC . . .
and standardize these servings," Frank McNulty, a state representative from
Colorado and an opponent of cannabis legalization told USA Today. "Whatever
is in that brownie, you're on it for the entire ride. There's no ability to self-
regulate with edibles." 14 "Marijuana edibles must not look like kids' candy,"
wrote the editorial staff of the Boston Herald in late 2020. "It's a smart move.
It may not stop every child from getting into an edible, but getting
manufacturers to stop making a product for adults to look like confectionery
for children will help enormously in keeping youngsters out of the hospital for
THC reactions." 15 Kevin Sabet, one of the nation's loudest voices in favor of
keeping cannabis illegal, echoed these sentiments when he told the Los Angeles
Times in response to a modest spike in cannabis edible incidents that, "This
should give serious public health officials in California pause. We need to slow
this freight train down and rein in this industry." 16

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13 See text accompanying notes __-__ infra.

14 Trevor Hughes, Marijuana 'Edibles' Pack a Wallop, USA TODAY (May 8, 2014),
https://www.usatoday.com/story/news/nation/2014/05/08/marijuana-pot-edibles-thc-
legalized-recreational/8463787/.

15 Marijuana Edibles Must Not Look Like Kids' Candy, BOSTON HERALD (Sept. 29, 2020, 5:23
candy/.

16 Patrick McGreevy, More California Kids Are Having Pot-Related Health Scares, L.A. TIMES
(July 13, 2018, 12:05 PM), https://www.latimes.com/politics/la-pol-ca-minors-pot-poison-
control-20180713-story.html.

Electronic copy available at: https://ssrn.com/abstract=3811846
Legal and public health scholars too have joined the alarmists in spreading overwrought fears of edibles. For example, in their article “Half Baked—The Retail Promotion of Marijuana Edibles,” published in the *New England Journal of Medicine*, Stanford Law scholars Robert MacCoun and Michelle Mello have compared edible packaging to Joe Camel and worry that “the availability of child-friendly edibles could increase the probability of initiation to marijuana use, reduce the average age of initiation, and increase the frequency and intensity of use among users of all ages.” Similarly, in their *Ohio State Law Journal* article “High Standards: The Wave of Marijuana Legalization Sweeping America Ignores the Hidden Risks of Edibles,” legal scholars Steve Calandrillo and Katelyn Fulton argue that “[u]ntil more is known on the health effects of edibles and the impact that they have on society, and until more effective and consistent regulation can be instituted, state-based restrictions on edibles may be necessary.” In the *Buffalo Law Review*, Heritage Foundation Senior Legal Research Fellow Paul Larkin, Jr., citing, among other things, the “heavy dose of sugar” found in many edibles, argues that “the FDA should consider treating . . . edibles as adulterated foods . . . taking whatever steps are available to prevent the sale of any such products altogether.” Even Harvard’s Dr. Peter Grinspoon, a tireless supporter of medical cannabis and a member of Doctors for Cannabis Regulation, has suggested in a Harvard Medical School blog that edibles are dangerous and should not be made to taste like actual food.

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18 Id. at 990.


20 Id. at 262.


Heeding alarmist calls like these, and despite obvious consumer demand, regulators in state after state have imposed substantial unnecessary regulations on cannabis edibles that unfairly burden commercial entities, raise prices and reduce offerings for consumers, contribute to the continuing vitality of the illicit market, undermine much-needed equity efforts, and cause environmental damage. Examples include serving size regulations, packaging and labeling requirements, caps on THC amounts in products, and prohibitions on the sale of non-shelf stable items such as freshly baked goods or cannabis-based meals. Additionally, concerns about the purported dangers of edibles likely contribute to the reluctance of regulators to authorize the creation of social consumption establishments that could go a long way towards making cannabis available to everyone, regardless of race or socio-economic status.

In this Article, we argue that the alarmist fears of edibles are misguided and dangerous. Edibles do pose a couple of unique risks that are not posed by other methods of cannabis consumption, but these risks are generally overstated and are easily addressed by simple, non-controversial regulatory policies. There is no need to rehash any of the old prohibitionist rhetoric or Reefer Madness tropes to rationally manage the risks of edibles. Rational edibles regulation requires, in the first instance, an accurate understanding of what edibles are, how they differ from other types of cannabis products, and their modest risks. In the pages that follow, we seek to demystify edibles and explain how states can manage their risks without overreacting and causing negative consequences to businesses, consumers, and society alike.

This Article proceeds as follows. In Part I, we describe the history of cannabis prohibition in the United States, shining a light on the fact that prohibition was enacted in bad faith to persecute racial minorities, veiled with the same alarmist rhetoric and pseudoscience we hear today. Part II then turns to edibles specifically, explaining what exactly edibles are and how they differ from other forms of cannabis consumption. By then looking at two famed stories of American edibles—Alice B. Toklas’s hashish recipe from the 1950s and Brownie Mary’s work with San Francisco AIDS patients in the 1980s and 90s—this Part contextualizes edibles as an immutable aspect of American drug history. Part II also brings this history up to the present by describing the past

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24 See text accompanying notes __-__ infra.
and current markets for commercial edibles in the United States and the various ways that states have attempted to regulate them to protect public health and safety. In Part III, this Article turns to the two unique problems posed by edibles—overconsumption and inadvertent consumption—and argues that while these are real problems, states need not rehash prohibitionist-inspired policies to solve them. Simple labeling requirements and educational campaigns will likely suffice to solve nearly all of the problems posed by edibles without imposing substantial regulatory costs on producers or consumers, as these problems in fact arise not out of legalization, but out of prohibition. Finally, Part IV addresses the critical issue of social consumption establishments and posits that an overstated fear of edibles is partially responsible for the unfortunate snail’s pace roll-out of such spaces in states that have legalized cannabis for recreational purposes. In short, in this Part, we pose the question: Why shouldn’t we be able to get a cannabis muffin to go with our morning coffee? The answer, we suggest, is that there’s no good reason at all.

I. A HISTORY OF GETTING HIGH IN AMERICA: LESSONS FROM OUR PAST

Critics have leveled a variety of claims against edibles, and since many of these rehash claims made against legalizing cannabis in the first place, they require some historical context to understand and analyze. Fearmongers have espoused anti-cannabis propaganda for over eighty years, so it’s important to be familiar with these talking points to spot them when they arise again in the context of edibles. This Part will first survey the history of cannabis prohibition, from its origins in the early twentieth century through the war on drugs to the present day, paying particular attention to the central role that racism has played in that history. This survey shows that many of the falsehoods still spread about cannabis today have their roots in bad-faith pretext decades old. This Part then discusses recent legalization advances in the United States, tracking the evolution of this movement from the early days of medical cannabis in the 1990s to the creation of a commercialized adult-use cannabis industry in the past decade. Finally, this Part explains that many prominent features of state cannabis regulatory regimes in place today—including the enactment of strict limits on advertising, the failure to authorize social consumption establishments, and the delegation of extensive authority to ban and regulate cannabis businesses to local governments—represent vestiges of prohibitionist fears manifested in a different form.

A. Reefer Madness

It has been well chronicled by historians that the United States government criminalized cannabis under false pretenses in the 1930s and from beginning
Prohibitionist propaganda has been so successful that anti-cannabis biases, based on untruths, survive over eighty years after they were conceived. As this Section shows, these fears come not from an intoxicating candy bar, but from within the schemes of the long-dead prohibitionists themselves.

1. Initial Regulation

In 1906, the United States Congress passed the Pure Food and Drug Act. The first national legislation to mention cannabis, the Act labeled it an intoxicating ingredient whose presence was thereunder required to be included on the label of any product containing it. This law is widely regarded as having given birth to the prescription drug system, and moreover christened the federal government as the overseer of drugs and medicine in the United States. In 1914, Congress passed the Harrison Act, which prohibited non-medical consumers from legitimately possessing opiates or cocaine. Due to pharmaceutical industry lobbying, cannabis, a common pharmaceutical ingredient at the time, was not included under the Harrison Act’s purview. Nonetheless, the Harrison Act was the first federal legislation to make a distinction between medical and non-medical use of drugs. Cannabis remained available for both medical and non-medical use, primarily in the form of medications, tinctures, and edible hashish paste, so that early American cannabis users in fact were also the first American edible consumers. Cannabis’s federal safe harbor, however, would soon come to an end.

In 1930, President Roosevelt installed Harry Anslinger as the founding Commissioner of the Federal Bureau of Narcotics (the “FBN”). The country was in the death rattles of alcohol prohibition, which had given rise to organized crime, massive public health problems, and a common disregard for the


26 Alcohol prohibition increased alcohol-related death despite decreasing overall consumption both because prohibition removed all quality control and because consumers were consuming increasingly strong unregulated spirits. The Iron Law of Prohibition dictates that in prohibition, “as law enforcement becomes more intense, the potency of prohibited
law.\textsuperscript{27} Harry Anslinger’s response at the time? Crack down harder.\textsuperscript{28} Recognizing that violence did not solve the problem, and desperate for a source of new tax revenue during the Great Depression, Roosevelt pushed through the Twenty-First Amendment in 1933, ending alcohol prohibition and robbing the FBN of its greatest source of revenue.\textsuperscript{29} Knowing that heroin and cocaine, effectively criminalized by the 1914 Harrison Act,\textsuperscript{30} could not fund the Bureau alone, Anslinger set his sights on a drug that was used by significantly more people: cannabis.\textsuperscript{31}

While no one person or event can be said to have caused what we now refer to as the war on drugs, Harry Anslinger and his single-minded zealotry get pretty darn close. Anslinger was obsessed with exterminating drug use and looked upon drug users, and especially drug addicts, with disdain.\textsuperscript{32} He made it...
his mission during his thirty-two year tenure as Commissioner of the FBN\footnote{Anglinger ran the FBN from 1930 to 1962, when he was sacked by President John F. Kennedy, and except for Herbert Hoover himself, this amounted to the longest tenure of any person as the head of a U.S. enforcement agency. Hari, supra note __, at 45.} to exterminate all drugs and drug use. The only problem? A whole lot of people in the United States really liked cannabis. This was not a problem for Harry Anslinger, however, who despite stating that there was “probably no more absurd fallacy extant to the notion” that drug use leads to violent crime,\footnote{Harry J. Anslinger, Organized Protection against Organized Predatory Crime—Peddling of Narcotic Drugs, VI, 24 J. Crim. L. & Criminology 636 (1933), available at https://scholarlycommons.law.northwestern.edu/jclc/vol24/iss3/9.} began a war of propaganda espousing precisely that.

2. Anslinger’s War on Cannabis

Beginning in 1934, Anslinger ran a three-pronged assault on cannabis, first by propagating sensationalist stories of violence in the media. American newspapers were already in the practice of running false accounts of cannabis use gone wrong, and as such were primed for the coming onslaught.\footnote{See, e.g., Mexican Family Go Insane, N.Y. Times, July 6, 1927, at 10, col. 6 (reporting that a Mexican family had gone insane after eating a cannabis plant growing in their garden). As explained elsewhere in this Article, humans do not get particularly high from eating raw cannabis. See Section II.A, infra.} Anslinger solicited from police over two hundred instances of violent crimes allegedly caused by cannabis intoxication and put them together in his “Gore Files.” With the help of mass media, including yellow journalism baron William Randolph Hearst,\footnote{Many say that Hearst had his own motivations, partnering with Dupont and other special interests to slander cannabis as he sought to eliminate hemp as an industrial competitor to nylon and other synthetic fibers. David Bearman, Oil vs. Cannabis: Why Marijuana Became Illegal and Still Is Today, HUFFINGTON POST (May 30, 2017, 11:50 am), https://www.huffpost.com/entry/oil-vs-cannabis-why-marijuana-became-illegaland_b_592d8b94e4b0a7b7b469cd4d (“William Randolph Hearst, who owned most of the newspapers of the time, also owned paper mills and viewed hemp paper, which requires 75 percent less sulfides than making paper out of wood pulp and can be grown annually, as competition.”). Still others argue that Hearst’s personal racism against Mexicans played a major role in this. See Lee, supra note __, at 51 n. 3 (“For Hearst, vilifying cannabis users was more than just a scheme to boost circulation; it was a personal vendetta. He harbored an animus towards Mexicans ever since Pancho Villa occupied the media mogul’s 800,000-acre ranch in Chihuahua in 1916 and seized some cattle-grazing land.”).} Anslinger published a collection of graphic quotes from this
Gore File in newspapers and magazines meant to scare the American public into believing that cannabis use incited violent criminal behavior. The most famous of these stories, that of Victor Licata, described the case of a boy killing his family after becoming addicted to cannabis.37 Researchers have since debunked the associations that Anslinger and the media drew between Licata’s actions and cannabis use, and further have shown that none of the 200 cases in the Gore Files were attributable to cannabis use.38 This all came too late though, as the media campaign against cannabis, successful in its own right, was then cited by Anslinger, the source of these stories, as evidence to the public and policymakers alike of the growing dangers of cannabis.

Prong two of the Anslinger strike on cannabis was discrediting doctors and scientists while claiming that cannabis had terrible health consequences. Anslinger wrote to thirty scientists inquiring about the safety of cannabis use. All but one wrote back to Anslinger claiming that based on evidence available at the time, cannabis did not pose major health risks.39 Anslinger, of course, went with scientist number thirty, who claimed that smoking cannabis caused users to fall into a delirious rage, become gripped in erotic dreams, lose the power of connected thought, and finally: go insane.40 Even though a steady stream of doctors approached Anslinger and the FBN to debunk Doctor

37 See H.J. Anslinger and Courneye Ryley Cooper, MARIJUANA-Assassin of Youth, THE AMERICAN MAGAZINE (July 1937) As it turned out later, Licata had a history of mental illness and police had previously attempted to commit him. LEE, supra note __, at 416.

38 See LEE, supra note __, at 53 (“Harry Anslinger trotted out examples from the ‘Gore File,’ his infamous scrapbook full of Hearst press editorials, racial slurs, and anecdotal accounts of horrific murders falsely attributed to marijuana smokers. Bereft of actual scientific data to back up his reefer madness claims, the FBN director presented no evidence of a statistical correlation between marijuana use and criminal behavior.”).


40 See id.
Number 30’s pseudoscientific conclusions, Anslinger continued to claim, indeed for the rest of his life, that cannabis was inherently dangerous.

In addition to spreading unscientific information, Anslinger in his third prong of attack further sought to whip up fears by associating cannabis use with racial minorities, specifically Black Americans and Mexican immigrants. Although states had already relied on racist tropes to prohibit cannabis on the local level, Anslinger sought to spread this fear nationwide and enact federal

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42 In what would be his final recorded words, in 1970 Harry Anslinger participated in a roundtable debate of drug laws organized by Playboy magazine. He challenged experts to name one doctor who had reported a beneficial aspect of cannabis. HARI, supra note __, at 46. The experts, by the way, answered extensively, and Anslinger was, in an excellent account of schaudenfreude, told, “You have led this country to treat scientific questions the way such matters were handled in the Middle Ages.” Playboy Panel: The Drug Revolution: The Pleasures, Penalties, and Hazards of Chemicals with Kicks are Debated by Nine Authorities, PLAYBOY (Feb. 1970).

43 On Anslinger’s racism, see, e.g., LEE, supra, n. __, at 51 (“The headlines and the plotlines were antidrug and anticrime, but the subtext was always about race.”); HUDAK, supra note __, at 25 (“His passion for drug prohibition was fundamentalist. His racism was no secret. His words were laden with fear, vilification, and xenophobia.”); BOOTH, supra note __, at 181 (“Anslinger began to focus on marijuana, writing articles about how it induced rapes and murders in which the perpetrators were almost always black or Mexican, the victims white.”).

44 For example, the first instance of restricting cannabis was in Massachusetts in 1911. See Richard Evans, 100 Years of Marijuana Prohibition, METROWEST DAILY NEWS (Apr. 29, 2011, 12:01 AM), https://www.metrowestdailynews.com/article/20110429/NEWS/304299919 (“One hundred years ago today, Massachusetts Governor Eugene Foss signed into law Chapter 372 of the Acts of 1911, “An act relative to the issuance of search warrants for hypnotic drugs and the arrest of those present.” Since then, marijuana has been illegal in Massachusetts, although the voters reduced possession of a small amount to a civil infraction in 2008. Remarkably, the 1911 law was the first state prohibition of marijuana in the United States.”); Martin I. Wilbert and Murray Galt Motter, A Digest of Laws and Regulations Relating to the Possession, Use, Sale, and Manufacture of Poisons and Habit-Forming Drugs, 56 PUBLIC HEALTH BULLETIN 135 (Nov. 1912) (including within the Massachusetts section, “[Laws, 1911, chap. 372.] Sec. 1. Provides for the issuance of a search warrant to [a law enforcement officer] commanding him to search the premises in which it is alleged
prohibition. To do this, Anslinger claimed that smoking cannabis gave rise to sexual deviancy, and that its use promoted racial mixing and endangered the innocence of young white women. Going beyond explicitly preying on latent racist fears, Anslinger sought to control the language around cannabis, first popularizing the term “marihuana” to associate the drug with Mexican immigrants, but also to confuse the public.⁴⁵ Many Americans did not equate “marihuana” with “cannabis,” a familiar term that referred to an ingredient that had been in their pharmaceuticals their whole lives. Indeed, at the Congressional hearings to criminalize cannabis, Dr. William Woodward, then-legislative counsel for the American Medical Association, claimed that doctors were wholly unaware that “marihuana”—this dangerous drug from Mexico that was threatening to overturn society—was in fact cannabis, and made a point of using the term “cannabis” throughout his testimony.⁴⁶

By leaking stories from his Gore Files to yellow journalists and then citing the published stories as evidence of the danger posed by rising cannabis use,

that . . . cannabis indica, cannabis sativa . . . is kept or deposited, and to seize and securely keep the same until final action, and to arrest the person or persons in whose possession it is found, together with all persons present if any of the aforesaid substances is found’’). While there is some disagreement about exact dates, several states passed cannabis prohibition measures before 1930 when Anslinger rose to lead the FBN. See, e.g., Isaac Campos, Mexicans and the Origins of Marijuana Prohibition in The United States: A Reassessment, 32 SOCIAL HISTORY OF ALCOHOL AND DRUGS 6, 15 n. 27 (2018) (“[Other scholars] confuse a number of these dates. They cite Massachusetts as [criminalizing cannabis in] 1914 when it was 1912, California as 1915 when it was 1913, Indiana and Wyoming to the 1930s, though the correct dates were 1912 and 1913, respectively.”).

⁴⁵ In fact, Anslinger is the reason the nomenclature “marijuana” and marihuana” became so broadly adopted as references to cannabis. In his war against cannabis, he was always sure to use the Spanish term “marihuana” instead of the more commonly used “cannabis,” both so as to provoke an association with Mexican immigrants, who were widely disparaged at the time, but also so as to spark fears about a new drug instead of changing the minds of those who already had opinions about cannabis. See Hudak, supra note __, at 23-27. Anslinger was so successful in his campaign that, as readers are likely well aware, “marihuana,” later spelled “marijuana,” became the primary terminology to refer to cannabis, and even today persists. Due to this problematic etymology and as a reclamation of not only the language but the narrative, the cannabis industry and cannabis advocates, as well as the authors, exclusively use the term “cannabis” when referring to the plant or intoxicant.

⁴⁶ See Taxation of Marihuana: Hearing Before the Comm. on Ways and Means, 75th Cong. (May 4, 1937) (statement of Dr. William C. Woodward, Legislative Counsel, American Medical Association).
Anslinger ultimately succeeded in his crusade to criminalize the drug. In April 1937, Anslinger testified before Congress in support of the Marihuana Tax Act, which imposed an exorbitant tax on growing cannabis, the payment of which one could evidence by the receipt of a federal stamp indicating payment. The statute imposed criminal penalties for noncompliance. The Marihuana Tax Act was passed and then went into effect October 1, 1937, effectively criminalizing cannabis, as even for those able and willing to pay, no stamps were issued.47

The passage of the 1937 Marihuana Tax Act was manufactured by the efforts of bad faith actors, such as Anslinger and Hearst, based on pretexts and lies. However, it is important to remember that they did not do this alone. Many people could have worked against them and did not, and none are more at fault than the 1937 Congress itself. That Congress held only two one-hour hearings on the Marihuana Tax Act and did not hold a floor debate. This Congress was easily duped by Anslinger, whose only evidence was his unverified accounts of violent cannabis addicts and citation to newspaper editorials, which again originated from his very files.48 Furthermore, many of those in Congress who voted on the matter did not even know what the bill was about, and instead chose to vote in ignorance.49

47 See Lee, supra note __, at 54 (“Even if someone sought to pay the exorbitant levy formally required for any commercial transaction involving cannabis, the U.S. government would not sanction the sale by issuing a tax stamp.”).

48 The bill’s sponsor, Rep Doughton, even expressed in an accompanying House report, “The seriousness of the problem is also emphasized by the fact that newspapers in over 100 cities in the country have reported the illicit use of marihuana within the communities which they serve.” Report To Accompany H.R. 6906, May 11, 1937, at 2.

49 The bill passed the House of Representatives in the alter afternoon of a long session, during which one Rep. Snell asked the Speaker of the House to postpone consideration, and the following exchange occurred:

Mr. SNELL. This is an illustration of the situation I was talking to the majority leader about a few moments ago. If we hold a session until late in the day and somebody brings up a piece of legislation, the average Member knows nothing about it, and while it is probably all right, it is hardly fair to take it up at that time.

Mr. RAYBURN. Mr. Speaker, if the gentleman will yield, I may say that the gentleman from North Carolina has stated to me that this bill has a
During the subsequent decades, Anslinger continued his crusade against drugs. With the FBN now fattened by the spoils of a war primarily against cannabis, Anslinger was able to crack down as he had always wanted. The rise of McCarthyism in the 1950s as a fearful reaction to an increasing Soviet power gave Anslinger just the new scapegoat he needed upon which to blame drug use. In 1951, Anslinger, who had backed away from his claims that cannabis users were violent delinquents, gave birth to the gateway drug theory, which suggested that people who use cannabis become more likely to use harder and more dangerous drugs such as heroin or cocaine. The theory aligned nicely with the domino theory of world socio-political power that the United States espoused at the time to garner political support against the expansion of communism. The gateway theory unfortunately caught on, and despite being thoroughly debunked countless times across decades, the theory persists.

unanimous report from the committee and that there is no controversy about it.

Mr. SNELL. What is the bill?

Mr. RAYBURN. It has something to do with something that is called marihuana. I believe it is a narcotic of some kind.

Mr. FRED M. VINSON. Marihuana is the same as hashish.

Mr. SNELL. Mr. Speaker, I am not going to object but I think, it is wrong to consider legislation of this character at this time of night. 81 CONG. REC. 5575 (1937).

50 Jacob Sullum, Bill Bennett’s Marijuana Gateway Theory (And Harry Anslinger’s), FORBES (Feb. 10, 2015, 6:50 PM), https://www.forbes.com/sites/jacobsullum/2015/02/10/bill-bennetts-marijuana-gateway-theory-and-harry-anslingers/#24e9e817a5ea. Again, it is important to note, this was done is total disregard to empirical evidence or scientific thought.

51 See, e.g., NATIONAL COMMISSION ON MARIJUANA AND DRUG ABUSE, MARIJUANA: A SIGNAL OF MISUNDERSTANDING: FIRST REPORT OF THE NATIONAL COMMISSION ON MARIJUANA AND DRUG ABUSE (1972); Andrew R. Morral et al., Using Marijuana May Not Raise the Risk of Using Harder Drugs, RAND CORPORATION (2002) (demonstrating that data allegedly supporting gateway theory can also be explained without gateway theory); Karen Can Gundy and Cesar J. Rebellon, A Life-course Perspective on the “Gateway Hypothesis”, 51 J. OF HEALTH AND SOC. BEHAVIOR 244 (Sept. 30, 2010); Ralph E. Tarter et al., Predictors of Marijuana Use in Adolescents Before and After Licit Drug Use: Examination of the Gateway Hypothesis, 163 AM. J. OF PSYCH. 2134 (Dec. 1, 2006); NATIONAL INSTITUTE ON DRUG ABUSE, MARIJUANA RESEARCH
even today.\textsuperscript{52} This new alarmism had far-reaching consequences. The Boggs Act of 1951, passed in the wake of this additional fearmongering, imposed the first mandatory minimum sentence for cannabis (2-10 years), paving the way for the war to come.\textsuperscript{53}

\textbf{B. The War on Drugs}

Cannabis use expanded significantly in the mid-20\textsuperscript{th} century, with the Beatnicks and Hippies jumping aboard the Devil’s Lettuce Train in the 1950s and 1960s, respectively. Although cannabis use remained fairly low compared to current consumption levels, this small level of usage was still massive compared to the usage of other illegal substances, like heroin and cocaine. As such, cannabis funded the FBN for decades, during which Anslinger sought to lock up every cannabis consumer he could. Despite this vendetta, the

\textsuperscript{52} See, e.g., Calandrelli and Fulton, \textit{supra} note \_\_, at 225-28.

\textsuperscript{53} See \textit{HUDAK}, \textit{supra} note \_\_, at 39.
persecution Anslinger had waged on cannabis users thus far was nothing compared to what was on the horizon.

1. **Nixon and the Controlled Substances Act**

   In 1961, a majority of the international community signed the UN Single Convention on Narcotic Drugs, an effort led by Anslinger himself to cement cannabis in a state of perpetual prohibition.\(^{54}\) The treaty required all signing countries to implement and maintain domestic prohibitions of cannabis.\(^{55}\) Although President Kennedy refused to sign the agreement—perhaps because of cannabis’s popularity among white middle class college students at the time—the United States did eventually ratify the treaty in 1968. The timing was apt, as the following year, in *United States v. Leary*,\(^ {56}\) the Supreme Court declared that the Marihuana Tax Act was unconstitutional.

   Unfortunately for cannabis advocates, a prohibitionist had moved into the White House, and so the period of federal legality was short-lived, to say the least. Richard Nixon responded before the midterm election in 1970 by pushing through Congress a sweeping drug criminalization bill: The Controlled Substances Act. This law created five schedules categorizing drugs based on their potential for abuse and accepted medical value. The Act placed cannabis in the most dangerous classification, Schedule 1, where it remains to this day.\(^ {57}\) Only a few years later, Nixon’s own commission on the dangers of cannabis use, commonly referred to as the Shafer Commission, for which he handpicked many members, concluded that cannabis should be decriminalized and was not

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\(^{55}\) Id.


\(^{57}\) This was initially intended to be only a temporary scheduling pending further review, but after the Shafer Commission determined that cannabis was not the deadly drug Nixon had played it up to be, a reconsideration of cannabis’s Schedule 1 status was deferred indefinitely.
dangerous. Nixon ignored this conclusion, not even reading it, and tasked the Department of Justice with further crackdowns.

In 1971, Nixon said out loud what his actions had evidenced all along, by declaring a “war on drugs.” The phrase not only invoked the same false dangers raised by Anslinger and others, but it also functioned in the same way as the language of Nixon’s prohibitionist predecessors: by feeding the fear of the American public, this time against communism, the civil rights movement, and the 1960s American counterculture. While Nixon alleged this war on drugs was to combat drug abuse and to protect Americans from the dangers thus posed, the true reasons are far simpler. As John Ehrlichman, Nixon’s aide on domestic affairs, told Dam Baum for Baum’s *Smoke and Mirrors: The War on Drugs and the Politics of Failure*, the war on drugs was executed to disrupt Nixon’s political dissidents:

We knew we couldn’t make it illegal to be either against the war or black, but by getting the public to associate the hippies with marijuana and blacks with heroin, and then criminalizing both heavily, we could disrupt those communities. We could arrest their leaders, raid their homes, break up their meetings, and vilify them night after night on the evening news . . . . Did we know we were lying about the drugs? Of course we did.

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59 Audio tape: Meeting with Richard Nixon and H.R. Haldeman, Oval Office Conversation No. 693-1 (Mar. 24, 1972, 3:02 PM-3:39 PM) (“I ... oppose the legalization of marijuana, and that includes the sale, its possession, and its use... . That is my position, despite what the commission has recommended.”) (on file with the Nixon Presidential Library); Audio tape: Meeting with Richard Nixon and H.R. Haldeman, Oval Office Conversation No. 568-4 (Sept. 9, 1971, 3:03 PM-3:34 PM) (“I have a strong firm convictions which I have expressed and which I won’t change ... about legalizing ... [and] my attitude toward penalties on marijuana, is ... very powerful... . We’re going to have a commission report, I said, [unintelligible] can be very clear, whatever it says, I’m against legalizing... . I’m against legalizing, period.”) (on file with the Nixon Presidential Library).

60 Spoiler: drugs won.

61 Alex Lockie, *Top Nixon Adviser Reveals the Racist Reason He Started the ‘War On Drugs’ Decades Ago*, BUSINESS INSIDER (July 31, 2019, 2:42 PM),

Electronic copy available at: https://ssrn.com/abstract=3811846
Just as with the racism of the 1930s and 40s, and the red scare in the 1950s, the reasons behind this prohibitionist crusade were not about cannabis itself, but rather about targeting those who used it, all the while using the same deceptive and bad faith arguments that Americans had been fed for decades.

2. Post-Nixon Escalation

The 1970s saw diverging paths on legalization. On the heels of the 1972 Shafer Commission’s report and recommendations, Oregon decriminalized cannabis in 1973. “Decriminalization” refers to the removal of criminal penalties for simple possession of small amounts of cannabis, while possession of bulk amounts, growing, and selling cannabis remain criminalized. Following decriminalization, it is important to note, cannabis remains prohibited, profits still go to illicit markets, and consumers are not protected by government regulations; the main distinction is that under decriminalization, the state does not actively charge individuals with a crime for possessing the drug. After Oregon, ten more states decriminalized cannabis during the 1970s, and decriminalization even enjoyed some national attention under the Carter administration, but renewed antagonism against cannabis shut down that trend until 2001.

In 1974, Senator James Eastland led a congressional subcommittee that responded to the Shafer Commission’s recommendation to decriminalize cannabis by attempting to demonize the drug. Eastland held Congressional hearings and invited anti-cannabis researchers to testify, thereby giving anti-cannabis propaganda a widely publicized platform and façade of scientific basis, and these proceedings gave rise to many of the cannabis myths we still

https://www.businessinsider.com/nixon-adviser-ehrlichman-anti-left-anti-black-war-on-drugs-2019-7; Dan Baum, Legalize it All: How to win the war on drugs, HARPERs, April 2016 available at https://harpers.org/archive/2016/04/legalize-it-all/. See also HUDAK, supra note __, at 50 [“The War on Drugs also fit into Nixon’s broader political strategy. Nixon’s well-known Southern Strategy sought to vilify out-groups in society, particularly racial minorities and members of the counterculture. . . . In fact, Nixon’s White House counsel, John Ehrlichman, has been quoted as explicitly stating that Nixon’s drug policies were racially motivated.”].


Electronic copy available at: https://ssrn.com/abstract=3811846
hear today. 63 Dr. Gabriel Nahas falsely claimed that he had proven a link between cannabis and amotivational syndrome, a term created for just such a fallacy. 64 Also testifying was Dr. Robert Heath, whose infamous 1974 rhesus monkey trials were widely publicized as evidence that cannabis killed brain cells. 65 In Heath’s study, researchers pumped sixty-three joints worth of cannabis smoke into gas masks worn by monkeys. After consuming said smoke over the course of five minutes, the monkeys suffered brain damage as a result of suffocation and carbon monoxide poisoning, but Heath attributed this brain damage to cannabis use. His results have never been replicated. 66

With the election of Jimmy Carter as President in 1976, a glimmer of hope appeared for rational cannabis regulation, as Carter largely viewed drug use as a public health issue rather than a matter for criminal law, 67 but with the election of Ronald Reagan four years later, this glimmer was extinguished and


64 See id. at 92 (statement of Dr. Gabriel Nahas, professor of anesthesiology, College of Physicians and Surgeons, Columbia University). Subsequent studies have found no link between cannabis consumption and so-called amotivational syndrome. See, e.g., Sara Smucker Barnwell, Mitch Earlywine, and Rand Wilcox, *Cannabis, Motivation, and Life Satisfaction in an Internet Sample*, 1 SUBSTANCE ABUSE TREATMENT, PREVENTION, AND POL’Y, 2 (Jan. 2006) (finding a null association between cannabis use and amotivational syndrome); David Duncan, *Lifetime Prevalence of “Amotivational Syndrome” Among Users and Non-Users of Hashish*, 1 PSYCHOLOGY OF ADDICTIVE BEHAVIORS 114 (Jan. 1987) (finding no significant difference in amotivational syndrome in cannabis users and non-cannabis users).


67 On Carter’s approach to cannabis and the infamous story about how Carter’s drug policy expert Peter Bourne’s visit to a NORML Holiday party ended up doom-ing the short-lived reform atmosphere in the White House in the late 1970s, see DUFTON, supra note __, at __.
did not return for decades. In 1980, Reagan lied that “leading medical researchers are coming to the conclusion that marijuana . . . is probably the most dangerous drug in the United States,”68 and asserted that while we do not yet know what all the ill effects of cannabis are, those effects are certainly permanent.69 Reagan’s efforts against cannabis led to the passage of the 1986 Drug Abuse Act imposing large mandatory minimum sentences for drug offenses, the amendment of the 1878 Posse Comitatus Act to allow use of U.S. military troops on domestic soil in pursuit of the war on drugs, the militarization of the police by way of the use of civil forfeiture in cannabis-related stops and arrests, and the mass incarceration of hundreds of thousands of Americans for mostly nonviolent, mostly cannabis-involved drug offenses.70

C. Cannabis in the Twenty-First Century: History Doesn’t Repeat but it Often Rhymes

With Reagan’s crackdown on cannabis, the war on drugs entered the era of mass incarceration. During his tenure, the prison population doubled from 329,00071 to 627,000.72 Today, over two million people are incarcerated in some fashion in the United States, about a quarter of whom are inmates who have been charged or convicted solely of drug offenses.73 Despite multiple presidents admitting to consuming cannabis in the past,74 the war on drugs


69 Reagan famously once stated that “The most reliable scientific sources say permanent brain damage is one of the inevitable results of the use of marijuana.” See Legalize It Once and For All, Campus Times, Apr. 24, 2014, available at: http://www.campustimes.org/2014/04/24/legalize-it-once-and-for-all/.

70 On Reagan’s cannabis policy, see generally HUDAK, supra note __, at 73-81; LEE, supra note __, at 157-60.


74 They being Clinton, who made the laughable claim that he did not inhale, as if that legally changed anything, and Obama, who correctly said “inhaling was the point.”
continued through the next five presidential administrations, surviving to this
day even though it has failed to accomplish its goal of reducing overall societal
drug use, much less actually promote the public good.\(^75\) Civil forfeiture
continues to provide police departments with strong incentives to enforce drug
laws to help fund their departments.\(^76\) Furthermore, as the evidence
undeniably shows, cannabis enforcement has been thoroughly racist; the
ACLU’s widely cited and reported publication *The War on Marijuana in Black
and White* concluded that Black Americans are roughly 3.7 times more likely
than Whites to be arrested for a cannabis-related offense.\(^77\)

Despite the abhorrent federal policy, states have slowly made progress
towards legalization, first for medical patients only, and more recently for all
adults. In 1996, California voters passed Proposition 215, the Compassionate
Use Act, making it the first state since the 1937 Marihuana Tax Act to legalize
cannabis for medicinal use. Even that development, however, was only
equivocally beneficial for cannabis users. Official interpretations of the
referendum were not initially favorable to medical cannabis patients. Latching
on to the language in the “pro” voter pamphlet that described the measure as
providing an affirmative defense to prosecution (despite no such language
present in the measure itself), for instance, then-California Attorney General
Dan Lungren took a narrow interpretation of Proposition 215 and did not stop
the arrest, charging, and prosecution of medical cannabis patients.\(^78\) By 1998,
California medical cannabis dispensaries were becoming rare, and arrests of

\(^75\) See *Gonzales v. Raich*, 545 U.S. 1, 12 (2005) (holding that the Controlled Substances Act
was intended “to conquer drug abuse and to control the legitimate and illegitimate traffic in
controlled substances”); Christopher J. Coyne & Abigail R. Hall, *Four Decades and Counting:
The Continued Failure of the War on Drugs*, CATO INSTITUTE POLICY ANALYSIS (Apr. 12, 2017),
https://www.cato.org/publications/policy-analysis/four-decades-counting-continued-
failure-war-drugs.

\(^76\) See *id.* (”One particularly insidious component of the War on Drugs is civil asset
forfeiture.”).

\(^77\) *American Civil Liberties Union, The War on Marijuana in Black and White (June 2013).*

\(^78\) See *Memorandum from Daniel Lungren, Cal. Att’y Gen., to District Attorneys (Nov. 6, 1996)*;
Patrick McCartney, *California and U.S. Officials Conspired to Block Prop 215, O’Shaughnessy’s*
(Autumn 2004), https://dokumen.tips/documents/california-and-us-officialsconspired-to-
cannabis patients, many with valid physician recommendations, skyrocketed, with over 50,000 in 1997 in California alone.\textsuperscript{79}

In the years following the adoption of Proposition 215, several other states passed medical cannabis measures, with Washington, Oregon, Alaska, Nevada, Washington D.C., Maine, Colorado, and Hawaii all passing some sort of medical cannabis laws by the end of 2000. Each state had its own list of qualifying conditions for which patients could receive a medical cannabis recommendation from a licensed physician and sometimes state-issued ID cards. Qualifying conditions often included HIV/AIDS, glaucoma, cancer, chronic pain, and epilepsy, for which cannabis is a unique and proven effective treatment,\textsuperscript{80} but state qualifying conditions greatly varied.\textsuperscript{81} Once in possession of the relevant physician recommendation and credentials, cannabis patients had the option to grow their own medicine, designate a caregiver to grow or produce their medicine, or purchase cannabis from the illicit market, as no formalized medical dispensaries existed. This situation gave rise to massive “grey” markets, which operated illegally, but also out in the open, sometimes with the tacit blessing of state or local authorities. The most prominent example of this phenomenon occurred in California, where a wildly extensive grey market operated in the open until state licensing requirements were adopted in 2018, but even now continues to a large extent.\textsuperscript{82}

In 2010, Colorado took the next step by implementing the nation’s first formal medical cannabis program that involved doing more than simply authorizing patients to obtain cannabis on their own. Similar to other states that had legalized cannabis for medicinal use, Colorado already contained operating medical cannabis dispensaries. Under the new licensing scheme, however, Colorado mandated that such businesses fully come above board, at least for purposes of state law. This development marked the beginning of the legal commercial cannabis industry, and within a few years, legally licensed


\textsuperscript{80} See *National Academies of Science, Medicine, and Engineering, The Health Effects of Cannabis and Cannabinoids* (2017) (describing health benefits of medical cannabis).

\textsuperscript{81} California was notorious for the ease of obtaining a medical cannabis card.

medical dispensaries spread to Arizona, Maine, New Jersey, New Mexico, Oregon, Rhode Island, and Vermont. 83

Despite the proven medical usefulness of cannabis and changing public sentiment toward the drug, federal enforcement of cannabis prohibition continued. To protect the medical cannabis industry, Congress after several attempts spanning fourteen years passed the Rohrabacher-Farr Amendment (later the Rohrabacher-Blumenauer Amendment), which prohibits the Department of Justice from prosecuting medical cannabis businesses that are compliant with state law. 84 Tacked onto appropriations bill annually, the protection survives today, important because now most states have medical cannabis programs. As of this writing, thirty-five states have implemented medical cannabis programs, 85 with no sign of this progress slowing. Indeed, the voters of Mississippi, one of the most conservative states in the nation, just voted to legalize medical cannabis in November of 2020. 86

In 2012, Colorado passed Amendment 64 and Washington passed Initiative 502, both by voter referendum, legalizing cannabis for consumption by the general adult population in each state. The first legal adult-use sale occurred on January 1, 2014, at 3D Cannabis in Denver, and the market has exploded since. Since 2012, thirteen more states have legalized adult-use cannabis, most by popular referendum but a couple (Vermont, for instance, and Illinois) through legislative action. The commercial cannabis industry is currently

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84 See Rohrabacher-Farr Amendment, Pub. L. No. 113-235, § 538, 128 Stat. 2130, 2217 (2015). This appropriations rider was initially misinterpreted by the DOJ as only protecting state officials, but its intended effect was reinforced by the Ninth Circuit Court of Appeals to restrict the DOJ expending any funds prosecuting any individual or businesses in compliance with their respective state medical cannabis law. See generally United States v. McIntosh, 833 F.3d 1163 (9th Cir. 2016); see also Matt Ferner, The Largest Federal Appeals Court Tells DOJ to Back Off State-Legal Medical Marijuana, HUFFINGTON POST (Aug. 16, 2016, 8:53 PM), https://www.huffpost.com/entry/medical-marijuana-9th-circuit_n_57b36a31e4b04ff83990337.


thriving, with states enjoying millions of dollars in sales annually. In 2020 alone, for instance, US retail cannabis sales topped $17 billion, even though the drug remains federally illegal for virtually all uses and purposes.

D. Cannabis Regulation Today

From the perspective of adults who enjoy using cannabis, the reforms of the past decade have of course made life better and easier. Any adult who lives in a state with a functioning adult use cannabis market can now walk into a cannabis store and choose from a wide array of products of all types (flower, edibles, tinctures, topicals, concentrates, etc.) and potencies (from CBD products that contain no THC at all to waxes and shatters that top out at 80% THC or higher) for use at home generally without any worry about being harassed or arrested by law enforcement. These products have been tested for impurities and labeled clearly so the user knows exactly what they’re buying and using. For those who have limited experience using cannabis or who simply want help figuring out which product will serve them best, trained personnel or “budtenders” are there to assist. For those who prefer to grow their own cannabis, most states that have legalized cannabis for adult use allow them to do so subject only to fairly generous limits on the number of plants they can cultivate at one time (typically 4-6 flowering plants).

Still, though, even those states that have fully legalized cannabis for both medical and adult-use purposes have continued to support policies reflecting the fears stoked by prohibitionists throughout the prior century, placing unjustified and unnecessary obstacles in the path of those who seek to enjoy cannabis. In our view, in other words, states have tended to adopt policies that embody Mark Kleiman’s famous call for “grudging tolerance” of drug use rather than fully embracing and celebrating the benefits of cannabis. Part of the

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87 Barcott, supra note __ (“Americans purchased $17.9 billion in cannabis products [in 2020].”).


89 MARK KLEIMAN, AGAINST EXCESS: DRUG POLICY FOR RESULTS (1992); see also Jonathan P. Caulkins, The Real Dangers of Marijuana, 26 NATIONAL AFFAIRS 21, 33 (Winter 2016) (“Mark Kleiman has argued for ‘grudging toleration.’ That means allowing adults access to some legally produced supply, hopefully on liberal enough terms to undermine the black market, but with restraints.
problem stems from the failure of most states to adjust or amend existing laws or legal doctrines outside of the cannabis statute itself to harmonize legalization with other public goals. For instance, many states continue to have per se rules against driving with any amount of THC in one’s system despite the fact that being fat-soluble, THC can remain in the body for weeks after being consumed.\textsuperscript{90} Moreover, in the realm of employment law, no states protect recreational cannabis users from being fired or not being hired in the first place based on testing positive for cannabis,\textsuperscript{91} and only some have even sought to protect medical users from similar negative employment actions.\textsuperscript{92} As a result, many employees have been fired for using a substance that is completely legal under state law.\textsuperscript{93} Finally, many states have not adjusted their Fourth Amendment search-and-seizure doctrines to account for the fact that possession of small amounts of cannabis products or plants is no longer illegal; in these states, the police can claim that probable cause exists to search a car or residence merely because they smell burnt cannabis, even though that smell is no longer evidence of a crime.\textsuperscript{94}

The other part of the problem can be found in the cannabis statutes and regulations themselves. Several prominent features of these statutes embody prohibitionist fears by strictly and unnecessarily burdening cannabis businesses from operating and selling their wares. First, all states that have legalized cannabis severely restrict cannabis establishments from advertising and


\textsuperscript{92} See \textit{id}.

\textsuperscript{93} See \textit{id}.

\textsuperscript{94} See generally Seth Stoughton, \textit{Marijuana Legal Regimes and the Evolving Fourth Amendment}, \textit{Verdict} (June 2, 2014). Massachusetts is the outlier in this area of law, having held that the odor of either burnt or unburnt cannabis cannot generally not be used to show probable cause for a search unless the odor somehow demonstrates that the amount of cannabis in the defendant’s possession is excessive. See, \textit{e.g.}, Commonwealth v. Cruz, 459 Mass. 459 (2011); Commonwealth v. Overmyer, 469 Mass. 16 (2014).
These restrictions tend to focus both on the content of advertisements (what kinds of things must be in an advertisement, and what kinds of things are prohibited) and the placement of advertisements (where businesses can advertise, including limits on both the location of the ads and what kinds of media can be used for advertisement). Some of these limits, of course, are aimed at the clearly legitimate goal of protecting children; for instance, most states prohibit the use of cartoon characters or celebrities who appeal to kids in cannabis advertisements. But most states go beyond these concerns to limit advertising to adults as well, presumably to reduce the demand for an otherwise legal product. Massachusetts, for example, bans most advertisements of cannabis product prices, and Colorado prohibits cannabis businesses from using leaflets or flyers for advertising or “engag[ing] in advertising that is visible to members of the public from any street, sidewalk, park or other place” other than a fixed sign on the property itself. As Jim Borghesani, a spokesperson for the Massachusetts ballot measure legalizing cannabis recently put it in response to a proposal to ban cannabis billboards: “A common refrain of policy makers hostile to legal cannabis is ‘protect the children,’ a sentiment that packs rhetorical sway but lacks empirical authenticity. The proposed legislation to ban billboard cannabis advertising seems a product of this sloganeering. It should be defeated.”


96 See Sesto, supra note __.

97 Id.

98 935 MASS. CODE REGS. 500.105(4)(b)(19).

99 COLO. CODE REGS. § 212-3 (R-1111)(b).

Second, most states afford cities and towns substantial authority to basically opt-out of legalization altogether. 101 This nod to “local control” clearly helps the legalization movement politically, but the result has often been to ensure large pockets of prohibition within states that have otherwise legalized cannabis. Massachusetts, for instance, allows any of its 351 cities and towns to ban cannabis establishments altogether. Localities that voted “yes” on the original referendum in 2016 must do so through a popular vote, but those that voted “no” on the original Act can prohibit cannabis businesses merely through the actions of elected officials. 102 As a result, nearly half the cities and towns in the state have prohibited cannabis establishments from operating within their borders, 103 often citing prohibitionist tropes about the dangers of the drug that have long been discredited. 104 A similar situation has occurred in other states, such as Colorado, 105 California, 106 and Michigan. 107

Finally, although some states and localities have formally adopted regulations allowing for the opening of social use establishments where people

101 See, e.g., Robert A. Mikos, Marijuana Localism, 65 CASE WESTERN RESERVE UNIVERSITY LAW REVIEW 719, 720 (2015) (“Citing concerns over marijuana’s perceived harms, many local communities in marijuana legalization states are seeking to reinstate marijuana prohibitions at the local level. Communities in at least twelve marijuana legalization states have already passed local bans on marijuana dispensaries.”).

102 MASS. GEN. LAWS ch. 94G, § 3 (2020).


104 See, e.g., Kelsey Bode, Andover Town Meeting Voters Banned Recreational Marijuana Shops from Town on Tuesday Night, THE EAGLE TRIBUNE (May 1, 2018) (describing meeting at which voters relied on arguments about children and driving to ban cannabis establishments from the city of Andover).


can use cannabis in public, \textsuperscript{108} not all states have even authorized such spaces. Moreover, even in those jurisdictions that do theoretically allow for social use establishments—Denver, for instance, and Massachusetts—very few if any such places have actually opened.\textsuperscript{109} As we will discuss later in the Article, social consumption spaces are critical for the normalization of cannabis use in the United States.\textsuperscript{110} All states prohibit the “public use” of cannabis, meaning that the only place one can really use the drug is at home, but because many people don’t have a home, or live in public housing where all cannabis use is prohibited, or live in smoke-free condominiums, or rent from landlords who do not allow cannabis use, or live in houses or apartments with children or other non-users, these cannabis users are out of luck unless they choose to risk a run-in with the law or anger their spouse or neighbors. Social consumption spaces, then, are a matter not only of convenience but also of equity, and the failure of states to actively promote them represents a failure to provide a safe space for everyone—not just those who own their homes—to enjoy the fruits (or buds) of legalization.

In sum, then, while cannabis may be legal in the fifteen states that have lifted their prohibitions for all adult users, this legality comes with significant limits and caveats. Yes, adults can visit a cannabis store to buy the product of their choice, but they can’t use it in public and they better hope they don’t get pulled over by a cop for driving days after they’ve consumed it. They might be fired or their houses searched simply for using a legal substance, and if they’re unlucky enough to live in a city or town that has opted to ban cannabis establishments entirely, they may have to drive a substantial distance to get what they want. And yes, entrepreneurs can apply for a license to operate a cannabis establishment in these states, but even if they can somehow obtain the capital necessary to run a business that is taxed at enormous rates and find


\textsuperscript{109} See Kristen Wyatt, Inside a Colorado Pot Club—a Rare and Endangered Species, AP NEWS (Apr. 19, 2017), https://apnews.com/article/6b25ab5c10ca4bdc9deb9216f14fa941 (“With no other weed state opting to regulate clubs or Amsterdam-style coffee shops, the Speakeasy Vape Lounge in Colorado Springs stands as one of a very few regulated marijuana clubs anywhere in the U.S.”).

\textsuperscript{110} See text accompanying notes __-__ infra.
a locality that will allow them to locate there, they still can’t even advertise their products like almost every other business imaginable. Prohibitionist attitudes, it would seem, continue to run deep in the United States despite legalization. In the next Part of the Article we explain how this phenomenon manifests itself specifically with respect to the regulation of edibles.

II. EDIBLES: AN INTRODUCTION

“Studies have produced conflicting results as to whether or not marijuana is a gateway drug.”\(^{111}\) One could be forgiven for thinking that this comes from a press release from the Nixon Administration. Instead, the excerpt comes from a 2019 legal article about edibles and is far from unusual in academic literature concerning an industry that now has more U.S. employees than there are computer programmers.\(^{112}\) The bias behind this false equivocation, rooted in bad faith campaigns of political agents past, is of course not specific to edibles, as cannabis still faces challenges getting legalized at all. Even once cannabis legalization measures do pass, though, it seems that the merits of legalizing cannabis must be rehashed at every subsequent step of regulation.\(^{113}\) Edibles are merely one of the new battlegrounds for prohibitionist arguments. When issues arise concerning how edibles should be regulated, many critics fall back on Reefer Madness mindsets and rhetoric rather than focusing on what we actually know about edibles, thus obscuring the real problems facing edibles in a post-legalization world. Before diving into the weeds of how states have regulated edibles, then, we start by explaining some of the science behind edibles in order to demystify the core subject of the Article.

A. What is an Edible?

Cannabis edibles, or just “edibles,” are products infused with activated cannabis extract that are intended to be consumed orally. Edibles come in many forms, from confectionaries and baked goods to oils and liquids, all of which can be orally ingested. The oral consumption of edibles induces a similar but distinct intoxication in the consumer as that of the more broadly familiar consumption methods of smoking and vaporizing. There are four main

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\(^{111}\) Calandrillo and Fulton, supra note __, at 225.


\(^{113}\) See supra Section I.D.
methods of cannabis consumption: inhalation, topical application, oral consumption, and sublingual consumption.\textsuperscript{114} By smoking or vaporizing cannabis, the most prevalent consumption methods,\textsuperscript{115} consumers can inhale combusted or heated cannabinoids into their lungs, producing intoxication. Topicals, such as creams, salves, and patches, are applied to the skin, although intoxication rarely results.\textsuperscript{116} Edibles and sublinguals are both initially ingested orally, but then are absorbed via different methods. Edibles are swallowed, passing through the stomach and liver before entering the bloodstream.\textsuperscript{117}

\textsuperscript{114} Debra A. Hunt et al., Understanding Cannabis, 16 THE JOURNAL FOR NURSE PRACTITIONERS 645, 647 (2020) (defining terminology related to various ingestion methods); Heidi Òblom et al., Data-Enriched Edible Pharmaceuticals (DEEP) of Medical Cannabis by Inkjet Printing, 589 INTERNATIONAL JOURNAL OF PHARMACEUTICS 119866 (2020) (“Commonly described administration routes of medical cannabis in the literature include, pulmonary (smoking, vaporization), oral (oromucosal drops and sprays, tablets, capsules, infusion in hot water, edibles, etc.), topical, and rectal.”); Cayley Russell et al., Routes of Administration for Cannabis Use – Basic Prevalence and Related Health Outcomes: A Scoping Review and Synthesis, 52 INTERNATIONAL JOURNAL OF DRUG POLICY 87, 88-92 (2018); Tory R. Spindle, Marcel O Bonn-Miller, and Ryan Vandrey, Changing Landscape of Cannabis: Novel Products, Formulations, and Methods of Administration, 30 CURRENT OPINION IN DRUG POLICY 98, 99-100. There are other consumption methods that do not fall within these four, including sprays, suppositories, etc., but which are far less prevalently used. Russell et al., supra at 92; Spindle, supra, at 100 (“Other novel products include sublingual sprays, tongue strips, lozenges, inhalers, and both rectal and vaginal suppositories.”).

\textsuperscript{115} See Russell et al., supra note __, at 88 (“Smoking combusted cannabis materials (e.g., by way of a joint, spliff, pipe, blunt, water-pipe/bong) remains the most predominant ROA among users in North America.”); id. at 90 (“According to some surveys, the prevalence of (any) vaporizer use among cannabis users is now comparable to that of cannabis smoking.”).

\textsuperscript{116} If applied topically, THC is absorbed in the epidermis, and mostly does not reach circulation, although more study is required to research the precise body reaction. This is why as consumers can use 300mg THC bath bombs (a dosage significantly above edible and sublingual counterparts) and not become especially intoxicated. See Hunt et al., supra note __, at 647 (“Most topicals do not penetrate deep enough to exert psychotropic effects, the exception being a transdermal delivery system that can deliver THC deeper (ie, through the skin to the blood vessels).”) (citing Roger Hudson et al., Cannabidiol Counteracts the Psychotropic Side-Effects of Δ-9-Tetrahydrocannabinol in the Ventral Hippocampus through Bidirectional Control of ERK1–2 Phosphorylation, 39 J. NEUROSCIENCE 8762 (Oct. 30, 2019)).

\textsuperscript{117} See Kerry Beal, Considerations in The Addition of Cannabis to Chocolate, 28 CURRENT OPINION IN FOOD SCIENCE 14, 15 (2019) (“Edibles introduce cannabinoids to the body via the gastro intestinal tract. THC is absorbed across the gut wall, enters the bloodstream,
Sublinguals, by contrast, are kept under the tongue, where they dissolve and pass through the mucus membranes at the floor of the mouth into the blood vessels located there.¹¹⁸

The distinction between edibles and sublinguals such as tinctures can be tricky to understand and is worth a bit of attention. Tinctures are liquids, traditionally alcohol-based but commonly oil-based in contemporary markets, that contain activated THC and other cannabinoids.¹¹⁹ Tinctures are often administered via a measuring dropper and intended to be consumed sublingually.¹²⁰ While tinctures are commonly categorized separately from edibles, in reality they are not different in kind. Instead, tinctures and sublinguals generally are merely designed in such a way as to facilitate a sublingual method of consumption. Swallowing a sublingual will produce an identical effect to swallowing a non-sublingual edible, and keeping an edible capable of dissolving under your tongue will produce a sublingual effect. Due to this similarity in kind, for purposes of this Article our definition of “edibles” will be inclusive of orally administered tinctures and other sublinguals unless otherwise noted.

undergoes first pass metabolism in the liver . . . . “); Peter X. Chen and Michael A. Rogers, Opportunities and Challenges in Developing Orally Administered Cannabis Edibles, 28 CURRENT OPINION IN FOOD SCIENCE 7, 10 (2019) (“Edibles delivers cannabinoids through the gastrointestinal tract, absorbed via the intestinal epithelial and transported into the bloodstream via the hepatic portal vein. From there circulation directs the cannabinoids to the liver where first-pass metabolism occurs.”).

¹¹⁸ See Catherine J. Lucas, Peter Galettis, and Jennifer Schneider, The Pharmacokinetics and the Pharmacodynamics of Cannabinoids, 84 BRITISH JOURNAL OF CLINICAL PHARMACOLOGY 2477, 2478 (2018) (“Oromucosal preparations [e.g. Sativex® (nabiximols) oromucosal spray] undergo rapid absorption via the oral mucosa (and hence are useful for symptoms requiring rapid relief), producing plasma drug concentrations higher relative to oral, but reduced relative to inhaled THC.”); Arshad Bashir Khan, Tarun Kingsley, and Preeta Caroline, Sublingual Tablets and the Benefits of the Sublingual Route of Administration, 16 JOURNAL OF PHARMACEUTICAL RESEARCH 257, 258 (2017) (noting that sublingual drug administration consists of putting a drug beneath the tongue on the mucous membrane in the sublingual area, whereby it is absorbed directly into the bloodstream).


¹²⁰ Id.
As mentioned above, THC is well known to be the most prevalent psychoactive cannabinoid, and cannabidiol ("CBD") is the most prevalently used non-psychoactive cannabinoid for medical purposes. Both can be extracted from cannabis and either consumed via inhalation methods or added to other products for topical or oral administration. However, eating raw cannabis flower does not produce the same intoxicating effect nor give the medical benefits that smoking that same flower will. Why is this? Instead of containing anything more than trace amounts of THC, as common knowledge might suggest, raw cannabis flower contains Tetrahydrocannabinolic acid ("THCa"), the acidic form and precursor to THC, which on its own is non-psychoactive. To be transformed into its neutral form of THC and become psychoactive, THCa must be activated in a process called decarboxylation.

Decarboxylation naturally occurs over time, but can be greatly catalyzed by the application of heat. With cannabis flower, decarboxylation occurs via

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121 For those unfamiliar, raw smokable cannabis is commonly referred to as "flower" because the part of the cannabis plant that people smoke to become intoxicated is, in fact, the flower of the cannabis plant.


123 See Maida and Daeninck, supra note __, at 399 (“The process of decarboxylation, which occurs through thermal treatment (heating or combustion), generates the pharmacologically active formats.”). Decarboxylation is simply the process of removing a carboxyl group (and releasing carbon dioxide) to convert an acidic molecule into its neutral form. By removing the carboxyl group one literally “de-carboxyl-ates” the molecule. The reverse process, carboxylation, adds carbon dioxide to a molecule and is the first step in photosynthesis.

124 See Marianne Hädener et al., *A Preliminary Investigation of Lung Availability of Cannabinoids by Smoking Marijuana or Dabbing BHO and Decarboxylation Rate of THC- and CBD-Acids*, 295 FORENSIC SCIENCE INTERNATIONAL 207, 209 (2019) (“In the cannabis plant, THC and CBD are synthesized as pharmacologically inactive carboxylic acids, THCA and CBDA, respectively. Conversion into their active neutral forms by decarboxylation occurs naturally as the plant ages, and is accelerated by light and heat (e.g. upon smoking, vaporizing or baking the plant material).”); Cinzia Citti et al., *Analysis of Cannabinoids in Commercial Hemp...*
combustion when smoking or by acute applications of high heat when vaporizing, such that the smoke or vapor inhaled contains THC, not THCa.\textsuperscript{125} When extracting cannabis into a form for use in edibles, however, decarboxylating must be much more precise than simply lighting the cannabis on fire, and it can be difficult to get right.\textsuperscript{126} Extractors must heat cannabis flower to the temperature at which decarboxylation begins, just above the boiling point of water, for an amount of time that breaks THCa down into THC, but not so long that THC is broken down further.\textsuperscript{127} Decarboxylated (or “decarbed”) cannabis flower contains THC, is psychoactive, and will produce intoxication if ingested.

The next step in the process involves “stripping” decarbed cannabis plant matter of its activated cannabinoids to obtain a cannabis product that can

\textit{Seed Oil and Decarboxylation Kinetics Studies of Cannabidiolic Acid (CBDA), 149 J. of Pharmaceutical and Biomedical Analysis 532, 533 (2018)} (“Cannabinoid acids like THCA, CBDA, CBGA, etc. undergo a decarboxylation process whose rate depends on different factors, but mainly the higher the temperature the faster the process. This decarboxylation finally leads to the formation of the corresponding neutral cannabinoids, THC, CBD, CBG, etc., which is not due to the action of enzymes, but to a simple chemical reaction or, more precisely, to a decomposition catalysed by heat. The conversion also takes place at room temperature, but it is much slower.”).

\textsuperscript{125} See Hädener et al. \textit{supra} note __, at 209.

\textsuperscript{126} To briefly cite some of the complexities involved in this process, decarboxylation occurs according to first-order kinetics, or logarithmically. See Citti et al., \textit{supra} note __, at 535 (“The rate constant of decarboxylation (k) refers to a first-order kinetic process.”); \textit{id.} at 538 (“The decarboxylation kinetics of THCA in \textit{Cannabis Flos} has been studied by Perrotin-Brunel et al. in a vacuum system. The reaction was described as a pseudo-first order catalyzed by formic acid, which encounters a keto-enol structure in the transition state.”) (citing Helene Perrotin-Brunel et al., \textit{Decarboxylation of \textDelta 9-Tetrahydrocannabinol: Kinetics and Molecular Modeling}, 987 \textit{Journal of Molecular Structure} 67 (2011)); Perrotin-Brunel et al., \textit{supra} at 68 (“Analysis of the data leads to the conclusion that this [decarboxylation] reaction surprisingly obeys a first order rate law.”). Additionally, because decarboxylation is the process of removing a carboxylic acid group and thus some amount of mass, when THCa converts to THC it only retains a maximum 87.7% of its mass. See Citti et al., \textit{supra} note __, at 537 (showing the conversion ratio of THCa to THC as 0.877, and the same for CBDa to CBD).

\textsuperscript{127} Perrotin-Brunel at al., \textit{supra} note __, at 68 (“Under the experimental conditions, the highest yield to \textDelta 9-THC [from THCa] was obtained at 110° C and 110 min.”).
either be sold as-is, like some tinctures,\textsuperscript{128} or mixed into other products, as in 
the case of edibles. Because cannabinoids are lipophilic, or “fat-loving,” they do not 
bind to water and instead must be stripped from the plant matter by other means.\textsuperscript{129} Activated cannabinoids can be stripped from decarbed plant 
matter by submersion in a fat or alcohol, which may be catalyzed by the 
application of heat to the solvent.\textsuperscript{130} Once the cannabinoids are extracted from 
the decarbed plant matter into the fat or alcohol, the plant matter is then discarded. The remaining fat or alcohol can then be added to other foods or 
ingredients to produce an edible and be sold to consumers.

As noted above, ingesting cannabis edibles produces a delayed onset and 
different effect as compared to other consumption methods. This is due to how 
edibles interact with the human digestive system. When orally ingested, the 
THC in edibles must pass through the stomach and then in the gut enter the 

\textsuperscript{128} Note that in the United States, cannabis tinctures are sold as oil-based instead of alcohol-based. While some tinctures are produced by means of alcohol-based extraction processes, the alcohol is later allowed to evaporate or otherwise diluted. This is because alcohol-based tinctures would be considered alcohol products under federal rules and be subject to federal licensing and labeling requirements. See, e.g., NEW YORK STATE LIQUOR AUTHORITY, ADVISORY #2019-1: DEFINITION OF “ALCOHOLIC BEVERAGE” UNDER THE ALCOHOLIC BEVERAGE CONTROL LAW (Jan. 15, 2019) (noting that any consumable product containing over 0.5% of alcohol is considered an alcoholic beverage under the New York Alcoholic Beverage Control Law and under federal regulation). However, as the Alcohol and Tobacco Tax and Trade Bureau (“TTB”) has clarified, it will not approve any formulas or labels that contain a controlled substance. TTB, FREQUENTLY ASKED QUESTION (FAQ): ALCOHOL BEVERAGE FORMULAS AND LABELS, https://www.ttb.gov/faqs/formulas-and-labels-a29 (last visited Jan. 10, 2021).

\textsuperscript{129} See Öblom et al., supra note __, at 1 (“The poor water solubility and poor oral bioavailability of both THC and CBD result in a formulation challenge, which explains why many medical cannabis products on the market are oil- or ethanol-based formulations, rather than conventional tablets.”); Beal, supra note __, at 15-16 (“The solvents used for extraction can include naphtha, alcohols including methanol and isopropyl and non-polar hydrocarbons such as butane. Liquid solvent is poured or pumped through a column containing the plant material and it dissolves and strips the cannabinoids and terpenes.”); Chen and Rogers, supra note __, at 8 (“The lipophilic nature of Cannabinoids requires the use of a lipid carrier to solubilize the bioactives.”); Jerry W. King, The Relationship Between Cannabis/Hemp Use in Foods and Processing Methodology, 28 CURRENT OPINION IN FOOD SCIENCE 32, 33 tbl. 1 (2019) (displaying extraction and processing of cannabis); id. at 37 (“Most cannabinoids and terpenes are not water-soluble as judged by the mismatch of their [polarity] with that of water.”).

\textsuperscript{130} See Luigi L Romano and Arno Hazekamp, Cannabis Oil: Chemical Evaluation of an Upcoming Cannabis-Based Medicine, 7 CANNABINOIDS 1 (May 5, 2013).
bloodstream, traveling through the portal vein to the liver.\textsuperscript{131} Due to cannabis’s lipophilic nature, which slows absorption through membranes, this longer path that edibles take through the digestive system accounts for the delayed onset associated with edibles.\textsuperscript{132} In the liver, THC undergoes “first pass metabolism” and is converted into 11-OH-THC,\textsuperscript{133} which produces a distinct, stronger, and longer-lasting intoxication than a similar dose of THC.\textsuperscript{134} This long and unique process is why sublinguals, when used as intended, are so different from edibles: sublinguals, such as lozenges or tinctures, may be placed under the tongue whereby they pass through the mucus membrane located there and

\textsuperscript{131} See Daniel G. Barrus et al., \textit{Tasty THC: Promises and Challenges of Cannabis Edibles}, RTI PRESS (Nov. 2016) ("Edibles introduce cannabinoids through the gastrointestinal tract. From the gut, Δ9-THC is absorbed into the bloodstream and travels via the portal vein to the liver, where it undergoes first-pass metabolism.").

\textsuperscript{132} See Alexia Blake and Istok Nahtigal, \textit{The Evolving Landscape of Cannabis Edibles}, 28 CURRENT OPINION IN FOOD SCIENCE 25, 28 (2019) ("This difference in onset and duration is primarily due to differences in drug metabolism, which are known to be dependent on the route of administration. With smoking, cannabinoids such as THC enter systemic circulation via lung alveoli. With oral administration, as is the case with edibles, cannabinoids must travel from the stomach to the liver through the portal vein before reaching systemic circulation.").

\textsuperscript{133} See Beal, supra note __, at 15 ("Edibles introduce cannabinoids to the body via the gastrointestinal tract. THC is absorbed across the gut wall, enters the bloodstream, undergoes first pass metabolism in the liver where the cytochrome P450 system enzymes hydroxylate THC to 11-hydroxytetradhydrocannabinol (11-OH-THC).") Beale, \textit{supra note __}, at 28 ("During a process known as first-pass metabolism, THC is metabolized by CYP450 enzymes in the liver into various metabolites, most noticeably 11-OH-THC.").

\textsuperscript{134} See Beal, \textit{supra note __}, at 15 ("11-OH-THC is a psychoactive metabolite more potent than THC. This results in the potentially stronger and longer lasting effect of edibles versus comparable dosages of smoked cannabis."); Blake, \textit{supra note __}, at 28 ("Interestingly, this predominant metabolite also possesses its own psychoactive effects, which are thought to be more potent than THC. Following metabolism, both THC and 11-OH-THC enter systemic circulation before crossing the blood-brain barrier."). This is not to necessarily say that a 5mg edible will produce greater intoxication than a 5mg sublingual product because of its conversion into 11-OH-THC. Because ingesting edibles presents a lower bioavailability than does sublingual consumption, less active cannabinoids will ultimately reach circulation. Similarly, inhalation presents a different level of bioavailability than edibles consumption. Thus, attempting to compare intoxication potential across consumption methods is more difficult inquiry to make. Instead, the above is understood as meaning that given a similar presence in blood circulation, 11-OH-THC produces a more intoxicating effect than does THC.

Electronic copy available at: https://ssrn.com/abstract=3811846
directly into the bloodstream, foregoing the longer path and conversion into 11-OH-THC.\textsuperscript{135}

Faced with the challenges presented by how edibles interact with the human body, cannabis businesses have introduced innovations in cannabis technology in recent years. One of the most promising emerging technologies is nanoemulsification. As many know, an emulsion is a mixture that keeps salad dressings and mayonnaise together: it allows fat-soluble and water-soluble liquids to mix together without separating. As applied to cannabis, processors create emulsions at the particulate level (with individual particulates measured in nanometers\textsuperscript{136}) that allow extracted cannabinoids to dissolve in water-based solutions.\textsuperscript{137} This technology has begun to allow cannabis businesses to create cannabis-infused beverages and other products that before were only pipe dreams.\textsuperscript{138}

Cannabis businesses have used nanoemulsion technology to solve for two of the largest qualms with edibles: delayed onset and non-homogenous dosing. Because cannabinoids in edibles can now be made water-soluble, they can be absorbed into the body quickly without having to go through the lengthy

\textsuperscript{135} Lucas, \textit{supra} note __, at 2478 (“Inhalational or oromucosal delivery of cannabinoids avoids or reduces the extensive first-pass metabolism observed following oral cannabinoid administration.”).

\textsuperscript{136} See David Julian McClements, \textit{Advances in Edible Nanoemulsions: Digestion, Bioavailability, and Potential Toxicity}, 81 PROGRESS IN LIPID RESEARCH 101\textsuperscript{081} (2021) (“The only difference between nanoemulsions and emulsions is the droplet size. Typically, nanoemulsions are considered to have mean droplet diameters below 200 nm, whereas emulsions have them above this value.”); Andrew Wong, \textit{6 Key Questions to Ask When Evaluating Water-Soluble Technology for Cannabis Products}, NATIONAL CANNABIS INDUSTRY ASSOCIATION (last visited Jan. 6, 2020), https://thecannabisindustry.org/tag/nanoemulsion-technology/.

\textsuperscript{137} See Marangoni and Marangoni, \textit{supra} note __, at 2 (“The encapsulation and/or emulsification of cannabis oil is the key step in the manufacture of a water-based drink.”).

process of first-pass metabolism. Additionally, while cannabis’s lipophilic nature can normally prevent homogenous dosing without intervention, water-solubility enabled by nanoemulsion allows cannabinoids to spread out evenly throughout an edible, paving the way for edibles that are traditionally more difficult to produce compliantly. Even further, nanoemulsions increase the bioavailability of cannabinoids within edibles, meaning that more of the active cannabinoids contained within edibles may be absorbed. Edibles currently have low bioavailability, which accounts for at least some of the inconsistency in effect and preferred dosing across consumers due to individualized rates of absorption. All of the above benefits come from just one cannabis technology innovation. With many more advances on the horizon, the sky is the limit for the future of edibles.

B. Hash and Pot Brownies: A Tale of Two Edibles

As we now know, cannabis has been a part of human culture for millennia. In the fifth century BCE, Herodotus described Scythians throwing cannabis onto heated stones and getting high. So too ingesting cannabis has a long relationship with humanity. For thousands of years, Indians have combined

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140 See McClements, supra note __, at 3 (“One of the most important applications of nanoemulsions within the food industry has been to increase the bioavailability of beneficial bioactive substances, such as oil-soluble vitamins and phytochemicals.”).


cannabis leaves and flowers into a paste known as *bhang*. This cannabis paste was, and still is, often mixed together with milk, as well as seeds and spices, to make *Bhang ki Thandai*, which itself is often referred to as just “bhang.” However, openly consumed today at Hindu festivals despite its illegality, bhang is in many ways the world’s oldest edible, and is distinctly Indian. Many countries have similarly specific edibles engrained in their histories. Cambodia has “happy soup” and more recently “happy pizza,” and Uzbekistan has *guc-kand*, a type of cannabis confectionary. The United States, of course, has the pot brownie. Lesser known, however, is that the pot brownie has its roots in the world’s most popular form of orally consumed cannabis: hashish. This Section will explore how hashish came to America, how it led to the pot brownie becoming the American edible, and how pot brownies led us to legalized cannabis.

1. Hashish in America

Hashish first became popular in the Muslim world as an intoxicant. Since cannabis is not proscribed by the Qur’an, as alcohol is, cannabis flourished in the form of hashish and other preparations. From countries like Morocco, it slowly made its way across the world.

In the mid-1800s, Jacques Joseph Moreau and Théophile Gautier established *Le Club de Hachichins*, or the Hashish Club, which introduced the

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143 Id. at 37.
144 Id.
145 Id. at 101.
146 Id. at 50.
147 Hashish is a concentrated form of cannabis resin that has been decarboxylated such that it is psychoactive in its solid form. Hashish may be smoked or orally ingested, depending upon its preparation and intended use, as well upon whether it is mixed with any tasty ingredients. *Id.* at 45.
148 Id. at 47.
149 One simple confection known as *majoona* was made by baking cannabis until it was dry (thereby decarboxylating it) and then rolling the dried product into a paste, which could then be ingested. *Id.*
150 Author of the 1845 book *Hashish and Mental Illness*, the first book in psychology to suggest that cannabis could be used medicinally to treat psychosis. Moreau theorized that the effects of cannabis may be sufficiently similar to psychosis such that all psychiatrists should imbibe to better understand their patients. *Id.* at 55.
French social elite to edible hashish paste consumed with dinners.\textsuperscript{151} The club met once a month from 1844 to 1849 and included a multitude of characters, from Charles Baudelaire to Alexandre Dumas, whose detailed description of consuming hashish in \textit{The Count of Monte Cristo} popularized hashish throughout the continent and beyond.\textsuperscript{152} The spread of edible hashish also made it to the United States, where travel writer Bayard Taylor published \textit{The Lands of the Saracen}, describing his experience with overindulging in edible hashish.\textsuperscript{153} Despite his harrowing experience from over-consuming, Taylor saw this as a learning experience, and any consumer today could learn from his advice in this 1854 book: “take the portion of hasheesh which is sufficient for one man, and not, like me, swallow enough for six.”\textsuperscript{154}

Flouting this sage advice, Fitz Hugh Ludlow began ingesting high doses of hashish, and described his experiences in his 1857 book, \textit{The Hashish Eater: Being Passages from the Life of a Pythagorean}.\textsuperscript{155} A smashing success, the book started the cannabis conversation in America. Hashish smoking became popular, as did edible hashish confectionaries.\textsuperscript{156} After Dr. W.B. O’Shaughnessy’s reports on medical applications for cannabis spread through the American medical community, doctors began prescribing cannabis to their patients in over-the-counter elixirs and tinctures.\textsuperscript{157} This prolific medical consumption of cannabis persisted until Anslinger won his war on cannabis with the passage of the 1937 Marihuana Tax Act, at which point cannabis and edibles were thrust out of the limelight.

The resurgence of cannabis edibles, and in many ways the beginning of what we know as edibles in America, started with an expat living in Paris in the 1950s.

\textsuperscript{151} \textit{id.} at 56 (citing LESTER GRINSPOON, MARIHUANA RECONSIDERED 58 (1971).

\textsuperscript{152} \textit{id.} at 58.

\textsuperscript{153} BAYARD TAYLOR, THE LAND OF THE SARACEN (1854).

\textsuperscript{154} \textit{id.} This humble account of an overconsumption experience shows that one can be mature about edibles overconsumption and not thereafter demonize the drug, but instead accept responsibility from one’s own irresponsible consumption, learn one’s lesson, and move on. \textit{Contrast Dowd, infra note __.}

\textsuperscript{155} FITZ HUGH LUDLOW, THE HASHISH EATER: BEING PASSAGES FROM THE LIFE OF A PYTHAGOREAN (1857).

\textsuperscript{156} LAWRENCE, supra note __, at 61.

\textsuperscript{157} Allegedly, consumers of these tinctures consumed daily doses in excessively high doses. \textit{id.} at 69.
Alice B. Toklas was running up against a deadline for her cookbook. Despite promising her publisher that Hemingway was going to send her a recipe on how to cook a lion (which may or may not be apocryphal), Toklas was in need of content and reached out to friends. Brion Gysin, at that time living in Morocco and indulging in the hashish plentiful there, sent in a recipe for “Hashish Fudge,” allegedly as a joke. Toklas unwittingly tossed the recipe into her cookbook without editing it, and it was included in the 1954 British edition, although the New York publishers timely caught and removed the recipe from the U.S. edition. The eponymously named Alice B. Toklas Cook Book was both a book of recipes and a memoir about Parisian bohemian life, and sold off the shelves throughout Europe, becoming notorious for its hashish fudge recipe.

Due to the massive popularity of the recipe, it was included in the second edition of the book in the U.S. As one of the highest-selling cookbooks of all time, the Alice B. Toklas Cook Book saw “Toklas” become synonymous with cannabis use, and awakened a hunger for cannabis in food. Chefs and cannabis proponents alike fell in love with the book, and famed chef Jeremiah Tower allegedly carried a copy with him at all times and used it to inspire a dinner he cooked for what would have been Toklas’s 100th birthday.

Although Toklas is credited as the origin of the pot brownie, her book only included a recipe for fudge, and she herself may have never so imbibed. A recipe for hash brownies first appeared in The Hashish Cookbook, which was published in 1966. Though The Hashish Cookbook was the first book to actually include a recipe for pot brownies, it is Toklas who will always be associated with birthing the American edible. The tellingly named 1968 film I Love You Alice B. Toklas, had the effect of truly cementing pot brownies in the American psyche, as it was the first major film to include cannabis-infused food as a major plot point. The film depicted the main characters consuming pot brownies to tongue-in-cheek delirious effects reminiscent of the 1937 propaganda film Reefer Madness, and explicitly credited Toklas, with one of the

158 Id. at 80.
159 Id.
160 Id. at 81.
161 Id.
162 Id. at 82.
163 Id. at 85.
164 Id. at 90.
characters attempting to avoid blame for the delirium by stating, “Thank Alice B. Toklas. It was her recipe. She wrote a freaky cookbook.”

2. Brownie Mary

During the 1970s and through the 1990s, Mary Jane Rathbun, now famously known as “Brownie Mary,” operated an illicit cannabis kitchen out of her home in San Francisco. Rathbun made dozens of batches of cannabis-infused brownies at a time, and over 15,000 brownies per month. Born in 1922, Rathbun’s grandmotherly appearance undermined attempts for prosecutors to get a jury to convict her, despite the police catching her with pounds of cannabis and dozens of edibles on multiple occasions.

During the AIDS epidemic, Rathbun volunteered as a nurse in the AIDS ward at San Francisco General Hospital at a time when many others wouldn’t for fear of catching the mysterious disease. Rathbun began giving some of her “kids,” as she referred to them, cannabis-infused brownies. She noticed that when the AIDS patients ate her brownies, their wasting syndrome symptoms ameliorated. People began donating cannabis to Rathbun, who would bake the flower into brownies and distribute them to AIDS patients free of charge. Even after run-ins with local police and federal DEA agents, Rathbun was persistent in her mission. As she once told reporters, “If the narcs think I’m going to stop baking pot brownies for my kids with AIDS, they can go fuck themselves in Macy’s window!”

165 Id. at 89.

166 A name too on the nose.

167 LAWRENCE, supra note __, at 105.

168 Id. at 106.

169 Id.

170 Id.

171 Id.

172 Id. at 107.

173 Id.

174 Id. (citing Peter Hecht, WEED LAND: INSIDE AMERICA’S MARIJUANA EPICENTER AND HOW POT WENT LEGIT 49 (Oakland, University of California Press 2014)).
Eventually, along with medical cannabis icon Dennis Peron, Rathbun helped open the San Francisco Cannabis Buyers’ Club, the first public cannabis dispensary in the United States, and did so at a time when cannabis was very much still illegal. The Club not only offered Rathbun’s famous brownies, but also featured cannabis-infused bread, cakes, and so-called “happy pills.” Many of the patients, and much of the staff, had HIV, and the dispensary became beloved, even earning local approval despite its state and federal illegality.

In part due to being constantly targeted by law enforcement officials, Rathbun and Peron went on to champion Proposition 215, the California Compassionate Use Act, which was approved by California voters in 1996 and legalized cannabis for medicinal use. While the road to Proposition 215’s passage was rocky and what followed immediately thereafter was not overtly promising, California’s Compassionate Use Act opened the door to an industry for cannabis edibles in the United States.

C. Legal Cannabis and the Emergence of Commercial Edibles

In the wake of Proposition 215’s passage, Dennis Peron reopened the San Francisco Cannabis Buyers’ Club, which had previously been shuttered by state law enforcement, to San Francisco’s patient community. The success and

175 LAWRENCE, supra note __, at 107.

176 Id.

177 See LEE, supra note __, at 236.

178 LAWRENCE, supra note __, at 109.

179 Two main camps supporting Prop 215, the stauncher progressive camp led by Dennis Peron and the more conservative camp led by out-of-state donors, at times butted heads, as Peron did not want to water down the measure, while the more conservative advocates wanted to form something that could pass a public vote. LEE, supra note __, at 243. The month before the vote, the DEA raided the San Francisco Cannabis Buyer’s Club with over one hundred agents with assault rifles and battering rams and led Peron out in handcuffs, resulting in a public relations nightmare for the DEA and garnering support for Prop 215. LEE, supra note __, at 243-245.

180 Despite Proposition 215’s passage, California Attorney General Dan Lungren chose to latch on to ambiguities in the law, interpreting it narrowly as merely giving those using cannabis for medical use an affirmative defense in court, and continued to enforce prohibition and prosecute medical cannabis patients alongside federal drug enforcement officials. LEE, supra note __, at 248, 251, 252.
notoriety of the club paved the way for more than thirty cannabis clubs that opened in the state shortly thereafter, including the Oakland Cannabis Buyers’ Cooperative, the Los Angeles Cannabis Resource Center, and the Santa Clara County Medical Cannabis Center. These clubs offered patient members an array of products, including infused brownies and cookies, but also capsules, tinctures, and other offerings that were more easily consumed by patients with debilitating conditions. Each club and its offerings were fairly unique because of the lack of regulatory structure in place. But because there was no regulatory structure, these cannabis clubs were subject to pressure from state and federal law enforcement and many were raided and shut down.

In 2003, California Governor Gray Davis signed Senate Bill 420, which established a statewide formal licensing and identification program for patients and allowing patients to pay caregivers or collectives to grow or provide them with cannabis. The effect, if not the intention, was to create an industry; cannabis was less commonly dispensed in clubs or by local support networks, but more commonly in establishments that resembled retail stores. The success of cannabis businesses was contingent on local approval, and while many local jurisdictions like Orange County eschewed cannabis operations, others like Oakland embraced them, giving rise to a quasi-illicit grey market. In 2006, Steve DeAngelo founded Harborside Health Center in Oakland, which he described as the world’s largest medical cannabis dispensary, a description that the locale retains to this day. With a more commercialized market came product competition, and in lockstep, innovation in cannabis edibles.

181 LAWRENCE, supra note __, at 111; Lester Grinspoon, Cannabis Clubs: Public Nuisance or Therapy?, PLAYBOY (Nov. 1998).

182 LAWRENCE, supra note __, at 112.

183 id.


185 Harborside in its infancy served more than 50,000 patients, and over 800 per day, and a few years later, a San Jose outlet had over 100,000 patients sign on. See LAWRENCE, supra note __, at 113.; Lucia Greaves, Harborside Health Center, World’s Largest Medical Pot Dispensary, Wins Battle To Avoid Shutdown, HUFFINGTON POST (Jan. 8, 2013), https://www.huffpost.com/entry/harborside-health-center-medical-marijuana-dispensary_n_2432944; Ryan Grim, Puff, Puff, Live: A Glimpse Inside Harborside Health
Colorado had followed California in legalizing the cultivation and consumption of cannabis for medicinal use in 2000, and while dispensaries did emerge in the Centennial State, the industry was initially fairly muted.\textsuperscript{186} In 2007, the Denver District Court ruled that medical cannabis caregivers, individuals, or entities designated by individual patients to cultivate and provide cannabis to them on their behalf, could provide cannabis for an unlimited number of patients, creating a rush by businesses to sign up patients.\textsuperscript{187} In 2009, U.S. Deputy Attorney General David Ogden issued a memorandum giving U.S. attorneys “guidance and clarification” regarding jurisdictions in which medical cannabis had been legalized, and outlining that prosecutorial priorities should not be focused on state-legal conduct.\textsuperscript{188} While the Ogden Memo, as it is now called, explicitly denied creating any legal

\textbf{Center,} \textit{HUFFINGTON POST} (Sept. 11, 2012), \url{https://www.huffpost.com/entry/puff-puff-live-inside-harborside_b_1669833}.

\textsuperscript{186} \textsc{Lawrence}, supra note __, at 113.

\textsuperscript{187} \textit{Id.}

\textsuperscript{188} \textsc{U.S. Dep’t of Justice, Office of the Deputy Attorney General, Memorandum for Selected United States Attorneys: Investigations and Prosecutions in States Authorizing the Medical Use of Marijuana} (Oct. 19, 2009), available at \url{https://www.justice.gov/archives/opa/blog/memorandum-selected-united-state-attorneys-investigations-and-prosecutions-states}. Years after the Ogden Memo, Deputy Attorney General James M. Cole issued a memorandum clarifying that the Ogden memo “was never intended to shield [cannabis] activities from federal enforcement action and prosecution, even where those activities purport to comply with state law.” \textsc{U.S. Dep’t of Justice, Office of the Deputy Attorney General, Memorandum for Selected United States Attorneys: Guidance Regarding the Ogden Memo in Jurisdictions Seeking to Authorize Marijuana for Medical Use 2} (2011). Two years later, Cole issued a second memorandum announcing that the DOJ would not prioritize prosecution against actors in compliance with state law and issuing a series of priorities for federal cannabis enforcement, which effectively communicated a hands-off approach to the state-legal cannabis industry. \textsc{U.S. Dep’t of Justice, Office of the Deputy Attorney General, Memorandum for All United States Attorneys: Guidance Regarding Marijuana Enforcement 1} (2013). After he came into office, Attorney General Jeff Sessions repealed the 2013 Cole Memo. See \textsc{U.S. Dep’t of Justice, Office of the Att’y Gen., Memorandum for All United States Attorneys: Marijuana Enforcement 1} (2018) (repealing the 2013 Cole Memo and any other documents restricting US attorneys’ ability to prosecute cannabis-related activities). Since the repeal of the 2013 Cole Memo, surprisingly, federal actions against state-legal enterprises have not significantly increased.
protections for those in violation of federal law, the effect was to dramatically increase the number of medical cannabis patients and operators.  

After the Ogden Memo, the cannabis industry took off despite ongoing federal raids. Colorado cannabis businesses, still operating under minimal regulation, increased not only in number, but also in product innovation. Stores expanded selections, selling everything from more familiar baked goods and chocolates, to new products like marinara sauce and salsa, all infused with cannabis. Colorado medical dispensaries sold fudge, muffins, coffee, ice cream, and even milkshakes. Cannabis drinks were popularized. Premium, organic, and vegan edibles shops emerged to meet demand, including offerings for cakes and chocolate croissants. The market even gave rise to a short-lived cannabis restaurant in Denver that served cannabis-infused pizza, lasagna, cheesecake, you name it. With few regulations in place, retailers did not face any substantial restrictions, and a cottage industry emerged to stock dispensary shelves with locally made edibles.

See Samuel Kleiner, The Limits of Pledging Prosecutorial Discretion: The Ogden Memorandum’s Failure to Create an Entrapment by Estoppel Defense, 33 Yale L. & Pol’y Rev. 265, 266-267; Ryan Grim and Ryan J. Reilly, Obama’s Drug War: After Medical Marijuana Mess, Feds Face Big Decision on Pot, Huffington Post (Jan. 26, 2013), https://www.huffpost.com/entry/obamas-drug-war-medical-marijuana_n_2546178 (noting that cannabis retailers increased from 1,000 before 2009 to 2,500 by 2013, and quoting Americans for Safe Access head Steph Sherer as stating “People were telling themselves what they wanted to hear,’ namely that the Ogen memo provided immunity from raids . . . ‘The proliferation got really ahead of advocates’”).

Lawrence, supra note __, at 116.


See Penny Parker, Ganja Gourmet: Where You Never Want to Stop Eating, Denver Post (Dec. 9, 2009), https://www.denverpost.com/2009/12/09/parker-ganja-gourmet-where-you-never-want-to-stop-eating/. Since Denver voted to ban sales and consumption of cannabis at the same location, Ganja Gourmet and similar sites were forced to close or convert into run-of-the-mill dispensaries. Lawrence, supra note __, at 131.
In 2010, Colorado officials responded to the bourgeoning unregulated industry by passing House Bill 1284, “creating the world’s first system to regulate and tax for-profit cannabis businesses, requiring dispensary owners to register with the state, pass criminal background checks, install security systems, pay taxes, grow 70 percent of their own product, and meticulously track their inventory from seed to sale.” The new regulatory framework forced many small businesses that could not afford to comply to go under, and the requirements on kitchens and cannabis tracking caused the cottage edibles industry to collapse. What remained was an industry with significantly less innovation and edibles offerings, and more restrictions were soon to come.

When Colorado and Washington became the first states to legalize cannabis for adult use in 2012, a for-profit industry quickly arose. The following years saw millions in sales and gave way to new edibles innovations from incorporating terpenes into edibles, to creating water-soluble cannabinoids, to curating multi-course cannabis-infused private dinners. However, cannabis legalization brought with it new problems. When Colorado edibles sales tripled in 2014, in part due to the budding cannabis tourism industry, alarmists began ringing bells. As some pointed to tragic incidents allegedly brought about by edibles and claimed that children were increasingly accidentally eating

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195 LAWRENCE, supra note __, at 117.
196 Id.
197 See Hunt et al., supra note __, at 648 (“Terpenes are aromatic chemicals that are found in many plants, often extracted for use as essential oils. Terpenes, found abundantly in cannabis, are responsible for the distinctive scent and flavor as well as the effects of the various cannabis strains. There are thousands of terpenes in existence, and about 200 have been identified in cannabis in different combinations and concentrations depending on the strain. Each terpene has specific neurotransmitter actions in the human body, although this appears to be somewhat individualized. Patients benefit most when they select terpenes that act on neurotransmitters that improve their particular issues. A few examples of common terpenes include limonene, pinene, and linalool.”); see also, e.g., Eric J. Downer, Anti-inflammatory Potential of Terpenes Present in Cannabis sativa L., 11 ACS CHEMICAL NEUROSCIENCE 659 (2020) (analyzing anti-inflammatory effects of several prominent terpenes present in cannabis); Angelica Maria Sabogal-Guáqueta, Edison Osorio, and Gloria Patricia Cardona-Gómez, Linalool Reverses Neuropathological and Behavioral Impairments in Old Triple Transgenic Alzheimer’s Mice, 102 NEUROPHARMACOLOGY 111 (2020) (researching effect of linalool, a prominent terpene found in cannabis, on Alzheimer’s disease); Tarmo Nuutinen, Medicinal Properties of Terpenes Found in Cannabis sativa and Humulus lupulus, 157 EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY 198 (2018) (investigating medicinal properties of terpenes).
policymakers grew concerned about the new industry, concerns which were only magnified by national press that wanted to sensationalize the new wild west.

In response to the outcry over edibles, Colorado regulators promulgated rules requiring that edibles be manufactured and sold in a very particularized fashion. For instance, the state required that all edibles had to be made with easily demarcated serving sizes of 10mg of THC and sold in childproof packaging with a universal identifying symbol on every package (this was years later extended to be printed on every edibles serving). While these measures were suitable for chocolates, gummies, and a few other confectionaries, other forms of edibles were not easily conformable, and the wide range of edibles offerings consequently dried up. Due to the high profile of Colorado’s efforts, when other states subsequently legalized adult-use cannabis, they looked to Colorado for guidance concerning how to regulate edibles. These second-in-time states adopted similar if not identical regulations to those that Colorado had promulgated, resulting in many of these regulations becoming common and legitimized by means of their mass adoption, resulting in the market we see today dominated by chocolates, gummies, and candies.

With strict limits placed on what they could sell in stores, and without any workable on-site consumption business model, cannabis edibles entrepreneurs saw another path forward: catered dinners. California, for example, saw a massive increase in private cannabis dinners in the 2010s. The hands-off approach that California had taken to its medical cannabis industry resulted in a prolific gray market and gave rise to a swath of unregulated edibles businesses. When California passed Proposition 64 in 2016 to legalize adult-use cannabis, edible sales in the state were already estimated to total $180

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198 For more on these incidents, see text accompanying notes __-__ infra.

199 See NATIONAL PACKAGING AND LABELING STANDARDS COMMITTEE, NATIONAL CANNABIS INDUSTRY ASSOCIATION, CANNABIS PACKAGING AND LABELING: RECOMMENDATIONS FOR SENSIBLE AND CONSISTENT REGULATIONS ACROSS STATES AND NATIONS 15-16 (Feb. 2019) (“A universal symbol is a visual warning to consumers that the product contains cannabis or THC. . . . [T]here is no true universal symbol for cannabis products at present because each state that requires a universal symbol has come up with a distinctive design. This may limit the intuitiveness, and therefore effectiveness, of the universal symbol.”); id. at 16 (displaying differing examples of state universal identifying symbols).
However, when California revamped its edibles regulations in 2018 to resemble what Colorado had done, many types of products could not conform to the regulations set forth. Any edibles that could not be individually divided up into ten-milligram serving sizes, such as the famous Auntie Dolores product line, were discontinued. Products that contained alcohol, or had to be microwaved or refrigerated, were prohibited. Edibles containing dairy were not allowed, so cannabis cheese makers (and eaters) were out of luck. Moreover, due to the lack of stores initially compliant under California’s recreational program, a sum total of 28 and the great number of unlicensed stores, consumers went right back to the illicit market.

The result of all this was that the initial surging edibles industry got regulated into the bland candy-dominated industry we see today. Earlier and larger states like Colorado and California paved the way by creating standard regulations in reaction to alarmist worries, and other states followed. The effect was to entrench regulations that stifle an industry we know has a much greater demand than chocolate bars and gummy cubes. It can be easy to look at the edibles market as it stands now and think that this is how it always was and must always be. However, an examination of the history of American edibles tells a different tale and shows us that the current state of the edibles market was hardly preordained. The range and types of products available to consumers are a direct result of the regulations under which edible manufacturers operate. And while some of those regulations have of course restricted edibles in the name of consumer safety, a noble cause unquestionably, the questions remain: Are these regulations effective, are they


202 Id.

203 LAWRENCE, supra note __, at 149.


205 LAWRENCE, supra note __, at 150.
no more restrictive than necessary, and ultimately, are they the best that we can do?

D. Regulatory Approaches in the States

States that first legalized cannabis for adult use not only got the first stab at cannabis industry, but also set a precedent for subsequent legalizers. As we see today, this has resulted in a large amount of overlap in the types of and approaches to edibles regulation, and indeed some regulations are identical across several states. Before getting into the merits and efficacy of these regulations—the subject of Parts III and IV of the Article—it will prove useful to survey the types of regulations that govern edibles. Stated overly simply, these regulations come in three strains or flavors, so to speak: (1) regulations on the content and form of edibles, (2) regulations on the packaging in which edibles are sold, and (3) ancillary edibles regulations.

First and foremost, states directly control edibles by regulating the form and content of edibles themselves. Some states directly ban the sale of edibles that are not shelf-stable so as to ensure that the new industry does not encounter problems with refrigeration in the supply chain, endangering consumer safety.

Pursuant to similar food safety concerns, some states explicitly ban edibles that contain alcohol or caffeine, or are themselves considered dairy, meat, or seafood products. Those types of food products that are allowed for cannabis infusion must then conform to dosing and form requirements. Most states that have legalized adult-use cannabis prohibit edibles from being shaped like humans, animals, or fruits, seeking to avoid

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206 In addition to the different types of regulations affecting edibles, most states that have legalized cannabis for recreational use have also instituted educational campaigns to reach out to new or underinformed consumers that are new to the market. Acknowledging that once products leave the store there is little that regulatory agencies can do to control how they are used, states have tried to promote responsible consumption through these campaigns to some success. See, e.g., CANNABIS CONTROL COMMISSION, MASSACHUSETTS PUBLIC AWARENESS CAMPAIGN, MORE ABOUT MARIJUANA: SUMMARY AND EFFECTIVENESS 30 (finding that the More About Marijuana educational campaign did show some effectiveness at having consumers store their edibles in a locked area if they had children in the home).

207 See, e.g., MICH. ADMIN. CODE r. 420.403(10) (requiring that all edible cannabis products be shelf-stable).

208 See, e.g., CAL. CODE REGS. tit. 17, § 40300 (2020).
appealing to children. In the same line of thought, some states prohibit edibles that resemble currently sold commercial products.

If an edible is of a type and form such that it may otherwise be sold, it must then conform to dosing requirements. When Colorado and Washington first imposed dosing limits on edibles following the legalization of adult-use cannabis, the idea was to find a serving size that was large enough for all consumers to feel an effect without consumers being overwhelmed by a single serving. These states settled on 10mg of THC for a standard serving size, and a limit of ten serving sizes per sale unit. All states to subsequently legalize adult-use cannabis imposed this framework of serving sizes, and mostly conformed to the numbers that Washington and Colorado settled on, with some variation.

For edibles that contain more than a single serving, states require that individual servings be separated, such as is the case for confectionaries like gummies, or be demarcated such that single servings are easily separated, as in the case of chocolate bars. Liquid edibles containing multiple doses are similarly required to conform to serving sizes, often by a requirement that the edible include a device for measuring out a single dose. Additionally, states require that edibles must be homogenously dosed, such that THC is spread throughout the product evenly and consumers do not ingest multiple servings thinking they are ingesting only one. Finally, many states require that edibles themselves, to the extent possible, must be marked with that state’s universal identification symbol for cannabis products.

Given all of these limitations, it makes sense that edibles that are created by pouring ingredients into molds reign supreme: they are the easiest to conform to regulation.

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212 For example, Alaska and Massachusetts have imposed a 5mg serving size and a 100mg limit per package. See Alaska Admin. Code tit. 3, § 306.560; 935 Mass. Code Regs. 500.150(4).


216 See, e.g., Col. Code Regs. § 212-3(3-335)(D)(2).
Once edibles are themselves in compliance, they must be packaged and labeled in conformity with state law. Edibles packaging itself is required to be child-resistant to prevent inadvertent consumption by children.\textsuperscript{217} States then impose strict requirements on what must appear on that packaging, including universal identification symbols, warnings about delayed onset and potential dangers to children, dosing and cannabinoid profile information, nutritional labels, and directions for use.\textsuperscript{218} States prohibit edibles packaging from containing many other things, such as misleading information or images that appeal to minors.\textsuperscript{219} In these packaging and labeling regulations, states seek to prevent access by minors while providing adult consumers with all relevant information to their consumption, in part to avoid instances of overconsumption.

Beyond state regulations on type, form, dosing, labeling, and packaging, other ancillary regulations also impact edibles producers, sellers, and consumers. Public consumption is prohibited in all states, and progress towards states allowing social consumption businesses is fledgling at best, leaving out-of-state consumers with few options for legal consumption and potential social consumption entrepreneurs out of luck. States additionally impose license requirements on edibles producers and retailers, which can be burdensome due to vertical integration requirements, slow and costly licensing processes, and municipal control of licensing approval, to name a few. If a business can acquire the necessary licenses and produce a compliant product, however, states regulate advertising edibles in various ways and to varying degrees.\textsuperscript{220}

So that’s where we are. From fairly unsophisticated origins in hash paste to the rise of pot brownies and baked goods in America to an unregulated

\textsuperscript{217} See, e.g., OR. ADMIN. R. 845-025-7020(2)(a); WASH. ADMIN. CODE § 314-55-105(3)(b)(i).

\textsuperscript{218} See, e.g. 935 MASS. CODE REGS. 500.105(5)(b); WASH. ADMIN. CODE § 314-55-105(3)(f).

\textsuperscript{219} See, e.g., ILL. ADMIN. CODE tit. 8, § 1300.930(c)(5); OR. ADMIN. R. 845-025-7020(2)(c), (3).

\textsuperscript{220} See, e.g., 935 MASS. CODE REGS. 500.105(4)(b)(16) (banning marketing on clothing or other promotional novelty items); 935 MASS. CODE REGS. 500.105(4)(b)(19) (prohibiting advertising the price of cannabis products); NEV. ADMIN. CODE § 6.120(2)(a)(3) (prohibiting advertising that depicts cannabis product consumption); NEV. ADMIN. CODE § 6.120(2)(c) (imposing buffer zones for cannabis advertising) NEV. ADMIN. CODE § 7.030(7) (prohibiting cannabis businesses from contracting with third parties for advertising); WASH. ADMIN. CODE § 314-55-155(1)(b)(i) (imposing buffer zones for cannabis product advertising); WASH. ADMIN. CODE § 314-55-155(2)(c) (barring cannabis advertising from arenas, stadiums, shopping malls, fairs that receive state funding, farmers markets, and video game arcades).
edibles cornucopia to the highly regulated chocolates and gummies-centric market we see today, cannabis edibles have taken a long and winding history in this country. It would be folly to presume that the current state of edibles regulations was either inevitable or is the final stop. Current regulation serves instead as an example of how the state-by-state regulation of edibles has resulted in an entrenchment of first-in-time regulations that themselves were responses to alarmist fears. If we are to better regulate the industry moving forward so as not to stifle it, we must reconsider some of the worries that resulted in initial cannabis regulations, and ask ourselves whether these purported harms were caused by the legalization of edibles, or instead arose out of prohibition itself.

III. REGULATING EDIBLES: SIMPLE SOLUTIONS TO SIMPLE PROBLEMS

With over a third of Americans now living in a state where cannabis is legal for adult use,\textsuperscript{221} it can be tempting to claim that the United States is reaching the end of cannabis prohibition. Such a conclusion, however, would be premature. After all, two thirds of Americans can still be arrested and imprisoned for possessing or using cannabis. Moreover, even in legalized states, we are still attempting to correct for the harms that prohibition has and continues to cause. While some of the regulatory problems posed by edibles, such as how they should be tested for toxic substances such as pesticide residue, are inherent in the products themselves, other problems, such as how to prevent edibles from being diverted to illicit markets, are not problems inherent to edibles, but rather arise out of the continuing nature of prohibition. The failure of policymakers to recognize this distinction has led to sluggish implementation of legalization measures and the promulgation of regulations that are either overly burdensome or miss the mark entirely, ultimately perpetuating the very harms of prohibition for which they should be solving.

Separating out regulatory issues that arise out of prohibition leads to the way to solve them. This Part first explores why prohibition does not work, and illustrates some of the defining qualities of prohibition-based policy. By showing how we already know the failures of prohibition and how to identify prohibition-based harms, this Part then applies this understanding to the two major issues in edibles regulation: overconsumption and inadvertent consumption. Explaining how regulations aimed at these two problems often incorrectly frame the relevant problems, this Part reveals that many of the

regulatory problems facing edibles can be solved by continuing on a path away from prohibition, and not, as some critics suggest, by delaying or turning back. Specifically, on the problem of overconsumption, we argue that while regulations focusing on serving sizes and other physical aspects of edibles may be helpful during the early stages of legalization, over time they should be phased out and replaced with an approach that emphasizes consumer education and flexible titration methods for a wide range of edibles products. With regard to inadvertent consumption, we contend that regulatory efforts should focus on educating adults about the need to responsibly store cannabis and not on regulating the form or type of edibles themselves.

A. The Problems of Prohibition

Alcohol prohibition, so notorious in United States history that it is commonly referred to simply as “Prohibition,” is widely regarded as a massive policy blunder. Prohibition gave rise to organized crime, dangerously unregulated alcohol markets, and a general disregard for the law. Most importantly, alcohol prohibition did not achieve its goal of stopping drinking in America. Why then do we think that anything would be different for

222 See Mark Thornton, Alcohol Prohibition was a Failure, 157 CATO INSTITUTE POLICY ANALYSIS (July 17, 1991), https://www.cato.org/publications/policy-analysis/alcohol-prohibition-was-failure; Mark A. R. Kleiman and Aaron J. Saiger, Drug Legalization: The Importance of Asking the Right Question, 18 HOFSTRA L. REV. 527, 532 n. 35 (Spring 1990) (citing John Kaplan, Taking Drugs Seriously, 92 PUB INTEREST 33-34 (Summer 1988)) ("The cost of prohibition on the criminal justice system, the feeding of organized crime, official corruption and civil liberty violations."); James Ostrowiski, The Moral and Practical Case for Drug Legalization, 18 HOFSTRA L. REV. 607, 641 (Spring 1990) ("The murder rate rose with the start of Prohibition, remained high during Prohibition, then declined for eleven consecutive years when Prohibition ended."). For a comprehensive historical account of Prohibition, see generally DANIEL ORRENT, LAST CALL: THE RISE AND FALL OF PROHIBITION (2010).

223 It must be noted though that Prohibition did, in fact, initially reduce the number of people who drank. For those that did drink, though, drinking rates increased dramatically, just as average ABV skyrocketed. See Cowan, supra note ___; Thornton, supra note ___ ("The decrease in quantity consumed needs at least four qualifications — . . . . First, the decrease was not very significant. . . . Second, consumption of alcohol actually rose steadily after an initial drop. . . . Third, the resources devoted to enforcement of Prohibition increased along with consumption. . . . The fourth qualification may actually be the most important: a decrease in the quantity of alcohol consumed did not make Prohibition a success. . . . The most notable of those consequences has been labeled the "Iron Law of Prohibition" by Richard Cowan. That law states that the more intense the law enforcement, the more potent the prohibited substance becomes.").
cannabis? Accepting that total prohibition is bad policy, how does prohibition play into regulated markets? When you try to solve for prohibition, but impose overly burdensome regulations, what result?

Cannabis prohibition, like alcohol before it, is ineffective at accomplishing its purported goals.\textsuperscript{224} Despite cannabis’s illegality, most Americans have consumed cannabis,\textsuperscript{225} and tens of millions have consumed cannabis within the last year.\textsuperscript{226} Cannabis is easier for minors to acquire under prohibition than it is under legalization.\textsuperscript{227} Prohibition does not make people safer, as it denies medical patients their medicine, fails to protect consumers from ingesting dangerous pesticides or other contaminants,\textsuperscript{228} and deters users from seeking medical care.


\textsuperscript{228}See Press Release, Centers for Disease Control and Prevention, THC Products May Play a Role in Outbreak of Lung Injury Associated with E-cigarette Use, or Vaping (Sept. 27, 2019) available at https://www.cdc.gov/media/releases/2019/p0927-thc-vaping.html (“In addition, the report from Illinois and Wisconsin showed that nearly all THC-containing
out medical help for fear of prosecution. Cannabis prohibition funds massive
criminal organizations that have killed tens of thousands of people in the past
few decades and fosters an overall disrespect for the law. The evidence is in:
from alcohol to cannabis, prohibition is not only ineffective policy, but it is also
actively harmful.

Legalization by contrast not only removes the harms of prohibition but
actively contributes to the common good by raising taxes, bolstering the
economy and jobs market, and bringing cannabis use into the public sphere
where the government can afford protections to consumers and businesses alike. It is thus doubly important that when legalizing, states are careful not to
overly burden legal markets and divert operators and consumers to illicit
markets. We know that cannabis has a fairly inelastic demand, meaning that
demand for cannabis is not readily affected by changes in supply. This not
only explains why prohibition is ineffective at curbing use, as supply naturally
rises to meet the inelastic demand, but also why overly burdensome
regulations fuel illicit markets: they restrict supply, but not demand. Even in
states with legal adult-use cannabis, if legal markets are unable to meet
demand due to the heavy burdens placed upon them by regulators, consumers
will turn to illicit markets to meet their demand instead.

products reported [as containing dangerous contaminants] were packaged, prefilled
[vaporizing] cartridges that were primarily acquired from informal sources such as friends,
family members, illicit dealers, or off the street.”).

229 June S. Beittel, Mexico: Organized Crime and Drug Trafficking Organizations (CRS Report
No. R41576).

230 See Carl Davis, State and Local Cannabis Tax Revenue Jumps 33%, Surpassing $1.9 Billion

231 Jenel Stelton-Holtmeier, Chart: US Cannabis Employment Could Climb Nearly 50% in 2020,
Surpassing Computer Programmers, MARIJUANA BUSINESS DAILY (July 28, 2020),

232 Gary Becker et al., The Market for Illegal Goods: The Case of Drugs, JOURNAL OF POLITICAL
ECONOMY (Feb. 2006).

233 For example, California is known for having a particularly restricted licensing model,
which is why an estimated 80% of the California cannabis economy is illicit. See Kevin

Electronic copy available at: https://ssrn.com/abstract=3811846
Illicit cannabis markets are extensive and sophisticated, even in states that have legalized adult use. Consumers do prefer legal cannabis, both due to quality and convenience, and are willing to pay a premium for it up to a certain amount (one scholar suggests $14 per gram), at which point consumers prefer illicit markets.\textsuperscript{234} The choice between legal and illicit markets is a rational economic choice, and one that follows simple economic principles. This is nowhere clearer shown than with California’s cannabis market, which is estimated to be 80% illicit.\textsuperscript{235} Many argue that this high proportion of illegal operators is caused by the state’s high tax rates, high barriers to entry, and limited supply of licenses.\textsuperscript{236} Recognizing that overly burdensome regulations applied to an inelastic demand for cannabis divert consumers to illicit markets, thereby perpetuating the harms of prohibition and undermining the benefits of legalization, the goal of such regulations should be, first and foremost, to avoid restricting supply or, in other words, to avoid extending prohibition.

The first step in enacting edibles regulations that do not further prohibition is to distinguish between problems inherent to edibles from problems that are rooted in prohibition and will therefore continue until full legalization is achieved. Problems inherent to edibles require permanent solutions that will regulate edibles in perpetuity, or at least until revision, as a part of a legalized market. Problems caused by prohibition, however, require temporary solutions.

\begin{footnotesize}
\begin{itemize}
\item See Dennis Romero, \textit{California’s Cannabis Black Market Has Eclipsed Its Legal One}, \textit{NBC} (Sept. 20, 2019), https://www.nbcnews.com/news/us-news/california-s-cannabis-black-market-has-eclipsed-its-legal-one-n1053856 (noting that legal cannabis retailers were burdened by “a lockout of legit sellers in most of the state’s cities, enforcement challenges and high retail taxes,” and that “Critics say those hurdles have only emboldened an expanding black market”).
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serving as stopgaps to prevent harms during the transition from prohibition to legalization. When one is conflated with the other, problems can easily arise.

Take for example the problem of diversion to illicit markets. To prevent such diversion, all states with legalized adult-use cannabis have limited how many plants consumers can grow at home as well as how much cannabis they can purchase or possess. In a fully implemented legal market, with cannabis legalized nationwide, none of these provisions would serve any significant purpose, as evidenced by the fact that few such similar provisions exist for alcohol. They instead serve to deter diversion of cannabis to the illicit market with all of its associated harms and lack of consumer protections. As such, they are only useful while illicit markets remain prevalent; once the illicit market disappears or decreases to a negligible level, the provisions will simply burden consumers for little to no benefit. Take instead the problem of how to ensure that edibles sold by stores do not contain toxic substances. A requirement that all licensed sellers of cannabis test their products for safety ensures that consumers are protected. Unlike the diversion problem, the possibility that some edibles will contain toxic substances will persist even after fully implemented legalization, and so testing requirements will continue to make sense.

Distinguishing between these two types of problems, those that come from prohibition and require only transitional measures and those that are inherent to edibles and therefore require lasting solutions, should determine the regulatory approach required. Problems that are inherent in the regulation of edibles are myriad but can typically be addressed with a relatively simple regulatory approach, mirroring regulations on alcohol. This same approach, however, is inapplicable to problems caused by prohibition, as problems caused by prohibition can only be completely solved by fully implementing legalization.

In the following sections, we apply this insight to the two primary problems posed by edibles: overconsumption and inadvertent consumption. Overconsumption happens when a consumer intends to reach a certain level

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237 The TTB imposes limits on how much beer or cider one may homebrew and how much wine one may ferment for personal consumption, although these ceilings are laughably high. See 27 C.F.R. § 25.205(b) (limiting unregistered home production of beer to 100 gallons if only one adult resides in the household, and 200 gallons per year if two or more adults reside in the household); 27 C.F.R. § 24.75(b) (mutatis mutandis for wine). The TTB prohibits distilling liquor for personal consumption. 26 U.S.C § 5601(a)(8) (imposing penalties for unregistered distilling).
of intoxication but ingests a larger dose than necessary to reach that level, sometimes excessively larger, resulting a negative experience. Overconsumption occurs mainly with new or inexperienced cannabis users, particularly cannabis tourists. Inadvertent consumption, on the other hand, happens when a person does not intend to ingest edibles at all, but mistakes an edible for a non-cannabis-infused food item, and thereby inadvertently becomes intoxicated. Inadvertent consumption occurs mainly with children. As we will explain, the reactions of regulators and cannabis critics to these two important issues exemplifies how scholars and policymakers have fallen prey to alarmist fears and inadvertently furthered the harms of prohibition.

B. OverDowding: The Overconsumption Panic

In June 2014, Maureen Dowd published a now-infamous opinion piece in the New York Times recounting her unfortunate experience with cannabis-infused edibles and speaking to the worries she had about the edibles market.238 “Don’t Harsh Our Mellow, Dude,” the title of which effectively communicated the level of nuance contained therein, shared Dowd’s harrowing experience ingesting an entire cannabis chocolate bar239—far too high a dose—and cited multiple instances of violence allegedly connected to edibles ingestion.240 The piece also almost offhandedly noted an increase of hospitalizations resulting from edible use.241 Dowd concluded on a facially

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239 Disregarding the 160-year old of advice of Bayard Taylor to “take the portion of hasheesh which is sufficient for one man, and not, like me, swallow enough for six.” See note ___ and accompanying text.

240 One of the instances Dowd cites is the case of Richard Kirk, who killed his wife after allegedly ingesting a high dose of edible cannabis. However, as later revealed, eerily reminiscent of a story from Anslinger’s Gore Files, Kirk was not significantly intoxicated by cannabis at the time of the murder. See Noelle Phillips, Richard Kirk Sentenced to 30 Years in 2014 Slaying of his Wife in Denver, THE CANNABIST (Apr. 7, 2017), https://www.thecannabist.co/2017/04/07/richard-kirk-prison-sentence-2014-slaying-wife-denver-observatory-park/76911/ (noting that Kirk’s blood test revealed that he was below the legal driving limit for cannabis).

241 Dowd wrote that she “became convinced that I had died and no one was telling me.” Dowd, supra note ___. She went on to cite a college student jumping off a Denver balcony, a Denver man killing his wife under the influence of edibles, and an increase in cannabis-related hospitalizations as evidence of “the darker side of unleashing a drug as potent as marijuana.” Id.
ambiguous note, but she strongly implied that edibles are inherently dangerous and should be strictly regulated to protect consumers.\textsuperscript{242}

Dowd has since been rightfully criticized,\textsuperscript{243} not only because she disregarded the advice she received that her chocolate bar contained multiple doses and that she should only eat one piece, but also because her article was right out of Harry Anslinger’s wheelhouse. However, despite her piece’s sensationalism, Dowd’s experience did clearly and widely convey one of the unique risks posed by edibles, namely overconsumption. In the remainder of this Section we describe how states have responded to the problem of overconsumption primarily by limiting the form and type of edibles that cannabis establishments can sell, thus restricting supply and rehashing prohibitory policies. We then suggest that rather than targeting edibles themselves as the source of the relevant risk, policymakers ideally should focus on educating and influencing consumers to behave responsibly. Only by reframing their attention on the correct problem will regulators be able to curb overconsumption while also allowing the edibles industry to grow, diversify, innovate, and satisfy consumer demand for a wide range of legal edibles products.

1. Initial Responses to Overconsumption

Before adult-use cannabis was to be legally sold in Colorado and Washington, policymakers had to decide on how they would address edibles dosing. Policymakers eventually settled on a 10mg THC serving size, a somewhat arbitrary threshold.\textsuperscript{244} After sales began, they found that

\textsuperscript{242} For example, Dowd suggested that edibles be stamped with not a cannabis leaf simple, but “maybe a stoned skull and bones” and questions the arguments of an edibles company owner, “Does he sound a little paranoid?” Id.


\textsuperscript{244} See AMENDMENT 64 IMPLEMENTATION TASK FORCE, TASK FORCE REPORT ON THE IMPLEMENTATION OF AMENDMENT 64 at 60 (Mar. 13, 2013) (recommending that Colorado adopt a 10 mg standard serving size for edibles); David Hammond, Communicating THC Levels and ’Dose’ to Consumers: Implications for Product Labelling and Packaging of Cannabis Products in
implementing a serving size alone was insufficient to address the inexperience that new consumers brought to the table. A lack of accurate labeling and problems with dosing homogeneity emerged, compounded by bad press that the industry received as a result of its novelty, all creating a public relations mess for the industry.

In reaction to Dowd and other sensationalist stories of edibles gone wrong, the Denver-based Council on Responsible Cannabis Regulation launched their “First Time 5” educational campaign to encourage first time cannabis consumers to consume 5mg for their first edibles experience, one-half of a standard 10mg serving in Colorado. That August, Colorado put forth emergency regulations aimed at addressing overconsumption, and the

Regulated Markets, INTERNATIONAL J. OF DRUG POL’Y 3 (July 2019) (noting that the 10mg serving size is “somewhat arbitrary” as standardized THC dosing is “highly subjective and depends upon a range of factors,” and that similar standard dose measurements have not been applied to other methods of cannabis consumption); see also 166 CONG. REC. H7079 (statement of Rep. Walden) (“We don’t even know at what point it is unsafe for marijuana users to drive. The THC levels that States have set for driving legal limits or for purposes of food consumption are simply arbitrary. Mr. Speaker, in Oregon, for example, cookies infused with THC are limited to 5 milligrams of THC per serving, or 50 milligrams per package. Now, you go across the Columbia River to the great State of Washington, and their limit is 10 milligrams or 100 milligrams. So there is little to no scientific evidence to support either of these levels. We simply don’t know.”).


248 For example, serving sizes are commonly put on packaging, packages are required to advise consumers of average time of onset and warn against overconsumption, and public education programs around edibles have become more prevalent. These regulations imposed a strict requirement that the 10mg serving size be enforced and that all edibles
following year it implemented further regulations regulating dosing, packaging, and labeling of cannabis edibles. These requirements were imposed to ensure that consumers knew how much THC they were ingesting when they ate an edible, particularly in light of the reports that edibles were not being accurately labeled and lacked homogenous dosing. Some parts of the regulations were also intended to directly address problems with new consumers who would not uncommonly overconsume, even ingesting an entire package of edibles at one sitting.

Every state to legalize cannabis for adult use has imposed either a 5mg or 10mg standard serving size. Similar to states that went first, subsequently legalizing states have required that edibles be sold in packages divided up into individual servings, or otherwise scored to indicate and separate each serving. To determine serving size, policymakers have to engage in an impossible Goldilocks inquiry. If the serving size is too high, then new consumers can more readily overconsume if they ingest one or two servings. On the other hand, too small a serving size could cause new consumers to engage in “stacking.” In Colorado’s case, the “just right” dosage was determined to be 10mg, although many now agree that the idea of a

must conform to the serving size by being sold in single-serving packages, being broken up into single-serving pieces, or if applicable scored so that single servings are easily broken off. See Luke Runyon, Colorado’s Pot Brownies Now Come with Instructions, NPR (Aug 26, 2014), https://www.npr.org/sections/thesalt/2014/08/26/343432131/colorados-pot-brownies-have-a-new-ingredient-warning-labels.


250 See, e.g., ALASKA ADMIN. CODE tit. 3, § 306.560(1) (5mg potency limit); CAL. CODE REGS. tit. 17, § 40315(a)(1) (2020) (10mg serving size); COLO. CODE REGS. § 212-3(1-115) (10mg standardized serving size); 935 MASS. CODE REGS. 500.150(4)(a) (5mg single serving size).

251 See, e.g., CAL. CODE REGS. tit. 17, § 40305(b); 935 MASS. CODE REGS. 500.150(3)(c), (d).

252 “Stacking” refers to the phenomenon where a consumer consumes too small a dose of edible, and while waiting for the edible to induce intoxication, mistakenly believes that the dose they consumed was too small, and then consumes additional doses, resulting in overconsumption. Manisha Krishnan, How the US Weed Edibles Scene Compares to Canada, VICE (Dec. 18, 2018), https://www.vice.com/en/article/gy7nbm/how-the-us-weed-edibles-scene-compares-to-canada-sticky (“Stacking is when someone eats an edible but doesn’t feel anything right away, so they eat more edibles to compensate for the lack of high.”).
standardized serving size is arbitrary and somewhat inapplicable to cannabis and that 5mg is closer to what most people would consider a normal dose, although there is large variation of what constitutes a “just right” dose across consumers. Regardless, because Colorado and Washington were first in time in determining how to regulate overconsumption and what dosage serving sizes should contain, when other states made the same inquiry, they by and large adopted or adapted what had already been done. As more states have adopted standard serving size and demarcation requirements, these regulations have gained a perception of legitimacy by their repeated adoption and have become entrenched in the industry.

The adoption by subsequent legalizing states of standard serving size requirements, along with other first-in-time regulations, naturally lends these regulations a false air of efficacy: If multiple actors working independently come to the same conclusion, then that conclusion will understandably be viewed as more trustworthy. However, what we’ve instead seen in the case of edibles regulations is initial, sometimes stopgap measures that subsequent states have then copied closely, sometimes almost verbatim. The lack of diversity in approaches gives rise to an illusion of rationality and efficacy when in fact it primarily represents happenstance and convenience.

This is not to say that these regulations are entirely ineffective; on the contrary, they have no doubt served to reduce the instances of overconsumption. But at what cost? As we described in Part II, the result of edibles regulations focusing on serving sizes and THC limits has been the development of a relatively dull and standardized candy-centric industry that stifles innovation and provides strong incentives for both producers and consumers to sell and buy products on the unsafe illicit market. Burdensome regulations on labeling and packaging raise prices and make it more difficult for smaller businesses to gain a foothold in the industry. This, in turn, has inequitable effects on who can start a cannabis business at all, as minority-owned businesses, which of course often represent the communities most devastated by the drug wars in the first place, tend to have particular difficulty


254 See supra note __.

255 See text accompanying notes __-__, supra.
raising sufficient capital to participate in the industry.\textsuperscript{256} Moreover, regulations that mandate separate servings often result in additional packaging material that creates waste and harms the environment.\textsuperscript{257}

All this is made worse by the fact that as time goes on, consumers are more likely to understand the problem of overconsumption, thus making regulations aiming at standardizing serving sizes and other limits on the form and type of edibles increasingly less important. Regulations that were initially effective in reducing overconsumption, in other words, may quickly lose their marginal benefits while continuing to cause problems. And yet, to a large extent, these initial stopgap regulatory responses to overconsumption have not been revisited. As explained in the following paragraphs, we contend that these regulations addressing overconsumption need to be revisited, reframed, and ultimately revised. We cannot let the floors that were first established in the

\begin{itemize}
\item Melissa Perlman, \textit{Reefer Blues: Building Social Equity in the Era of Marijuana Legalization}, 24 U.C. \textit{Davis J. Juvenile L & Pol'y} 95, 116 (Summer 2020) ("The stigma surrounding cannabis and people of color make it more difficult for them to make headway in the industry, which creates even more obstacles for people of color as they try to enter the business world. When trying to build a business, people of color 'lack access to capital, advisers, and networks, as well as discrimination from banks while applying for small business loans' and in the end it all 'boils down to finances."" (quoting Solomon Jones, \textit{Legalizing Marijuana Won't Benefit People of Color}, \textit{Phila. Inquirer} (Jan. 1, 2019), https://www.philly.com/opinion/commentary/marijuana-sales-black-brown-dollars-wealth-column-solomon-jones-20190102.html)); Ivan Moreno, \textit{Trials Minorities Face Raising Marijuana Capital: Q&A with DC Dispensary Owner Linda Mercado Greene}, \textit{Marijuana Business Daily} (Dec. 6, 2020), https://mjbizdaily.com/marijuana-legalization-left-minority-populations-behind-dispensary-owner-says/ (relaying Linda Mercado Greene’s difficulties in accessing capital in pursuit of entering the Washington, D.C., medical marijuana market, and specifically noting her stating “Securing capital as a Black woman was my first hurdle. Black people don’t have generational wealth, and it’s been hard for us to get any capital for years. You really can’t go to your own community of color because, once again, the capital is not there. The generational wealth is not there”); Janet Burns, \textit{Make No Mistake: Cannabis Equity Can’t Wait}, \textit{Forbes} (Jan. 8, 2020), https://www.forbes.com/sites/janetwburns/2020/01/08/in-2020-cannabis-equity-cant-wait/?sh=5a6030db1c97 ("[S]tates have struggled to both define and enforce qualifications for equity license applicants, who generally include people of color and members of historically criminalized communities, veterans, medical patients, and others who can offer cannabis experience rather than venture capital.")
\item See generally, Kevin Dalia, \textit{Green Garbage: A State Comparison of Marijuana Packaging and Waste Management}, 12 \textit{Golden Gate U. Environmental L.J.} 175 (Spring 2020).
\end{itemize}
early days of legalization be seen as ceilings, or else the cannabis market will always remain a basement: out of sight and unfinished.

2. Reframing Overconsumption

It is our view that the current slate of overconsumption regulations adopted by legalizing states have aimed at the wrong culprit. Instead of demonizing edibles, cannabis policy needs to directly confront the true problem: irresponsible consumers.

Too often, the worries of overconsumption and inadvertent consumption are phrased as risks of edibles, placing the blame on cannabis itself.258 It is important that we start from the fact that cannabis overdoses are a myth.259 It is of course true that without accurately dosed edibles or protections against pesticides and contaminants, consumers are taking risks when imbibing. Even when consuming properly dosed and tested edibles, consumers may experience panic attacks and activation of any conditions associated with increased heart rate.260 These ancillary harm worries are exactly what gave rise to standardized serving sizes, increased testing scrutiny, and other regulations that have at least proven initially successful. However, the largest problem

258 See, e.g., Calandrillo and Fulton, supra note __, at 262 (“Until more is known on the health effects of edibles and the impact that they have on society, and until more effective and consistent regulation can be instituted, state-based restrictions on edibles may be necessary.”); Larkin, Jr., supra note __, at 335 (“[E]dibles are shaped and colored to mimic candies already familiar to children or infants who are not yet intellectually capable of understanding the risks of consuming edibles . . . .”).

259 PDQ Integrative, Alternative, and Complementary Therapies Editorial Board, Cannabis and Cannabinoids (Nov. 6, 2020), https://www.ncbi.nlm.nih.gov/books/NBK65755/ (“Because cannabinoid receptors, unlike opioid receptors, are not located in the brain stem areas controlling respiration, lethal overdoses from cannabis and cannabinoids do not occur.”); You Might Not Overdose on Cannabis, But You Can Still Overdo It, HEALTHLINE (last visited Jan. 9, 2021), https://www.healthline.com/health/can-you-overdose-on-marijuana (“You can’t overdose on cannabis in the way that you can overdose on, say, opioids. To date, there have not been any reported deaths resulting solely from cannabis use, according to the Centers for Disease Control and Prevention (CDC).”). Terms like “overdose” and “toxicity,” common with respect to drug use, are inapplicable to cannabis, despite their use in common parlance. In the same way, cannabis is not an “intoxicant” per se, but labeling it as such is useful for the purposes of this Article.

260 PDQ Integrative, Alternative, and Complementary Therapies Editorial Board, supra note __ (noting cannabis and cannabinoids can give rise to tachycardia and hypotension, which are rapid heartbeat and low blood pressure, respectively).
posed to edibles consumers is not edibles themselves, but uninformed or irresponsible consumption; the danger is primarily a behavior, not a substance. While regulatory restrictions and increasing edibles technology\(^\text{261}\) may provide consumers with a better ability to plan their experience, they cannot account for the ultimate cause: user error.

The mainstays of edibles worries, namely reports of overconsumption, calls to poison control centers, and hospital visits, have occurred when adult-use cannabis has been legalized, but similar phenomena were less present in the wake of medical legalization.\(^\text{262}\) These types of worries were not prevalent before adult-use cannabis for a reason: there are a greater number of less experienced cannabis consumers in the adult use market than in the medical market. As one Colorado official put it, “The thing we didn’t anticipate is that the average consumer for medical marijuana is extremely knowledgeable about the effects of THC, the effects of how edible products interact with their bodies. We really didn’t anticipate we’d have the challenges with possible


\(\text{262}\) See Barrus et al., \textit{ supra} note ___ (“[B]etween 2005 and 2009 (before recreational legalization), the Children’s Hospital Colorado emergency department saw no cases of accidental ingestion. In 2013, the same emergency department treated eight children (mostly under the age of 3) who ingested edible cannabis. The number increased to 14 children in 2014. . . . Out-of-town patient visits to a hospital in Aurora, Colorado, for health issues following consumption of edibles almost doubled from 85 per 10,000 visits in 2013 to 168 per 10,000 visits in 2014; statistically significant differences were not observed for Colorado residents during the same time period.”); Caroline Llanes, Michigan Sees Uptick In Children Ingesting Marijuana Edibles, \textit{Mich. Radio} (Sept. 17, 2019), https://www.michiganradio.org/post/michigan-sees-uptick-children-ingesting-marijuana-edibles (reporting that one Michigan poison control center saw cases of children under six consuming edibles increase from six in 2017 to forty-six in 2018, and fifty-nine in the first nine months of 2019); Daniel Lampariello, Poison Control Calls for Kids Up 160% Since Recreational Marijuana Legalization, \textit{WGME} (Aug. 21, 2019), https://wgme.com/news/marijuana-in-maine/poison-control-calls-up-160-since-recreational-marijuana-legalization (noting an increase in calls to poison control from two in 2016 to nineteen in the first eight months of 2019).
overconsumption of edibles on the recreational market." Even without the regulations now allegedly guarding against overconsumption, as well as maximum doses that could exceed 100mg, we still did not see overconsumption instances emerge in the pre-legalization medical market.

Targeting irresponsible consumer behavior rather than edibles may seem obvious, even minor, but it is key in understanding how best to solve these problems, as doing so avoids prohibitionist, ineffective, and counterproductive responses. While it is true that consuming edibles in an irresponsible manner or in excessive amounts can result in negative personal and health consequences, framing the danger as stemming from edibles themselves raises a conceptual barrier to solving the problem. Just as referring to car crashes as "accidents" casts them as unavoidable and erases the human element that policymakers must recognize to successfully make roads safer, so too does focusing on edibles themselves risk deemphasizing the real cause of irresponsible overconsumption. If we accept that edibles, consumed responsibly, present a much lower risk than is commonly claimed, we can regulate edibles in a way that not only protects the public better, but also creates more opportunity in the edibles industry, more offerings to consumers, and an overall advancement of the movement away from prohibition and Reefer Madness towards rational regulation.

Overconsumption is a problem caused by prohibition, or more specifically by the lack of knowledge among the general public that prohibition has yielded. Had cannabis never been made illegal, it is likely that far more people would know how to consume it responsibly. Over time, as legalization continues to march forward, it is likely that the problem of overconsumption will decline significantly. It may be true that regulations limiting serving sizes and otherwise dictating the form of edibles can help protect new and naïve consumers, but the idea that regulations be permanently tailored entirely to


Electronic copy available at: https://ssrn.com/abstract=3811846
new and naïve consumers makes little sense. While approaching the problem of overconsumption as a Goldilocks inquiry can help serve as a stopgap for the prohibition problem of uninformed consumers, it imposes too strict a framework upon edibles that creates a host of important negative externalities. In the end, addressing consumer overconsumption likely requires a bifurcated approach, perhaps an initial prophylactic set of regulations to protect new and naïve consumers but ultimately a more sophisticated approach that simply enables responsible consumption for the greater consuming public. To borrow a bit from Colorado’s initial best practices campaign, regulations may work when they encourage consumers to first try five, but they serve only to benefit the illicit market when they mandate that consumers forever buy by five.

3. Addressing Overconsumption as a Prohibition Problem

Current regulations addressing overconsumption restrict the form and dosages of edibles. Such rules shut down much of California’s grey edibles market and reduced the range of legally available edibles offerings in most states basically to various forms of candy and the occasional cookie. This approach further served to give illicit operators a massive boon with a monopoly on edibles offerings that can’t conform to state-imposed dosage requirements. In doing so, these restrictions harken back to decades of prohibition, as government action to restrict supply instead of conforming to demand is the bedrock of prohibitionist thinking. Partial prohibition created by overregulation gives opportunity for illicit markets to fill the demand and ultimately serves to make consumers less safe. Diverting cannabis consumers to the illicit market means that they will be less able to consume responsibly, with no assurances of accurate dosing information or quality control. To prevent this, regulators must conform their precautionary measures to consumer demand, instead of hoping, à la the prohibitionists, that demand will conform to regulation. It is important to recognize that this change in approach does not necessarily mean removing restrictions. Instead, a non-prohibitionist approach may in fact require a more extensive regulatory

framework to allow the sale of currently proscribed products in a way that also protects consumers. Only by regulating to allow more edibles products rather than fewer into the legal market can states ensure that consumers can meet their demand without turning to the illicit market.

How could regulations be changed so as to bring illicit edibles offerings into the legal market while still protecting consumers from the dangers of overconsumption? Well first, what is the goal of dosing limits? By limiting the standard serving size of edibles, requiring that individual servings be packaged individually, putting a ceiling on the maximum dose per package, imposing strict homogenous dosing requirements, limiting baked goods and other hard-to-homogenize forms of edibles, and mandating accurate labels that include directions and warnings, regulators are attempting to ensure that consumers only get as intoxicated as they so intend. In other words, these regulations aim to allow cannabis users to titrate their edibles experience. As the common safety phrase goes, consuming edibles responsibly requires one to “Start Low, Go Slow.”

In aiming at empowering consumers to titrate effectively, regulators should not be tied to a system of standardized serving sizes that restrict product form, even if setting a standard serving size may have some benefits. We certainly do not regulate commercial alcohol sales according to how many serving sizes are contained in a container, as whiskey is not sold in boxes of twenty-five individual shots. Instead, we educate consumers on how much a standard serving size is, how to measure the potency of alcohol, and how many standard serving sizes are typically contained in different types of containers as well as how to measure those serving sizes. The National Institute on Drug Abuse, which admittedly has historically been very adverse to cannabis, in seeking input for establishing a standard THC dose for edible cannabis


267 It is of course true that different alcohol products have different ABV content, and because alcohol standard serving sizes are volume-based instead of dosage-based, a standard serving size of one may not contain the same dose as a standard serving size of another. Cannabis edibles, by contrast, have a dose-based standard serving size. This does present a difference between alcohol and cannabis edibles standard serving sizes, but one that does not diminish this analogy. Indeed, to the extent that standard serving sizes are useful, the regulation of cannabis edibles is actually an improvement over alcohol, which further reinforces this point, as we already accept the sale of variably-dosed, but accurately labeled, bulk intoxicants in the forms of liquor and wine bottles.
products, noted that although a standard serving size can function as a useful and easy-to-follow benchmark for researchers, any given standard size will ultimately be arbitrary. Similarly, five or ten milligram standard serving sizes for consumer purposes does set a standard that can be followed by repeat consumers, but these denotations are ultimately arbitrary. Therefore, policymakers should not be stuck to them, or to any standard serving size, beyond their usefulness in facilitating titration. Instead, regulators should seek to enable responsible consumer titration through multiple means: standard serving sizes for chocolates, gummies, and other easy-to-conform products, but also additional methods enabling consumer titration for those products to which standard serving sizes may be inapplicable.

What’s odd is that we can see that despite strict rules around cannabis confectionaries, alternate methods of controlling titration are not only equally viable, but are acceptable to cannabis regulators already, as long as those edibles can be considered a tincture or otherwise come in liquid form. In Massachusetts, for instance, various products, from cooking oil to THC drink additives, fall under the state’s definition of “tincture.” Under the state’s definition, a tincture must be measurable by dropper or measuring spoon, but otherwise is not subject to edibles dosing limits, and indeed many recreationally available tinctures contain hundreds of milligrams of THC. In Colorado, packages of liquid edibles can contain up to 100mg of THC if they come with a serving size measuring cup that measures out 10mg of THC. If we accept that containers can contain a high amount of THC without thereby necessarily harming consumers, and that alternate methods of enabling titration can be successful, why effectively limit cannabis edibles to candies and chocolate bars? The fact that tinctures and elixirs continue to be legally sold in adult-use states without causing market mayhem shows that alternate methods of enabling consumer titration exist and can be effective.

268 Volkow, supra note __.

269 935 MASS. CODE REGS. 500.002 (“Tincture means a Cannabis-infused alcohol or oils concentrate administered orally in small amounts using a dropper or measuring spoon. Tinctures are not considered an Edibles under 935 CMR 500.000 and are not subject to the dosing limitations applicable to Edibles.”).


272 Even products that are only tinctures in a looser definition that allows in cooking oil.
The solution then is clear: in addition to educating consumers, regulators must allow for alternate but accurate titration methods for edibles. Liquid edible products provide a good blueprint, as some states have successfully mandated that they include a measurement device in their packaging to accurately measure dose. Regulators need to expand this thinking by either (1) creating edible-type-specific regulations such that all forms of edibles have dedicated titration regulations, or (2) promulgating “pre-clearance” rules allowing for producers to submit measurement and titration plans to regulators for approval, with regulations being periodically updated to account for approved methods. The second option is particularly appealing, as by allowing for alternate methods of titration while putting the burden on edibles producers, regulators can combat illicit markets by expanding legal markets, enable innovation and opportunity by crowdsourcing the heavy lift of designing these titration methods, and continue to protect consumers by empowering them to consume responsibly. In doing so, regulators could open the door to a wider array of cannabis offerings, from those that have already shown to be successful, such as baked goods, to those that have only been postulated, like cannabis condiments and frozen cannabis-infused pizzas. Both of the above approaches allow for consumer titration without restricting the market or playing to prohibitionist fears. The problem of overconsumption, if stripped of the prohibitionist alarmism surrounding it, can be solved in a rational way that does not harm the industry.

C. Inadvertent Consumption: What About the Children?!

Appeals to the purported dangers posed to children by legal cannabis have long been a mainstay of prohibitionist rhetoric and policy. When Harry Anslinger first waged his war on cannabis, for example, he made sure to focus on the danger that cannabis posed to children, young children and adolescents alike, as he knew it would trigger white American parents to rise up in arms about “marihuana.” Others in the same era also focused on children; it is no accident that the film *Reefer Madness* focused on high school students and was

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274 See Anslinger and Cooper, supra note ___ (stating that youth are the primary targets of “peddlers of poison” and using such rhetoric as “The sprawled body of a young girl lay crushed on the sidewalk the other day after a plunge from the fifth story of a Chicago apartment house. Everyone calls it suicide but actually it was murder. The killer was a narcotic known to America as marihuana, and history as hashish.”).
originally called “Tell Your Children.”  

Similarly, when Ronald Reagan escalated the war on drugs, his administration stressed that cannabis posed both physical and moral dangers to the children of white Americans.  

Even now, critics of legalization continue to play the “what about the children?” card, as evidenced by the Reefer-Madness-Redux title of Alex Berenson’s recent popular and deeply flawed book, *Tell Your Children: The Truth About Marijuana, Mental Illness, and Violence.* 

275 See *Lee,* supra note __, at 52 (“Tell Your Children (1936), better known by its later title Reefer Madness.”); *David V. Patton, A History of United States Cannabis Law,* 34 J.L. & HEALTH 1, 9 (2020) (“The infamous 1936 film Reefer Madness (also known as Tell Your Children and Doped Youth depending on where and when the film was shown) was part of Anslinger’s propaganda effort.”). 

276 See *Lee,* supra note __, at 162 (“‘Just say no’ was allegedly all about protecting the kids—a theme that animated a network of federally funded antipot parents’ groups that rose to prominence during the Reagan administration. ‘We’re in danger of losing our whole next generation,’ the First Lady told leaders of the National Federation of Parents for a Drug-Free Youth. The rhetoric of child protection was the calculated cornerstone of drug-war public relations.”). 

The fact that child-centric rhetoric has such deep roots in American prohibitionist history should immediately set off warning bells that the concerns of critics are overblown and purposefully manipulative. Fortunately, the appeal of this type of rhetoric has waned significantly, as voters have increasingly recognized that prohibition is the source of most cannabis-related problems, including problems involving children, rather than the solution to those problems. By decreasing the size of the illicit market, imposing regulations to improve product safety, and ensuring that only adults can access stores and dispensaries selling cannabis, legalization generally protects children rather than harming them. During the legalization debates of the past decade, prohibitionists consistently decried the dangerous impact that cited by Berenson and Gladwell. In a conversation with Rolling Stone, Cooper asserts that Berenson completely misunderstood the report’s conclusions around schizophrenia. ‘To say that we concluded cannabis causes schizophrenia, it’s just wrong, and it’s meant to precipitate fear,’ she says. Rather, the scientists found an association between schizophrenia and cannabis use, but do not yet have enough evidence to determine causality. As Cooper puts it: ‘People who have schizophrenia are also known to be very heavy tobacco smokers, but we don’t say that tobacco causes schizophrenia.’”); Jamiles Lartey, *Popular Book on Marijuana’s Apparent Dangers is Pure Alarmism, Experts Say*, THE GUARDIAN (Feb. 17, 2019), https://www.theguardian.com/society/2019/feb/17/marijuana-book-tell-your-children-alex-berenson (citing Letter from Scholars and Clinicians who Oppose Junk Science about Marijuana, DRUGPOLICY.ORG (Feb. 14, 2019), https://drugpolicy.org/resource/letter-scholars-and-clinicians-who-oppose-junk-science-about-marijuana (“75 scholars and medical professionals have criticized a controversial new book about the purported dangers of marijuana, calling it an example of ‘alarmism’ designed to stir up public fear ‘based on a deeply inaccurate misreading of science.’”)); DRUG POLICY ALLIANCE, WHAT NOT TO TELL YOUR CHILDREN: FIVE THINGS ALEX BERENSON GETS WRONG ABOUT MARIJUANA (2020), https://drugpolicy.org/resource/what-not-tell-your-children-five-things-alex-berenson-gets-wrong-about-marijuana (“Berenson falsely claims that no one is incarcerated for marijuana possession anymore, and minimizes the harms of arrest. . . . Berenson fails to mention that, while there has been a fair amount of government-backed research on potential harms of marijuana, prohibition has severely limited research on marijuana’s medical efficacy and safety. . . . Berenson grossly overstates the benefits of decriminalization and underestimates the persistence of racially disparate enforcement.”); David Bienenstock, *Tell Your Children* to Reject Alex Berenson’s Debunked Nonsense, LEAFLY.COM (Jan. 9, 2019), https://www.leafly.com/news/politics/tell-your-children-to-reject-alex-berensons-debunked-nonsense (“Alex Berenson is a manipulative writer. His book is full of false alarms, nonsense correlations, and long-debunked theories. . . . Berenson has pretty clearly been caught purposely leading his readers to a wholly false conclusion. Call me old-fashioned, but back in my day weed still had seeds, and we called such cynical behavior ‘bullshitting to make a buck.’”).
legalization could have on children.\textsuperscript{278} According to these critics, without the government telling kids that consuming cannabis is wrong and with legal cannabis available for purchase (and right down the street, no less!), surely children would be in mortal peril. Voters and representatives in many states saw through this rhetoric, however, and as states began to legalize, these problems largely failed to materialize—as it turns out, legalization has tended to decrease cannabis use by children rather than increase its use.\textsuperscript{279}


Given the power of appeals to protecting children and the persistence of the myth that legalizing cannabis leads to increased use by kids, it is not surprising that the prohibitionists have refocused their attention on a new target: edibles. Critics like Macoun, Mello, Larkin, and Dowd have argued that legally available cannabis edibles will cause an increase in inadvertent consumption by children due to the probability that parents will have more edibles in the household, as well as the ease with which some edibles may be mistaken for common food items. To support their arguments, these critics have pointed to data showing that legalization has correlated with increased calls to poison control centers and visits to hospital emergency rooms linked to inadvertent consumption of edibles, mostly by minors. The evidence, some argue, is sufficient that drastic action has to be taken to make edibles less appealing to children and to possibly even restrict edibles available to the adult public. Although no state has yet to ban edibles entirely, most states have supplemented common-sense regulations about child-safe packaging and storage requirements with additional measures aimed at limiting the form and appearance of edibles. For instance, in 2016, Colorado regulators mandated a universal identification THC stamp be placed on

\[280\text{ See Larkin, Jr., supra note __, at 332 ("[L]egal restrictions do not prevent children - to say nothing of adolescents - from finding the drug in their parents' supply or obtaining it elsewhere and mistakenly consuming it, or being deliberately tempted to do.").}\]

\[281\text{ See id. at 381 ("[D]eveloping edibles that resemble commercial foods] poses the risk that minors - some accidentally, some intentionally - will consume marijuana edibles found around the home or elsewhere.").}\]

\[282\text{ See id. at 335 (citing increases in cannabis-related calls to poison control centers and emergency department visits).}\]

\[283\text{ See id. at 346 ("However unusual it may seem, prohibiting edibles alone - that is, without also prosecuting the sale of marijuana to be smoked - is not an irrational choice, given the marijuana regulatory regime we have today."); Dowd, supra note __ ("The governor also signed legislation mandating that there be a stamp on edibles, possibly a marijuana leaf. (Or maybe a stoned skull and bones?)"); Grinspoon, supra note __ ("[M]ake [edibles] look and taste like medicine, in pill form, in pill bottles . . . ."); MacCoun and Mello, supra note __ ("We believe that regulations should also impose substantive restrictions on product formulation and packaging aimed at reducing the likelihood that minors and other consumers will confuse marijuana and nonmarijuana products.").}\]
individual edibles\textsuperscript{284} and promulgated rules prohibiting edibles from being made in animal or fruit shapes.\textsuperscript{285}

In this Section, we argue that while packaging and storage requirements are useful as a last resort for protecting children from inadvertently consuming edibles, state policies should focus on furthering legalization rather than prohibition by focusing on education and information rather than by limiting the color or shape or taste of edibles themselves. Along with adopting our already proposed reforms to de-candify the edibles market and opening social consumption sites (the topic of Part IV of the Article), these modest measures should suffice to reduce the number of already rare instances of inadvertent consumption without rehashing prohibitionist tropes and policies.

1. Reframing Inadvertent Consumption

Before we can analyze how best to address the problem of inadvertent consumption, we need to work through several important threshold inquiries—namely, what exactly is “inadvertent consumption,” how serious of a problem is it, and to what degree are current regulations well-suited to address the problem?

Inadvertent consumption occurs when a person does not intend to ingest edibles at all, but mistakes an edible for a normal food, consumes it, and thereby inadvertently becomes intoxicated. To better understand what we


\textsuperscript{285} \textit{COLO. CODE REGS.} § 212-3(3-335)(G) (2020); John Ingold, New Study Reveals What Makes Marijuana Edibles Most Attractive to Young Kids, \textit{DENVER POST} (Sept. 8, 2016), https://www.denverpost.com/2016/09/08/marijuana-edibles-attractive-kids/ (citing SEAN O’CONNOR AND SAM MÉNDEZ, \textit{CONCERNING CANNABIS-INFUSED EDIBLES: FACTORS THAT ATTRACT CHILDREN TO FOODS} (June 2016) (conducting research on general factors that make confectionaries appealing to children.); see also \textit{CAL. CODE REGS.} tit. 17, § 40300(m) (prohibiting “[a]ny cannabis product in the shape of, or imprinted with the shape, either realistic or caricature, of a human being, animal, insect, or fruit”); \textit{935 MASS. CODE REGS.} 500.150(1)(b); \textit{MICH. ADMIN. CODE} r. 420.403(9)(a). Quebec, in a surprisingly conservative approach to Canada’s Cannabis 2.0 rollout, the second stage of Canada’s cannabis legalization which now allows for sale of edibles, announced that it would ban the sale of all cannabis candies and any other products that would be attractive to children. \textit{Quebec to Ban Sale of Cannabis Candies in Effort to Protect Kids}, \textit{GLOBAL NEWS} (July 24, 2019), https://globalnews.ca/news/5679335/quebec-to-ban-sale-of-cannabis-candies-in-effort-to-protect-kids/.
mean when we speak of inadvertent consumption, perhaps it is best to articulate what we do not mean. Critics often conflate some situations of overconsumption with inadvertent consumption, thereby masking the problem. While overconsumption can come in the form of naïve consumers stacking and otherwise disregarding instructions and best practices, consumers can also overconsume when acting responsibly. For example, if a consumer ingests an edible labeled as containing 10mg THC, but the edible actually contains 20mg THC, the consumer has of course inadvertently consumed more THC than they intended. However, the harm here is best described as the consumer ingesting too much THC rather than the consumer ingesting THC when they didn’t want to: a clear case of overconsumption, just one that is predicated upon manufacturer rather than consumer error.

Conflating this with inadvertent consumption is understandable, as both scenarios involve factors outside of the consumer’s control causing a greater level of intoxication than intended. However, the above scenario can be prevented by testing, homogeneity requirements, and accurate labeling regulations that give consumers the tools to titrate responsibly. Inadvertent consumers do not need to be empowered to titrate, but rather need to be able to avoid consumption at all. While there is naturally some overlap between the issues, such as accurately labeled products helping with both problems, inadvertent consumption and overconsumption are largely distinct in both origin and solution.

To unpack inadvertent consumption, let’s next get rid of another conflation: Although both adults and children can inadvertently consume cannabis, the problem that critics are really concerned about is inadvertent consumption by children. It might be useful therefore to distinguish between “inadvertent consumption” by children and “accidental consumption” by adults. For one thing, it’s far from clear that accidental consumption is a problem at all. Just as no one is putting razor blades or drugs in Halloween candy, the problem of accidental consumption by rational adults is largely in the head and based on fear. Moreover, accidental consumption can be

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addressed by some of the above-proposed solutions for overconsumption. Adults can take heed of and appreciate the warnings that come on edibles. Any accidental consumption by adults, then, is caused by (1) non-conformity to regulations by producers, (2) naïveté of the consumer and ignorance of warnings, or (3) irresponsible storage and behavior. What we’re really talking about when we talk about inadvertent consumption, and what regulators seem to be addressing, is consumption by minors. If a child is in a position to inadvertently consume cannabis, then measures to reduce overconsumption will not solve for this problem, as children have reduced capacity and may not appreciate the warnings and such.287

Taking this one step further, what about the relationship between inadvertent consumption by minors on the one hand and intentional consumption by minors on the other hand? In some ways, of course, the two problems are different. With intentional consumption by minors, we’re concerned with deterring children who want to consume cannabis from doing so, while with inadvertent consumption we’re concerned with making sure that children do not consume cannabis thinking that it’s something else. Regulators have approached the two problems with different sets of solutions. Regulations aimed at deterring children from trying to get cannabis, such as advertising restrictions, fines or other punishments for underage consumption, requirements that dispensaries or other cannabis businesses be located a certain distance from schools and playgrounds, and the like, are of no use in addressing inadvertent consumption by minors who aren’t trying to use cannabis in the first place. Likewise, regulations aimed at reducing inadvertent consumption, like prohibiting edibles from looking or even tasting like fruits, will be of little to no use in stopping intentional consumption by minors who would probably be willing to consume edibles even if they looked and tasted like broccoli or clams.

In other ways, though, the two problems are quite similar. The end result—an intoxicated child—is the same in both instances. If a child consumes a cannabis edible, what difference does it make whether they do so accidentally or not? We do not necessarily worry about children’s ability to titrate their

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287 This is seen in the tens of thousands of children every year who ingest household cleaning products. See David D. Gummin et al., 2019 Annual Report of the American Association of Poison Control Centers’ National Poison Data System (NPDS): 37th Annual Report, 58 CLINICAL TOXICOLOGY 1360, 1481-1484 tbl. 22A (showing that children under five years ingesting household cleaning substances accounted for 166,093 calls to poison control in 2019).
edibles, because we do not want them consuming at all, intentionally or not! As one legal scholar who lambasts edibles admits, “Selling edibles poses the risk that children will find and mistakenly consume a product that injures them and that adolescents will find and intentionally consume the same product.”

Moreover, and most importantly, the two problems are similar in that both have essentially two types of potential solutions, with one type focusing on restricting access by children to cannabis and the other focusing on deterring or discouraging children from using cannabis even if they’ve gotten (or figured out how to get) access to cannabis. To deal with intentional consumption by minors, access regulations focus on prohibiting both dispensaries and adults from selling or giving cannabis to children, while deterrence regulations focus on advertising restrictions and imposing penalties on children who do consume. To deal with inadvertent consumption by minors, access regulations focus on storage and child-safe packaging requirements (as well as educating adults on how and why to keep cannabis away from children), while deterrence regulations focus on making edibles themselves unattractive to kids. Here’s the key point, though: Deterrence regulations, unlike access regulations, are marked by two critical characteristics: they tend to restrict access to adults as well as children (and are therefore rightly characterized as prohibitionist tactics), and they are unnecessary if access regulations succeed.

In both situations, then, it makes sense to characterize consumption by minors not as a problem of cannabis itself or edibles themselves but rather primarily as a problem of access. Addressing fears of inadvertent consumption as a problem of access by minors rather than as a problem of edibles is vital. As mentioned above, linguistic choices are fundamental in creating conceptual room for enacting change. Current commentary and regulations often place the blame on edibles themselves, framing them as inherently dangerous products. If we properly confront the problem as one of access by children to edibles, however, we can better see the solution: We need to focus primarily on stopping children and adolescents from getting access to edibles, not on making edibles less appealing to them.

288 Larkin, Jr., supra note __, at 317 (emphasis added).
289 See supra note __ and accompanying text.
290 This is not akin to the mass proliferation of JUULs among minors, as most minors obtained their JUULs through retail locations that did not have as serious risks to their operations by selling to minors. See Where are Kids Getting Their JUUL?, TRUTH INITIATIVE (May 29, 2018),
Now that we better understand the problem of inadvertent consumption, we can address the alleged harms. Inadvertent consumption has the same harms as overconsumption, in that the consumer experiences an intoxication level that they did not sign up for. Some claim that consumption by minors has the additional worry of impeding brain development, although if evidence exists showing that significant long-term psychological harm can be caused by a single instance of inadvertent consumption, we are not aware of it. The real question is how significant the problem is, both in terms of the harm of the experience itself and how often it actually occurs.

What evidence do we have substantiating the magnitude of these harms? As is so often mentioned, in years following legalization, poison control centers saw an uptick in edibles-related calls, and hospitals saw more admissions for children who had consumed edibles. Initially, it is worth pointing out that while an instance of inadvertent consumption by a child can certainly be harrowing for child and parent alike, the harm is temporary and passes relatively quickly. Compared to a situation where a child drinks a bottle of liquor or eats a handful of Tylenol, inadvertent consumption of cannabis edibles is not life threatening and will almost certainly not result in lasting physical maladies. Treatment for children who inadvertently consume edibles is often to simply wait it out. More to the point, though, it is far from clear that true instances of inadvertent consumption have risen in any substantial way following legalization. Counting the number of calls to poison control centers and visits to hospital emergency rooms in states that have legalized


291 See Larkin, Jr., supra note __, at 329-30, 329 n. 35.

292 See Larkin, Jr., supra note __, at 333 n. 45.

293 See Colleen Fisher Tully, *What to Do if a Kid Gets into your Edibles*, LEAFLY (Feb. 21, 2020), https://www.leafly.com/news/health/what-to-do-if-a-kid-gets-into-your-edibles ("Dr. Mitchell confirms no child has ever died from cannabis overdose. ‘The first thing is not to panic,’ he says. . . . Remember it can take up to four hours to feel the full effects of cannabis edibles, and up to 12 hours to wear off. . . . ‘There’s no antidote,’ he says. But there will be a long wait.”).
cannabis is a deeply flawed metric for determining the actual increase in instances of inadvertent consumption because parents are naturally going to be more willing to seek help if possessing cannabis is legal than if it is illegal. 294

By most reliable accounts, inadvertent consumption by minors is a fairly limited problem; according to one report, “[K]ids have a 136 times higher chance of eating a diaper cream accidentally than cannabis. Birth control pills, contact

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294 See COLORADO DEP’T OF PUBLIC SAFETY, MARIJUANA LEGALIZATION IN COLORADO: EARLY FINDINGS 10 (2016) (“[T]he decreasing social stigma regarding marijuana use could lead to individuals being more willing to report use on surveys and to health workers in emergency departments and poison control centers, making marijuana use appear to increase when perhaps it has not.”); ALLIE HOWELLS, WILL MARIJUANA LEGALIZATION INCREASE HOSPITALIZATIONS AND EMERGENCY ROOM VISITS?, REASON FOUNDATION 6 (finding that “while these data demonstrate increased emergency room visits and poison control calls related to marijuana, this correlation cannot be directly attributed to the legalization of marijuana”); NATIONAL INSTITUTE ON DRUG ABUSE, MARIJUANA RESEARCH REPORT: WHAT IS THE SCOPE OF MARIJUANA USE IN THE UNITED STATES? 5 (2020), https://www.drugabuse.gov/download/1380/marijuana-research-report.pdf?v=d9e67cbd412ae5f340206c1a0d9c2bfd (finding that it is unknown whether increases in emergency room visits are “due to increased use, increased potency of marijuana (amount of THC it contains), or other factors”); George S. Wang et al., ASSOCIATION OF UNINTENTIONAL PEDIATRIC EXPOSURES WITH DECriminalIZATION OF MARIJUANA IN THE UNITED STATES, 63 ANNALS OF EMERGENCY MEDICINE 684, 687 (finding that a limitation of the study included “caregivers in states where marijuana is decriminalized may be more likely to call poison centers or present to health care facilities for help than in nonlegal states.”); JOHANNON P. CAULKINS ET AL., CONSIDERING MARIJUANA LEGALIZATION: INSIGHTS FOR VERMONT AND OTHER JURISDICTIONS, RAND Corp. 32 (2015) (stating that data on increases emergency department calls should be looked at with caution: “It is important to be careful about drawing conclusions from simple pre–post analyses without adequate control variables”); He Zhu & Li-Tzy Wu, TRENDS AND CORRELATES OF CANNABIS–INVOLVED EMERGENCY DEPARTMENT VISITS: 2004 TO 2011, 10 J. OF ADDICTION MEDICINE 429, 436 (2016) (“the causality between cannabis use and [Emergency Department] visits cannot be determined”); but see Monte et al., ACUTE ILLNESS ASSOCIATED WITH CANNABIS USE, BY ROUTE OF EXPOSURE, 170 ANNALS OF INTERNAL MEDICINE 531, 535-36 (2019) (a study of cannabis related emergency department visits did not discuss the limitations of studying instances of cannabis patients going to the emergency room in states with legalized recreational marijuana). Compare Tully, supra note __ (“In the ER, be upfront and honest. Give the medical team all your notes and any packaging so they can help. In Canada, at least no one is calling family services and taking your kid away over cannabis edibles, assures Mitchell.”), with, e.g., Jerry DeMarco, CLIFFSIDE PARK BOY, 3, CRITICAL AFTER SWALLOWING POT EDIBLES, Mom, Visiting Friend Charged, DAILY VOICE (Dec. 28, 2020), https://dailyvoice.com/new-jersey/cliffsidepark/news/cliffside-park-boy-3-critical-after-swallowing-pot-edicbles-mom-visiting-friend-charged/800486/ (describing inadvertent consumption incident resulting in arrest and charging of inadvertently consuming child’s mother).
lens fluid, caterpillar stings, and toothpaste all warrant more calls to Poison Control than pot.”

Finally, what about regulations aimed at decreasing instances of inadvertent consumption—do they actually work? The fact is that we don’t really know. Most would surely agree that child-resistant packaging is effective at preventing children from getting access to whatever is inside. Moreover, it seems reasonable to assume that if followed, regulations requiring adults to store cannabis in a way that prevents minors from accessing it would also be at least somewhat effective. On the other hand, it is far from clear that regulations concerning the shape or color or taste of edibles themselves do much to deter children from inadvertently eating them. Of course, the efficacy of such regulations will likely depend to some degree on how restrictive they are. A regulation requiring that all edibles be shaped like a medicinal pill will likely deter at least some instances of inadvertent consumption (though anyone who has kids or knows anyone who has kids or is otherwise familiar with the human race will recognize that some kids will put just about any small item in their mouth) but is the same thing true for a regulation prohibiting

\[295\] See Sieeka Kahn, What to do if your Child Accidentally Eats Weed, SCIENCE TIMES (Nov. 12, 2019) https://www.sciencetimes.com/articles/24247/20191112/cannabis.htm (quoting Christopher Ingraham, Your Kid is 136 Times More Likely to be Poisoned by Diaper Cream than Weed, WASH. POST (Nov. 17, 2014, 2:32 PM), https://www.washingtonpost.com/news/wonk/wp/2014/11/17/your-kid-is-136-times-more-likely-to-be-poisoned-by-diaper-cream-than-by-weed/); see also Barrus et al., supra note __ (“However, despite the increases in calls to poison control centers, emergency room visits resulting from pediatric exposure to cannabis remain relatively low . . . .”). The panic about children consuming edibles mirrors the parental panic around children eating Tide Pods, where the actual harm is minimal, but the panic is widespread. See Amelia Tait, Only 86 Teens Ate Tide Pods, So Why did the World Erupt in Moral Panic?, NEW STATESMAN (Jan. 30, 2018), https://www.newstatesman.com/science-tech/internet/2018/01/only-86-teens-eat-tide-pods-so-why-did-world-erupt-moral-panic (“It’s true that since the Tide Pod Challenge began, the American Association of Poison Control Centers (AAPC) has received 86 reports of teenagers intentionally ingesting laundry detergent. Yet at the end of last year, the AAPC reported that over 10,500 children under the age of five were exposed to laundry pods in 2017 (for example ingesting, inhaling, or absorbing the detergent). If we are going to have a mass panic about poisonings, ten thousand children are clearly in greater danger than less than a hundred teens. So why was it that only the Tide Pod Challenge that made pearl-clutching headlines across the globe?”); Peter Allen Clark, Calm Down, Everybody. Very, Very, Very Few Teens are Trying to Eat Tide Pods., MASHABLE (Jan. 19, 2018), https://mashable.com/2018/01/19/tide-pod-challenge-hysteria-stop/ (“In 2017 there were 53 cases total, and in the first 15 days of 2018, there have been 39. That's a big increase, sure, but there are over 40 million teens in America.”).
edibles from looking like bears or roosters but allowing them to otherwise taste like candy? It is hard to imagine that such a regulation will have much marginal benefit to the kid who comes across a sweet cube and is otherwise inclined to eat it.

The more fundamental problem with regulations geared towards deterring children who come across poorly stored edibles from consuming them, though, is that, while well-intentioned, these mostly serve as a last defense after all other points have failed. As the author of a University of Washington report on efficacy of edibles regulations even admits, “The primary responsibility falls on parents to keep these things away from kids.” If a young child has access to a loose edible, and we are worried about that edible’s shape, then the regulatory system has already failed. We contend that a response to inadvertent consumption which focuses on the edibles themselves and whether they are appealing to children mischaracterizes the problem and guarantees ill-suited solutions. Regulators who focus on edibles themselves not only forgo earlier points of prevention, but in doing so risk backtracking into prohibition. Instead, regulators must characterize the problem of inadvertent consumption as one of access to edibles rather than of anything inherent in edibles themselves. Only by doing this can we can rethink the problem of inadvertent consumption and move forward past it.

So how do we prevent children from accessing edibles? Well, the answer to that question is well-known: End prohibition.

2. Addressing Inadvertent Consumption as a Prohibition Problem

One of the major rationales for legalizing cannabis in the first place is to reduce access by minors. Why then, when the question is applied to edibles consumption, a subset of cannabis consumption, do we think a different answer applies? It is prohibition, not legalization, that primarily causes the access problem. Illicit and unregulated markets allow for adolescent purchase. Uneducated consumers engaging in poor storage practices enable young children to access edibles. And a confinement of edibles to the home rather than a public venue puts edibles in a place where they may be possibly accessed by children of all ages.

296 Kahn, supra note __.

297 See, e.g., David Schlussel, “The Mellow Pot Smoker”: White Individualism in Marijuana Legalization Campaigns, 105 CALIF. L. REV. 885, 906 n. 156 (listing various legalization campaigns citing restriction of minor access as reason to legalize).
Accordingly, full legalization and regulation is the solution to these problems. Minors will have a much harder time getting products from a properly regulated market than they will from the illicit market.298 Just as with alcohol, Tylenol, and cleaning products, storage and edibles safety can be addressed through labeling requirements such as placing a “Keep Away From Children” warning on the packaging, as is now required in some states, as well as through mass public education programs focusing on the importance of restricting access to cannabis by minors. Child-safe packaging, while effective by nature, should serve as a measure of last defense against young children opening edibles left about. A corollary to this approach is that anything regulating the form or appearance of edibles is missing the mark. To the extent possible, we should not be at a point where minors are coming across loose edibles and deciding whether to eat them based on whether they look like clowns and taste like strawberries.

While all agree that edibles should not be easily confused with normal commercial products, especially children’s candy, overly restricting edible appearance and form only serves to bolster an illicit market that itself is

298 See JOHNSTON ET AL., supra note __; Anna Wagner et al., How Do High School Seniors Get Marijuana? Prevalence and Sociodemographic Differences, 114 ADDICTIVE BEHAVIORS 1, 3 (2021) (finding that the most endorsed methods of acquiring cannabis were given for free by friends, bought from friends, and bought from a drug dealer/stranger whereas most adolescents do not acquire cannabis via the state’s legal medical program; Teens Less Likely to Use Cannabis When It’s Legal, US Study Finds, BBC News (July 9, 2019), https://www.bbc.com/news/world-us-canada-48921265 (citing D. Mark Anderson, et al., Association of Marijuana Laws with Teen Marijuana Use, 173 JAMA Pediatric 879-881 (2019)) (citing Dr. Mark Anderson, the lead doctor on the study, as stating that “it was usually harder for teens to buy from licensed dispensaries - where proof of age is required - than from dealers, which could partly explain the drop”); What Happens to the Weed Black Market when Recreational Marijuana Goes Legal Jan. 1? ‘I See It Opening the Door to More Clients,’ One Dealer Says, Ally Marotti Chicago Tribune (Dec. 17, 2019), https://heraldreview.com/news/state-and-regional/what-happens-to-the-weed-black-market-when-recreational-marijuana-goes-legal-jan-1-i/article_8fda1729-cde3-5f9c-8e20-c1ac0c623d2b.html (stating there will still be underage customers who buy from the black market); Christopher P Salas-Wright et al., Trends in Perceived Access to Marijuana Among Adolescents in the United States: 2002-2015, 78 J. OF STUD. ON ALCOHOL AND DRUGS 771, 781 (“Despite the legalization of recreational and medical marijuana in some states, our findings suggest that ... perceptions that marijuana would be very easy to obtain are on the decline among American youth.”).
responsible for edibles that commonly appeal to children, often blatantly so. When alarmists cry foul about products that children find appealing, the reaction should not be to restrict an entire category of edibles, which quite possibly will put the dangerous unregulated edibles in the hands of children, but instead should be to make space and regulations for such offerings to exist with reasonable regulations so that they are not mistaken for other commercially available products.

Restricting edibles as a response to inadvertent consumption, as some commentators recommend, only worsens the harms of which they complain. Following such critics’ advice allows adolescents greater access to edibles and endangers younger children. Further, illicit market edibles lack the safety protections that states impose upon legal edibles, and adult consumers engaging in the illicit market rather than legal markets create greater risks to small children, as child-safe packaging and safety warnings are hardly guaranteed on the packaging of illicit edibles.

Critics who argue for prohibiting or overly restricting the form or taste of edibles are inexplicably ignoring all of the lessons of prohibition and its inefficacy. To combat minor access to edibles, policymakers must implement education programs about safe storage and actual drug education for parents and youth, acknowledging that once edibles leave the store, there is only so much control regulators can have over them. Specific regulations aimed at deterring minor access, such as child-safe packaging, can help in this effort, but should only be prioritized as measures of last defense. Legalization removes the active harms of prohibition, education solves for the transition from prohibition to legalization, and child-safe packaging, appropriate warning labels, and most of all putting the onus of edibles safety on parents are the correct ways to address the problem of inadvertent consumption by minors.

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In sum, overconsumption by adults and inadvertent consumption by minors are two distinct problems that once properly understood require two different approaches, both of which follow the same anti-prohibition principle.

As it turns out, though, implementing our suggestions for addressing overconsumption will have benefits for tackling inadvertent consumption as well. It is illuminating that the same critics who worry on the inadvertent consumption front about the fact that edibles come in forms and flavors that appeal to young children often also advocate on the overconsumption side for prohibiting cannabis-infused mocktails,300 or hummus,301 or butternut squash croquettes,302 or other products that may be more difficult to segment into easily discernible serving sizes but which would be less alluring to kids. Ironically, one unintended result of our nation’s overcautious approach to overconsumption has been to create an industry that turns out products (candies, primarily, and also other sweets) that are particularly attractive to children. Loosening restrictions on the type of edibles available will likely reduce the instances of inadvertent consumption, as it is the rare toddler who will jump at the chance to eat an unattended cannabis-infused halibut steak303 or steaming bowl of canna-mushroom soup,304 or a plate of cannabis-glazed Brussels sprouts.305

Moreover, considering the problems of overconsumption and inadvertent consumption together gives rise to a question that lies at the heart of edibles regulation: How can we simultaneously prevent adults from eating too much THC and keep edibles out of the hands of children, all while moving away from prohibition and fostering a growing industry? If only there were some type of


business that prohibited minors and allowed adults to consume edibles responsibly there and not have to bring them home where children may be present. It would also be important that this business monitor its customers so that they did not overconsume. You can see where this is going. We have to talk about social consumption.

IV. SOCIAL CONSUMPTION AND CANNABIS À LA CARTE

Why can’t we buy a cannabis muffin with our coffee? Prohibitionist-influenced worries as expressed above are certainly partially to blame, preventing fresh-baked cannabis muffins from being sold at all. Even if we could buy such a muffin at a store or dispensary, though, we’d still have to bring it home to eat it. The notion that someone could actually go and eat a cannabis muffin (or cheeseburger, or ice cream sundae, or pesto pizza) out in the world among other people who enjoy cannabis in a place set aside for such consumption somehow remains impossible. But why? The question of why we can’t buy a cannabis muffin with our coffee might seem flippant, almost silly, but once we examine the potential benefits of cannabis social consumption establishments for both consumers and non-consumers alike, the import of the not-so-silly question becomes clear: Given that social consumption spaces can provide a safe, convenient, and convivial atmosphere for using cannabis while also providing jobs, addressing social and racial inequities, and reducing the chances of both overconsumption and inadvertent consumption of edibles, what in the world should stand in the way of us buying that muffin?

What is social, or on-site, consumption? At its core, a social consumption establishment is just a business allowing for sale and consumption of cannabis or cannabis products at the same location, or “on-site.” Bars and breweries are forms of alcohol social consumption businesses, where people can purchase alcoholic beverages and then drink them on-site. Amsterdam famously hosts

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cannabis social consumption businesses, and while such businesses there have enjoyed moderate success and international attention, their quasi-legal status and limited number pale in comparison to the potential market in the United States. Social consumption establishments can take all sorts of forms, from bring-your-own-cannabis (“BYOC”) private clubs, to Amsterdam-esque cafés, to places like spas and yoga studios that combine the possibility of consuming cannabis with activities not typically or necessarily associated with cannabis, to retail cannabis stores that allow consumers to use (or “taste”) the products they’ve purchased on-site. While this Article


310 See van Ooyen-Houben, supra note __.


focuses on edibles, we note that the mainstay of a social consumption business is not necessarily the availability of edibles to eat, but the incorporation of any method of cannabis consumption on-site. For the purposes of this Article, though, we will use the term “social consumption” to primarily reference those establishments that are geared to on-site consumption of cannabis edibles.

In this Part, we describe the current landscape of social cannabis consumption in the United States, noting that the number of places in operation that qualify as genuine social consumption businesses is somewhere in the low single digits and identifying the primary obstacles to the establishment of such businesses. We then explain the many potential benefits of social use establishments for cannabis and conclude that if we are truly serious about moving away from prohibition, normalizing cannabis use, and addressing the problems of overconsumption and inadvertent consumption of edibles, then we need to start getting serious about facilitating the establishment of social consumption businesses.

A. Current Landscape of Social Consumption

Given the history of cannabis in the United States and the prohibitionist ideas that have been engrained throughout, it should come as little surprise that the movement toward social consumption has struggled to get off the ground. While cannabis legalization promised the opening of cannabis cafés

among-1st-u-s-allow-consumption-n1121851 (reporting that the Alaska Marijuana Control Board approved on-site consumption cannabis licenses for GoodSinse, in Fairbanks, and the Cannabis Corner, in the Ketchikan Gateway Borough); Alaska OKs Rules for On-Site Cannabis Use, Gives Jurisdictions Some Control, MARIJUANA BUSINESS DAILY (Dec. 21, 2018), https://mjbizdaily.com/alaska-regulators-approve-rules-onsite-marijuana-use/ (detailing Alaska’s on-site consumption requirements, including that consumption areas must be outdoors or otherwise separated from retail spaces and a prohibition on BYOC); see also Christ Kudialis, Nevada’s First Cannabis Tasting Room is set to Open, LEAFLY (Oct. 3, 2019), https://www.leafly.com/news/politics/nevadas-first-cannabis-lounge-is-about-to-open-and-wont-cost-you-a-dime (describing the Vegas Tasting Room inside NuWu Cannabis Marketplace in Las Vegas, at which customers may order and consume on-site sample-size amounts of cannabis and cannabis products).

315 See, e.g., Thomas Mitchell, Governor Jared Polis Signs Bill Legalizing Social Marijuana Use Areas, WESTWORD (May 29, 2019), https://www.westword.com/marijuana/colorado-governor-signs-bill-legalizing-marijuana-cafes-lounges-and-other-social-use-areas-11360517 (describing passage of Colorado HB 19-1230 a full seven years after Colorado voted to legalize adult-use cannabis, which authorizes a variety of cannabis social
and similar public locations where one could buy and consume cannabis baked goods (or matzo ball soup,\textsuperscript{316} or French toast,\textsuperscript{317} or pasta and clams\textsuperscript{318}), the current landscape of social consumption is basically a wasteland. Not a single social consumption site yet exists at which a consumer can purchase and consume an edible cannabis product that would not be available at a dispensary,\textsuperscript{319} and other types of sites are barely more plentiful.\textsuperscript{320} Indeed, only a handful of social consumption sites have opened in the entire country.\textsuperscript{321} Denver’s The Coffee Joint is a BYOC café that allows patrons to consume


\textsuperscript{319} Note that patrons may purchase cannabis drinks or confectionaries at the Original Cannabis Café in West Hollywood, just as they would at a normal dispensary, but then also consume them there. CATEGORIES, ORIGINAL CANNABIS CAFE, https://cannabis.cafe/ (last visited Dec. 29, 2020) (listing cannabis products available for purchase, reflecting those at a normal retail storefront).

\textsuperscript{320} The saving grace of all this, though, is that the slowed rollout of social consumption programs made it so that no social consumption businesses were really in operation in March of 2020 when COVID-19 caused lockdowns across the United States. Because in-person dining was closed down, and cannabis businesses despite being declared essential in many states were excluded from federal small businesses, social consumption businesses would have likely folded, resulted in millions of dollars of investment disappearing and possibly setting social consumption seriously back. In a weird way, the stunted growth of social consumption may have ended up saving its future success.

\textsuperscript{321} There are also a few BYOC cannabis clubs, which do not sell cannabis on-site but do allow patrons to bring and consume cannabis and unlike the Coffee Joint do not sell non-infused foods on-site.
cannabis on-site. West Hollywood’s Original Cannabis Café (f/k/a Lowell Café) allows consumers to purchase prepackaged dispensary offerings and consume on-site. The Vegas tasting room allows consumers to consume, or “taste,” sample-sized products on site in order to facilitate their purchasing choices. With over seven years having passed since the first recreational cannabis sale in the United States, legally-authorized social consumption has effectively amounted to just these three sites, but it did not have to be this way.

Colorado was briefly home to a handful of social consumption establishments, such as the Ganja Gourmet that created and served edibles on site, but such businesses were forced to close or convert to more conventional dispensaries after Denver banned social consumption businesses in 2010. While Denver created a pilot program for social consumption businesses in 2016, and Colorado passed a law in 2019 allowing for a wider array of social consumption licenses, few businesses have been able to take advantage of

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322 \textit{The Coffee Joint}, \url{https://thecoffeejointco.com/} (last visited Dec. 29, 2020) (The Coffee Joint in Denver, which is a BYOC social consumption site that sells coffee and non-infused food). In 2019, Colorado passed House Bill 1230, which authorized new business licenses for cannabis lounges, tasting rooms, and other cannabis-based hospitality businesses where consumers can bring and consume cannabis and cannabis-infused products, but as of this writing no additional businesses have opened thereunder. See H.B. 19-1230, 72nd Gen. Assemb., First Reg. Sess. (Colo. 2019).

323 \textit{See Original Cannabis Café}, \url{https://cannabis.cafe/} (last visited Dec. 29, 2020) (Original Cannabis Café in West Hollywood, a café-style social consumption business that serves food and sells prepackaged cannabis products for on-site consumption); \textit{Tetra Cannabis Club}, \url{https://www.tetralounge.com/} (last visited Dec. 29, 2020) (Tetra Cannabis Club in Denver, a BYOC cannabis lounge that sells no food or cannabis products).


327 \textit{See} Mitchell, \textit{supra} note __.
these measures. Other states, such as Nevada and Oregon, have been even slower at rolling out such programs. 328 Massachusetts recently approved a pilot program for cannabis social use establishments, three years after legalization passed, 329 but not a single such site is anywhere close to existing much less operating. Still other states, such as Alaska, Michigan, and Illinois, have made social consumption applications available to businesses, 330 and some applying businesses in these states have even had their licenses approved. 331 However,  

328 See Joey Peña, Nevada’s Delay of Cannabis Social Use Venues Leaves Business Owners to Pivot and Wait, MARIJUANA BUSINESS DAILY (June 12, 2019), https://mjbdaily.com/nevadas-delay-of-cannabis-social-use-venues-leaves-business-owners-to-pivot-or-wait/; Associate Press, Oregon Bill to Allow Marijuana Social Use Lounges Hits Dead End, MARIJUANA BUSINESS DAILY (May 16, 2019), https://mjbdaily.com/oregon-bill-marijuana-social-use-lounges/. Interestingly enough, while Nevada has pushed off implementing social consumption until mid-2021, Nevada is home to one of the only true on-site consumption establishments in the country, which only exists because it is not governed by Nevada’s wider cannabis regulations. Native American tribes situated within Nevada are able to enter into agreements directly with the governor regarding cannabis use and sale on tribal lands. NEV. REV. STAT. § 223.250 (2020). Pursuant to this, the Las Vegas Paiute Tribe opened NuWu Cannabis Marketplace, a massive cannabis megastore, in Las Vegas in 2017. See ‘The Tribe Has Taken Over’: The Native Americans Running Las Vegas’s Only Cannabis Lounge, THE GUARDIAN (last visited Jan. 8, 2021), https://www.theguardian.com/us-news/2019/nov/10/nevada-cannabis-lounge-paiute-las-vegas. Then in October 2019, the tribe opened a cannabis tasting room inside NuWu Cannabis Marketplace, which allowed consumers to sample a small amount of cannabis or cannabis product on site. See Reed, supra note __.  


330 See Lee DeVito, Detroit OKs Recreational Pot Ordinance that Allows for Consumption Lounges, DETROIT METROTIMES (Nov. 24, 2020), https://www.metrotimes.com/detroit/detroit-oks-recreational-pot-ordinance-including-consumption-lounges/Content?oid=25860098 (“Not only does the new ordinance catch Detroit up with other communities in the state that have opted-in for recreational cannabis sales, but it surpasses them by allowing for designated consumption lounges — something that isn’t yet offered elsewhere.”);  

no social consumption businesses have yet opened for business.\textsuperscript{332} Moreover, even if these establishments ever materialize, states limit the edibles sold at these hypothetical social-use establishments to pre-packaged, shelf-stable products.\textsuperscript{333}

Why are there so few social consumption businesses several years into legalization, none of which offer cannabis edibles made on site? The answer, again, is likely tied to prohibition mindsets. Beyond the excessive startup costs and lack of available capital typical of the entire cannabis industry, social consumption businesses face unique regulatory barriers to entry. For instance, excessive delegation of authority by states to local governments, a problem for the cannabis industry generally, is particularly acute when it comes to social consumption, due to the widespread NIMBY attitudes that often reflect prohibitionist fears at the local level. All social consumption businesses must obtain appropriate licenses from the state regulatory entity in order to open and operate,\textsuperscript{334} and some states do not even provide for such licenses,\textsuperscript{335} but even in states that have taken the possibility of social consumption seriously, local governments are given the final say about whether to allow such establishments within their borders. For example, Massachusetts restricts social consumption establishments to an initial set of twelve municipalities

council-approves-on-site-consumption-for-downtown-pot-shop ("The 9-1 vote appears to make Springfield the first city in Illinois to grant approval for controlled legal public consumption. As a result, HCI Alternatives (to be known as Illinois Supply & Provisions starting Jan. 27), 628 E. Adams Street, now has the right to host on-site consumption at their downtown location whenever ready and with a real chance for it to be the first-of-its-kind to open statewide."); Thiessen, supra note__ ("On 3-2 votes, the Marijuana Control Board approved [on-site consumption] applications by GoodSinse LLC in Fairbanks and Cannabis Corner, which is located in the Ketchikan Gateway Borough.").

\textsuperscript{332} This may at least in part be due to the onset of the COVID-19 pandemic. See supra note __ and accompanying text.

\textsuperscript{333} See, e.g., 935 MASS. CODE REGS. 500.141(3)(c) ("Sale of Edibles shall be limited to pre-packaged Shelf-stable Items.").

\textsuperscript{334} See, e.g., COLO. CODE REGS. § 212-3(3-110) (noting that only Licensed Hospitality Businesses ([on-site consumption establishments with corresponding licenses]) may allow on-site consumption); 935 MASS. CODE REGS. 500.050(1)(c)(7) (noting requirement of a Social Consumption Establishment license).

\textsuperscript{335} See, e.g., WASHINGTON STATE LIQUOR AND CANNABIS BOARD, FAQS ON MARIJUANA (last visited Jan. 9, 2021), https://lcb.wa.gov/mj2015/faqs_i-502 ("Can customers consume in a retail store? No. On-premise consumption is not allowed.").
which must opt in to the program, but thus far no cities or towns have chosen to participate.\textsuperscript{336} A similar problem exists in California, where local governments must also opt-in to social consumption and where only twelve out of over four hundred municipalities have agreed to allow it.\textsuperscript{337} Deferring to localities has led to a tight bottleneck for social consumption, not to mention corruption,\textsuperscript{338} to the point that social consumption may as well still be prohibited in these states.

Beyond giving local governments the power to prohibit social consumption, state regulators have also imposed additional expensive requirements on social consumption businesses, such as requirements for separated or outdoor consumption space,\textsuperscript{339} neighborhood security guard


patrols, and large buffer zones. These regulatory burdens will suffice to keep some potential entrepreneurs out of the business altogether, but even for businesses that are willing to absorb these costs, such as already-existing restaurants and bars, typical state regulations that prohibit establishments from holding both a cannabis social consumption and a liquor license may be prohibitive. Add to this concerns about legal liability and fears of inebriated consumers driving themselves home, and it is no surprise that the number

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341 Denver requires that social consumption businesses not be within 1,000 feet of schools, child care facilities, or alcohol and drug treatment centers. See Jon Murray, Denver Approves First Social Marijuana License, Allowing Vaping and Edibles in Lincoln Park Coffee Shop, DENVER POST (Feb. 26, 2018), https://www.denverpost.com/2018/02/26/denver-approves-first-social-marijuana-license/ (noting the “restrictive proximity rules intended to keep businesses from allowing marijuana use on their premises if they are within 1,000 feet of schools, child care facilities, or alcohol and drug treatment centers”). These setback requirements have left open only twenty square miles of Denver for social consumption businesses. Jon Murray, Denver’s First-of-Its-Kind Social Marijuana Use Program for Businesses is Mostly a Bust. Can It Be Fixed?, DENVER POST (Aug. 18, 2018), https://www.denverpost.com/2018/08/18/denver-social-marijuana-use-program-struggling.

342 Bill Weinberg, Colorado Law to Allow Social Cannabis Consumption, CANNABIS NOW (June 4, 2019), https://cannabisnow.com/colorado-social-cannabis-consumption/ (“One obstacle is that Marijuana Hospitality licenses and liquor licenses will be mutually exclusive for any one establishment . . . .”).

343 Normally when a product sold causes harm to the purchaser or a third party, the seller could be found liable under a theory of product liability. As we have seen, however, product liability claims involving edibles have been exceedingly few in number and proven difficult to make. See Thomas Stufano, Through the Smoke: Do Current Civil Liability Laws Address the Unique Issues Presented by the Recreational Marijuana Industry?, 34 TOURO L. REV. 1409, 1416-23 (2018) (describing the few product liability claims made on the basis of edibles ingestion, which were dismissed or settled); see also Complaint for Wrongful Death and Survivor and Demand for Jury Trial, No. 37-2020-00038013-CU-PO-CTL (Sup. Ct. Cal Oct. 20, 2020) (seeking damages wrongful death allegedly caused by edible consumption). Some believe that such claims are necessarily uphill battles, as plaintiffs will have difficulty establishing causation. See, e.g., Hilary Bricken, Killer Pot? An Analysis of the Cannabis Wrongful Death Suit in Colorado, ABOVE THE LAW (June 6, 2016),

Electronic copy available at: https://ssrn.com/abstract=3811846
of social use establishments operating in the United States is so paltry. In short, starting a social consumption business is expensive, uncertain, and overly burdensome. If states are going to move away from prohibition and towards a more successful industry and safer consumers, they must not only remove these extensive and unnecessary hurdles that they have placed in front of potential social consumption businesses but also actively promote and facilitate their creation.

B. Addressing the Lack of Social Consumption as a Prohibition Problem

Why is social consumption important? What are the benefits of creating public spaces where people can congregate and consume cannabis among like-minded individuals and in the presence of employees who are familiar with cannabis and its effects? First and foremost, at the highest level of generality, social consumption is beneficial because it cuts against the harms of prohibition. As we’ve seen, the core problem with prohibition is that where there is an inelastic demand, there will come a supply, and that prohibiting or inhibiting a supply only serves to benefit the illicit market and endanger consumers. Many people enjoy consuming cannabis in a social setting, thus
creating a demand for places where this can occur, so prohibiting or inhibiting
the existence of social consumption sites is destined to cause problems.

More specifically, the failure of states to authorize and facilitate the
creation of social consumption businesses has perpetuated several difficulties
caused by prohibition that continue to harm consumers and businesses alike.
Most obviously, social consumption sites provide consumers who may have no
legal or practical place to use cannabis somewhere to do so. For a drug that has
purportedly been “legalized,” there sure are a lot of places where cannabis
can’t be used.345 Every state, for instance, prohibits the “public use” of
cannabis, meaning that at least theoretically, consumers cannot use it while
walking on the streets or hanging out in parks and other outdoor spaces. Most
states also mandate that cannabis may not be consumed on-site at
dispensaries. Furthermore, most public accommodations like hotels and inns
expressly prohibit cannabis consumption, a problem for cannabis tourism that
has persisted from the beginning of legalization. Finally, many people either
cannot or do not want to consume cannabis in their homes. Use of cannabis is
prohibited in all federally subsidized housing, for instance, and many landlords
and even condominium associations prohibit at least the smoking of cannabis
in their units, if not all cannabis use. And consumers who share their living
arrangements with others—either children or adults who object to cannabis
use—may very well choose not to use cannabis at home.

By legalizing cannabis but not providing any place to consume it, states
have aggravated a host of problems caused by prohibition. For one thing, the

345 See Jacob Sullum, Colorado’s Cannabis Conundrum: Marijuana Everywhere, But Not a
situation is simply absurd and makes the government appear ridiculous. Relatedly, by restricting places to legally consume cannabis, the state undermines respect for the law by encouraging illegal behavior. It is not fundamentally difficult to skirt some of these rules and eat cannabis edibles in one’s hotel room, or discreetly smoke or vaporize cannabis in remote locations, but the whole point of legalization is that consumers should not have to break the law to use cannabis. Why legalize cannabis but then force people to act illegally if they want to use it? Furthermore, the lack of social consumption sites severely inhibits cannabis tourism, a potentially significant source of revenue for states and profits for businesses. Someone who travels from Wyoming to Colorado in part to use cannabis will likely have nowhere legally to consume it. States should not be able to knowingly profit massively from cannabis taxes paid by tourists who come from out of state to consume cannabis but have no legal consumption method.

Finally, and most importantly, state restrictions on where cannabis can be used perpetuate inequalities. Wealthy individuals who can afford their own homes in the suburbs or outdoor spaces in urban apartments and condominiums can typically consume cannabis at home any way they please, but people of more modest means who rent or live in subsidized housing or live in cramped apartments with many other people or who do not have homes at all are out of luck. Given the correlation in the United States between socio-economic status and race, moreover, these inequalities inevitably take on a racial component. By authorizing and facilitating social consumption establishments, states can help remedy these economic and racial inequalities, while also promoting lucrative cannabis tourism and fostering a respect for law and the government among citizens who continue to suffer from the harms of prohibition.

Returning specifically to the purported “harms” of edibles, social consumption establishments can also address both of the modest primary risks posed by such products: overconsumption and inadvertent consumption. How does social consumption address the problem of overconsumption? As discussed above, overconsumption risks largely derive from prohibition and the lasting effects of prohibition in the transition to legalization, as many consumers never learned how to use edibles responsibly. Social consumption businesses lessen the likelihood of overconsumption by enabling responsible and informed consumption in a public space where trained

346 See supra Section III.B.
personnel can help consumers avoid overconsumption.\footnote{See, e.g., Letter from Social Consumption Working Group, supra note __, at 1 (“To ensure customers purchasing edibles are informed, they must receive and verbally acknowledge an understanding of a consumer information card educating customers about the potential length of impairment from edibles. Consumer education will also be made available through signage.”).} With informed employees present both at the point of sale and the point of consumption, there is a lesser risk that patrons will overconsume, as such employees can guard against consumers stacking and would have the discretion to cut off those already intoxicated.\footnote{See COLO. CODE REGS. § 212-3(6-705)(G) (“A Licensed Hospitality Business shall not allow any individual under 21 years of age to enter its Licensed Premises.”); Letter from Social Consumption Working Group, supra note __, at 1 (“No one under 21 may access the premises of an on-site consumption establishment. If permitted by local regulation, municipalities may allow outdoor event hosts to designate an area for on-site consumption. All licensees must have an adequate plan to ensure that no one under 21 will be allowed into an on-site consumption area.”).} This would be particularly helpful for cannabis tourists and others who may be new to using cannabis. By pushing these consumers to use cannabis edibles in seclusion, away from those that may advise caution or otherwise be able to intervene, the system promotes irresponsible use. If Maureen Dowd had had the opportunity to eat her chocolate bar at a social consumption site instead of in her hotel room, for example, it is unlikely that she would have eaten the entire thing and then spent the next eight hours “curled up in a hallucinatory state” convinced that she had died.

How does social consumption combat the worries of inadvertent consumption? Beyond the benefits of further implementing legalization, as discussed above, by restricting access to minors,\footnote{See COLO. CODE REGS. § 212-3(3-520)(H)(1) (noting that training for social consumption employees must include “[i]dentifying signs of visible impairment including alcohol and drug impairment”); Letter from Social Consumption Working Group, supra note __, at 2 (“The pilot program requires each employee of a social consumption establishment to complete the Responsible Server Training Program in addition to general required agent training. The mandatory training includes impairment-related topics such as potency, effects, absorption time, and procedures to ensure that customers are not overserved.”).} social consumption businesses (like bars and breweries in the alcohol context) provide safe spaces for adults to consume cannabis without worrying about whether children might come across a stray gummy bear or some other treat they will be tempted to sneak into their mouths. More important, perhaps, social consumption
businesses allow cannabis consumers with children to readily access cannabis edibles without bringing such products into their homes. This lessens the worry that minors may consume cannabis edibles that their parents bring into the home, as it simply lessens the chance that cannabis edibles will be brought into the home in the first place. If an adult is worried that their child might accidentally consume a cannabis-infused edible, they can just go to the social consumption site and eat the edible there, thus completely alleviating the worry that a child will happen upon it in the refrigerator or pantry.

Finally, social consumption places cannabis use in the public sphere, making cannabis use visible, and more importantly, normalized. For too long, cannabis has been treated as a bogeyman. By normalizing cannabis and edibles consumption, public sentiment and the policy that follows can be based on reality rather than fear. We know that prohibition is not effective policy, and we also know that prohibitionist beliefs arise from fear of cannabis, in the past propagated by bad faith actors. When people can finally see cannabis use in their communities, in licensed establishments, being conducted responsibly, remaining prohibitionist biases will naturally fade, hopefully resulting in an atmosphere where conversations about cannabis regulatory policy can move beyond sensationalist slogans (Cannabis will kill you! Tell your children!) and start focusing on mundane, though still highly important, issues like zoning and taxation.

In sum, creation of social consumption businesses is a necessary and critical next step away from prohibition and toward full legalization and normalization of cannabis use in the United States. Among other advantages, these establishments will help address the modest risks posed by edibles by providing safe, adult-only places for consuming edibles, where trained employees can educate consumers about responsible consumption and ensure that they do not overconsume. As such, policymakers need to ensure the quick and effective implementation of social consumption programs. A large part of this involves removing significant barriers to entry for social consumption businesses that prevent entrepreneurs from starting up such businesses. Perhaps most significantly, states should not authorize cities and towns to prohibit social consumption establishments, as such local control rehashes all the major problems posed by prohibition generally. The goal should be to treat cannabis social consumption businesses just as bars and breweries are treated today. It should be as easy to find a social place to enjoy a cannabis muffin (or

**CONCLUSION**

Many regulators seem to view edibles as a harm being forced upon society, one that they must in their roles seek to mitigate as much as possible, resulting in incredibly slow rollouts of state programs, legalization rehashings at every step, and exceedingly burdensome and superfluous regulations on producers that ultimately further a prohibition that has already done enough damage. This regime of grudging tolerance\footnote{See note __, supra.} has the additional effect of allowing into the industry only those with significant capital and often excluding those whom prohibition has most harmed. It is time to end this stingy and harmful approach to legalization and begin addressing the issues posed by edibles not by asking how to protect people against their dangers but rather how to enable people to consume responsibly.

The problems with edibles regulation, past, present, and future, all have a common thread: they do not have difficult solutions once the right questions are asked, but getting to the place where we can implement those solutions requires seeing through and then overcoming decades of anti-cannabis rhetoric and attitudes. The first step, then, is asking the right questions. The question that gave rise to this Article and has popped up several times is this: Why can’t we order a cannabis muffin with our coffee? Or to put it another way: Why is the government so scared of a muffin? While the question may seem flippant, it turns out to be a serious one with a lengthy answer. By working through our answer to the question here, we have arrived at yet another question, this one a question about questions themselves: How do we get legislators and regulators asking the right questions about cannabis?
It’s important to re-stress a few important tenets, all of which boil down to this: Do not let history repeat itself. First, prohibition does not work. Prohibition seeks to curb a behavior by attacking the supply and ignoring the demand. We have decades of evidence of this folly. Trillions of dollars have been expended in the war on drugs, and drug use has not declined despite massive government efforts. This is not because government enforcement agencies failed to crack down hard enough, but because prohibition itself is defective policy. In pulling ourselves out of such foolishness predicated on bad faith, we should seek to avoid any extension or badges of prohibition, and approach regulatory problems with an understanding that prohibition is simply not on the table.

Second, prohibitionist ideas reinforced by a near-century-long war of propaganda can often be found working just under the surface of opinions about cannabis that are expressed in good faith and do not appear prohibitionist on their face. These opinions can take the form, for instance, of cautioning against certain dangers of cannabis without understanding them, or calls to delay rolling out cannabis programs in the name of needing further research. In this Article, we’ve seen how arguments that failed to waylay cannabis legalization have re-emerged in the battle against edibles. They hold just as much merit now as they did then. In such cases, those who understand cannabis and its history must identify and call out prohibitionist biases so we can seek to enact appropriate regulations from a starting point of common understanding.

Third, states often enact cannabis regulations by following what prior states to legalize have done, without always seriously questioning whether those prior states have gotten it right. As such, first-in-time regulations that may have been arbitrary or the product of compromise serve to set standards that other states, fearing getting the answer wrong, then adopt out of hand. We’ve seen in this Article how states have adopted limits on the form and type of edibles simply because that’s what other states have done. If the concept that states are laboratories of democracy is to hold any water, then states need to evaluate cannabis policy problems with fresh eyes, applying the best science and understanding of cannabis without falling for prohibitionist traps or unquestioningly adopting the approaches of preceding states.

Finally, states must ensure that cannabis regulatory agencies are staffed by people who are knowledgeable about cannabis and who ideally support full legalization. Appointing cannabis regulators with no prior knowledge of cannabis, much less those with past outspoken beliefs against legalization, is simply setting up a system to fail. Although regulators can certainly learn about how to regulate cannabis by looking to analogous industries like the alcohol or food industries, cannabis is not booze and cannabis edibles are not the same
as other foods. Cannabis must be treated as the unique substance that it is, and that means states should appoint and hire regulators who understand its unique properties and history.

A natural response to all of this is to ask, “Why the need to go so fast? Start low, go slow, right?” While this is indeed good advice about how to actually consume edibles, addressing questions of edibles policy like the ones we have discussed in this Article should not wait any longer. Further delays will push consumers into the riskier illicit markets and inhibit the development of an industry that can bring immense benefits to businesses, consumers, and the government alike. Every day that we extend prohibitionist policies is another day that racial minorities must struggle to overcome the harms of the drug wars. Moreover, regulators have the responsibility to best develop their own state’s cannabis market pursuant to the will of the voters. With the inevitable arrival of federal legalization and the growth of interstate commerce in cannabis that will come with it, states need to start planning now for the much more complicated world that is soon to arrive. As such, regulators should engage with these problems promptly, while they still have the bandwidth to do so.

Planning for federal legalization requires imagining a world where cannabis edibles are as prevalent, and moreover are as normalized, as alcohol or coffee. Taking such a world as the goal, the path forward becomes clear. We need to start with basic questions. How do we prevent another Maureen Dowd debacle? How do we keep children from eating cannabis edibles? How do we properly end prohibition? How do we create an industry? Good-faith but knee-jerk reactions can end up overburdening a market getting off the ground. The questions we need to ask now are simple, but crucial. Answering them requires one to take a step back and apply an anti-prohibitionist view, questioning some of the basic assumptions endemic in edibles regulation. Taking on the anti-prohibitionist perspective, we can find better ways to answer these questions so we can then move on to other, less important questions—not “why can’t we get a cannabis muffin with our coffee?” but rather “which kind of cannabis-infused muffin should I order?”

As this Article has attempted to demonstrate, the solutions for our edibles problems are not conceptually difficult. What is difficult is recognizing what questions must be asked in the first place, and then asking them. We are in a wild new world of cannabis regulation, and we should not be afraid to question things every step of the way to optimize our regulations and take us safely and happily into the wild green yonder.