CANNABIS INFUSED FOODSTUFFS/EDIBLES IN SOUTH AFRICA: RISKS, REGULATIONS AND RECOMMENDATIONS

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The South African Medical Research Council
recognizes the catastrophic and persisting consequences of colonialism and apartheid, including land dispossession and the intentional imposition of educational and health inequities.

Acknowledging the SAMRC's historical role and silence during apartheid, we commit our capacities and resources to the continued promotion of justice and dignity in health research in South Africa.

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Factsheet

Edible Cannabis Affects People Differently

'start low - go slow'

GET CANNABIS CLARITY.CA

Quick Tips for Edibles

- Start with small amounts: 2.5 mg of tetrahydrocannabinol (THC) or less for products that you eat or drink
- Don't take more right away - effects from an edible cannabis product may not be felt for 2 hours, and may take 4 hours for effects to peak
- Clear your schedule – the effects from edible cannabis last 4 to 12 hours with some effects lasting up to 24 hours
- Label and store all cannabis securely. Edible cannabis often looks like regular food such as baked goods or candy; to reduce the risk of accidental consumption label your cannabis edibles and store them securely away from food products and out of the reach of children and pets.
- Always obtain cannabis and cannabis products from a legal source.
- If you or someone you know has accidently consumed cannabis or consumed too much and is not well, seek immediate assistance:
  - *Call BC Poison Control Centre:* **1 800-567-8911**, *or* **604 682-5050**.
  - *Call 911 or go to your local hospital emergency department.*

About Using Edible Cannabis

- Many people are aware of the immediate psychoactive effect associated with smoking cannabis but may not be aware of the delayed onset and the extended duration of the effects associated with edible cannabis.

Start low, go slow

- The psychoactive effect of cannabis is mainly caused by THC. Using low dose products containing no more than 2.5mg THC may assist you in determining your individual response to, and comfort level with, the effects of edible cannabis.
- You may find that one 2.5 mg THC dose is enough, but if you choose to increase your dose, wait at least two hours before taking a second 2.5 mg THC dose.
- This careful small-dose approach will help you avoid over consumption that can result in unpleasant effects including extreme sedation/inability to move, anxiety, paranoia, hallucinations, delusions, rapid heartbeat, or respiratory depression.

BRITISH COLUMBIA

GENERAL OVERVIEW

DEFINITION OF CANNABIS-INFUSED FOODSTUFFS/EDIBLES

- Cannabis products made for ingestion, including food, cooking ingredients, tinctures, dietary supplements, teas, sweets, gummies, cookies, candy, chocolates, and capsules *(Fordjour, Manful et al. 2024)*
- These can be home-made or commercially prepared
- THC+CBD vs CBD only

**Cannabis-infused foodstuffs and edibles are used interchangeably.*

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WHY THE INTEREST IN EDIBLES CONTAINING CANNABIS?

- Legislation of cannabis: Act No. 07 of 2024: Cannabis for Private Purposes Act, 28 May 2024 (deemed sound)
- 7th of March 2025: Announcement in the South African government gazette to declare ban on all edible cannabis products (Department of Health)
- This ban sparked immense controversy (cannabis advocates, industry players)
- The ban was lifted on the 26th March 2025 for further input

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WHAT DO WE KNOW?

- ↑ Number of people using edible cannabis may due to changes in legislation in South Africa, as with other countries (Canada, USA, Uruguay)
- Availability of edible cannabis (e.g. “cannabis social clubs”, “coffee shops”, online, other vendors
- Cannabis in general is gaining increasing acceptance in modern medicine
  - Evidence that CBD improves spasticity in multiple sclerosis, nausea, epileptic seizures, sleep aid)
- Concerns about THC and psychiatric consequences

World Health Organization

United Nations Office on Drugs and Crime

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HARMS AND BENEFITS ASSOCIATED WITH CANNABIS-INFUSED FOODSTUFFS/EDIBLES

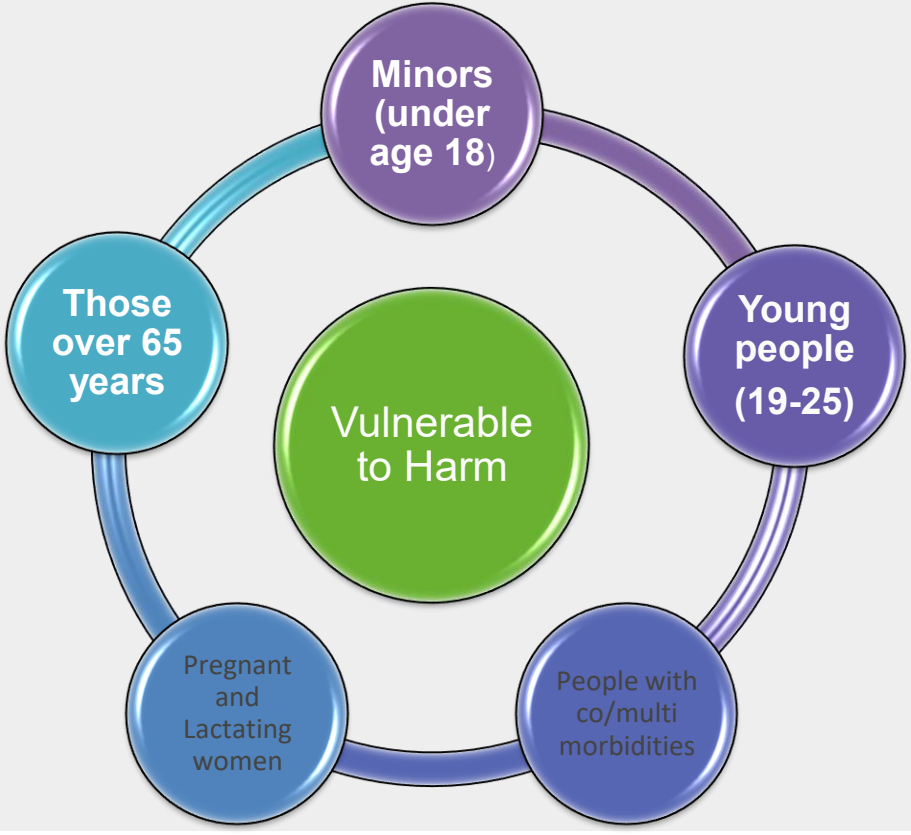
PERCEIVED BENEFITS

- Reduced stigma due to mode of use
- Perceived preferred effects in comparison to smoking cannabis
- Less harmful in terms of physical health effects
- More effective for chronic pain

EVIDENCE ON HARMS

- Evidence mainly from USA and Canada
- Limited in Low- and Middle-Income Countries
- Pharmacokinetically and metabolically, cannabis edibles containing THC
  - Have delayed onset
  - Longer lasting psychoactive effects
- Concerns related to foodstuffs containing THC
  - Overconsumption and toxicity
  - Mental health symptoms
  - Physical health conditions
  - Increased tolerance (risk of cannabis use disorder)

SUBGROUPS VULNERABLE TO HARM

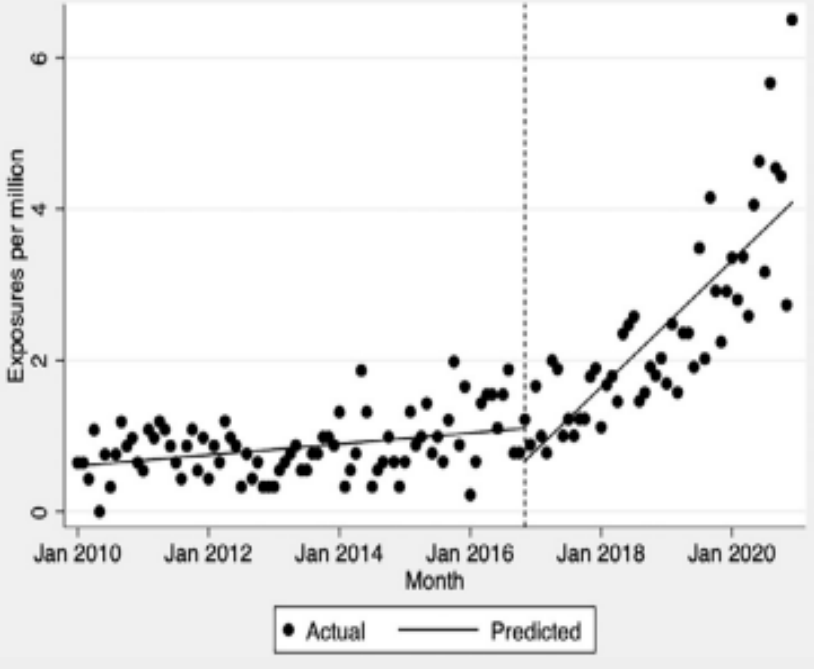


CHILDREN AND ADOLESCENTS

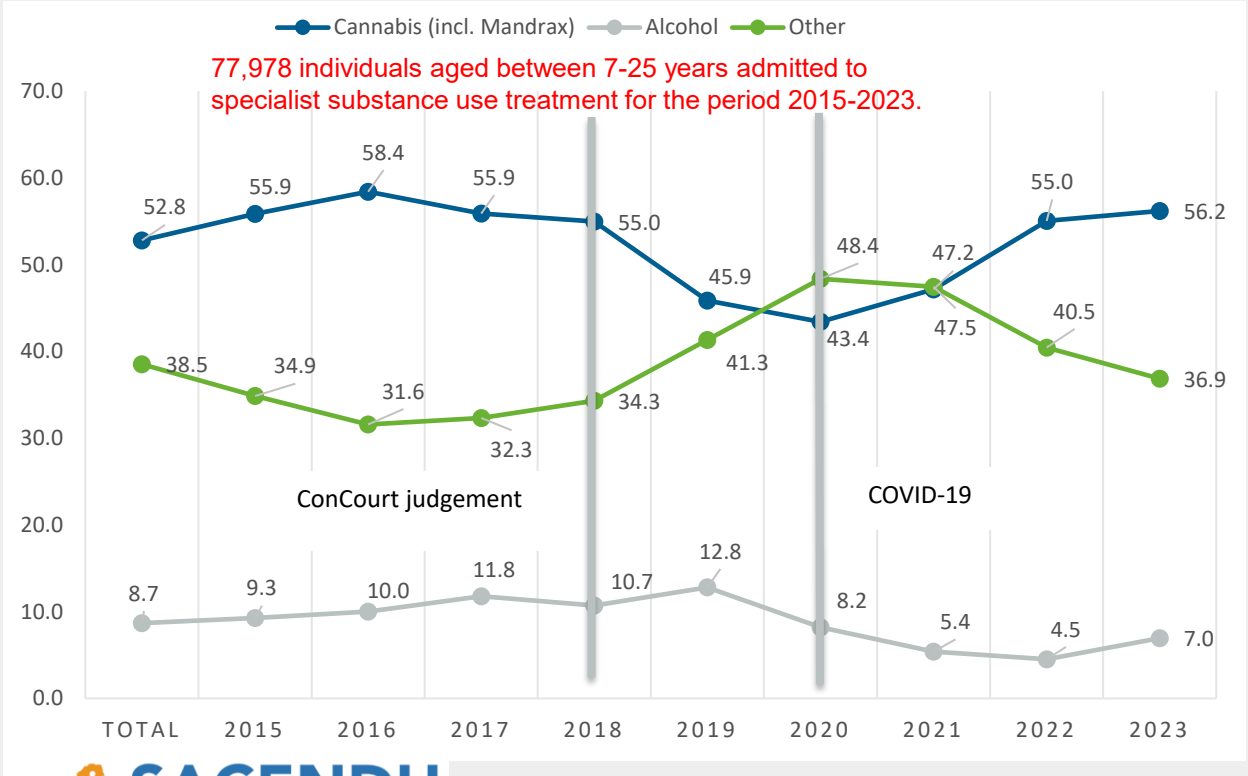
- Children: accidental/ exploratory exposure to edible THC, mainly within household
- Concern: Young children (<5 years)
- Adolescents: Social norms more permissive under legalization
- Brain still developing until age 25
- Data from poison control centres, healthcare facilities

EXAMPLE IN CALIFORNIA, USA

- Moderate vs Major severe health outcomes
- Unintentional vs intentional
- Almost all occurred in home
- 83.5% involved edible THC
- More than half of exposures were in adolescents



TREATMENT ADMISSIONS BY SUBSTANCE CATEGORY (OVERALL AND BY YEAR)



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AOSIS

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Cannabis use among hospitalised adolescents before and after decriminalisation in South Africa

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Background: Cannabis is the most widely used substance worldwide, and its use is much higher among adolescents. However, adolescents are at higher risk of negative sequelae secondary to this use, including the possible development of mental disorders. On 31 March 2017, the South African High Court ruled that cannabis use by an adult in a private dwelling should be decriminalised.

Aim: This study aimed to determine the clinical profile of adolescents who use cannabis, who use, who present to a tertiary hospital in Cape Town, South Africa, before and after the high court ruling in 2017.

Setting: Folder review of adolescents admitted at Groote Schuur Hospital (GSH) in the Emergency Psychiatric Unit.

Methods: This study was a retrospective folder review of adolescents admitted from April 2015 to March 2019.

Results: Cannabis was the most commonly used substance in the study, with increased use seen post-ruling. The most common frequency of cannabis use reported was daily. A significantly higher proportion of patients who used cannabis pre-ruling had psychotic disorder ($p < 0.001$) and cannabis use disorder ($p = 0.01$). Post-ruling, the results were statistically significant ($p < 0.001$) for both.

Conclusion: The study showed an increasing prevalence of cannabis use in adolescents admitted with mental illness after the high court ruling in 2017. This study also demonstrates that adolescents remain a vulnerable population to the effects of cannabis and highlights the need for further research.

Contribution: The findings of this study call for more focussed adolescent interventions and services.

Keywords: cannabis; adolescents; mental illness; high court ruling; decriminalise; South Africa.

Introduction

Cannabis is the most widely used drug globally, with an estimated 219 million users in 2021.[1,2] Its use is particularly high among adolescents and youth.[3] The cannabis use perception index showed that countries in Africa fell into the top two regions, following countries in Asia, which had the greatest increase in cannabis use.[1] Cannabis has become more socially accepted and thought to be harmless, and with its changing legal status, it has allowed for more widespread exposure.[4,5] Over the past few decades, cannabis has become more potent, with an increasing delta-9-tetrahydrocannabinol (THC) percentage.[4] In the United States, the THC percentage increased from 4% to 16% between 1995 and 2018.[6] Despite this, there has been a significant decline in the percentage of adolescents who consider regular cannabis use to be harmful.[4] The risks of cannabis use are the highest in certain groups, including people with pre-existing mental disorders and adolescents.[5]

In South Africa, cannabis is the most commonly used illicit substance, with initiation reported as early as 11 years old.[4] Factors that increase the risk of developing a substance use disorder (SUD) include socioeconomic inequalities, poverty, limited education and marginalisation, which are factors that many adolescents in South Africa are exposed to.[7] Ongoing cannabis use during adolescence can result in long-term changes in brain function that can adversely impact educational, professional, and social achievements.[7]

Mental health conditions account for 16% of the global disease and injury burden in adolescents.[7] In South Africa, violence, human immunodeficiency virus (HIV) infection, and substance use

SACENDU
SOUTH AFRICAN COMMUNITY EPIDEMIOLOGY NETWORK ON DRUG USE
Treatment Demand Data • Service Quality Measures (SQM)
• Community-Based Harm Reduction Services

Higher rates of cannabis use found among adolescents admitted with psychotic and/or cannabis use disorder to hospital emergency unit post high court ruling (Swartz et al., 2024).

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OLDER ADULTS

Features of the available evidence:

- 28 primary studies included, many evaluating large surveys/regional databases; remaining studies were smaller NRSs and one RCT
- Type of cannabis use was often mixed (medical and non-medical) or unclear
- Statistical adjustment in NRSs to account for confounding was not commonly used
- In some cases, multiple studies assessing the same outcome reported conflicting findings
- Adverse events were rarely explicitly evaluated in NRSs

Physical health associations

Harmful:
Possible INCREASED risk of…

- *Accidents/injuries
- *Adverse events
- *ED visits (50–64 years)
- *HIV/AIDS
- *Sexually transmitted disease

- COPD (50–64 years)
- ED visits, without hospitalization
- Poorer HR-QoL (self-rated)
- Hepatitis B/C
- Liver cirrhosis (50–64 years)
- Lung cancer

Beneficial:
Possible DECREASED risk of…

- *Head and neck or prostate cancer

- Diabetes
- Heart condition (65+ years)

Mental health and behavioural associations

Harmful:
Potential INCREASED risk of…

- *Anxiety (self-report)
- *Depression (MDE and self-report)
- *Driving under influence
- *Impaired cognitive function
- *Impaired concentration
- *Impaired executive function
- *Opioid dependence
- *Risk behaviors (theft, drug selling, arrest, violence)
- *Suicide

- Alcohol use disorder
- Other substance use disorders
- Mental health disorders
- Nicotine dependence
- PTSD

Beneficial:
Possible DECREASED risk of…

- Depression (BDI)

Other noted associations

Harmful:
Possible INCREASED risk of…

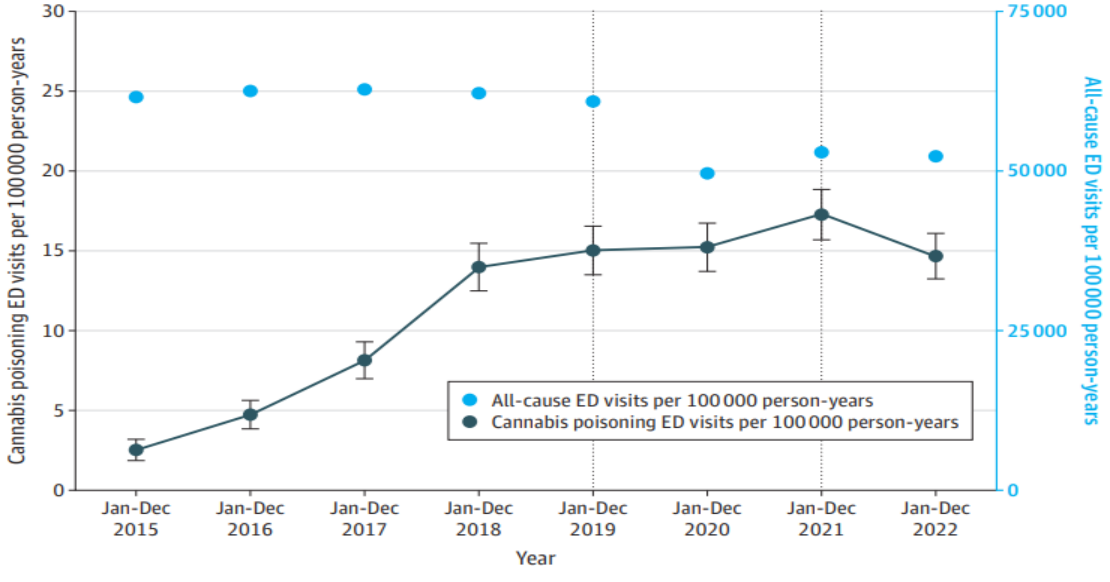
- *Job loss
- Use of *tobacco, *illicit drugs, alcohol, benzodiazepines, cocaine, opioids, prescription pain relievers, prescription psychotherapeutics
- Problematic use of *alcohol, *prescription opioids, prescription pain relievers, sedatives, tranquilizers

*Significant effects from adjusted analyses are indicated by asterisks. Outcomes without asterisks represent significant effects from unadjusted analyses.
Outcomes with any significant effect are reported, regardless if conflicting non-significant findings for the outcome were present. Outcomes with both significant beneficial and harmful effects are reported under both headings. Effects may have differed across the cannabis products evaluated; where only one product was associatec with an effect and the effect of others may have differed, we have reported the product name.

BDI = Beck Depression Inventory; COPD = chronic obstructive pulmonary disease; ED = emergency department; HR-QoL = health related quality of life; MDE = major depressive episode; NRSs = non-randomized studies; PTSD = post-traumatic stress disorder

CANADA EXAMPLE: CANNABIS INTOXICATION IN OLDER ADULTS

Figure. Annual Rates of Emergency Department (ED) Visits for Cannabis Poisoning in Ontario Older Adults, 2015-2022



No. at risk								
ED visits for cannabis poisoning	55	107	190	337	375	392	462	404
All-cause ED visits	1 341 074	1 411 050	1 461 055	1 498 287	1 519 955	1 277 811	1 415 903	1 440 749
Study cohort	2 176 277	2 254 637	2 330 106	2 409 362	2 494 549	2 573 514	2 673 587	2 752 154

CONCERNS AND CHALLENGES IN SOUTH AFRICA

- Lack of a regulatory framework on cannabis-infused foodstuffs/ edibles
- Changes in social norms/perceptions around cannabis and cannabis edibles
- Consumer knowledge/literacy of THC and cannabinoid content is limited
- Limited data available in South Africa (studies conducted mainly in high-income countries)
- Accessibility/diversion (older peers, adults)
- THC dosage not well understood
- High-potency edibles and cannabis-infused beverages
- Control of THC amount in home-baked goods
- Myriad of techniques to extract ingredients from the cannabis plant

RECOMMENDATIONS: WHERE TO NEXT?

Area	Recommendation	Rationale
Legal Framework	Develop dedicated regulatory framework for cannabis edibles under or separate - the Cannabis for Private Purposes Act (2024):	Aligns with international norms and provides legal clarity Regulation can consider both imported and local commercial products for taxation
THC Potency Limits and **Standard Units**	Cap THC at a minimum of 5mg per serving, at a maximum of 10 mg per serving, and 100 mg per package	Reduces risk and aligns with Canada and U.S. state standards., but also addressed homogeneity requirements → consistent dosing, prevents possible overdose
Education and information to reduce harms	Health professionals to be knowledgeable on safe use, risks, and legal boundaries; service providers able to advise people who they work with	Education on constitution of standard unit of THC; highlight risks of accidental ingestion Reduces stigma and misuse Implement evidence-based prevention and intervention programmes Harm reduction measures

INFORMATION ON STANDARD THC UNIT

a)

1 serving size		
2 Standard THC Units	10mg THC	80% THC

b)

1/2 serving size		
1 Standard THC Unit	5mg THC	40% THC

c)

1/4 serving size		
0.5 Standard THC Unit	2.5mg THC	20% THC

What is the serving size?
How many standard THC units per serving size?
What is the total amount THC?

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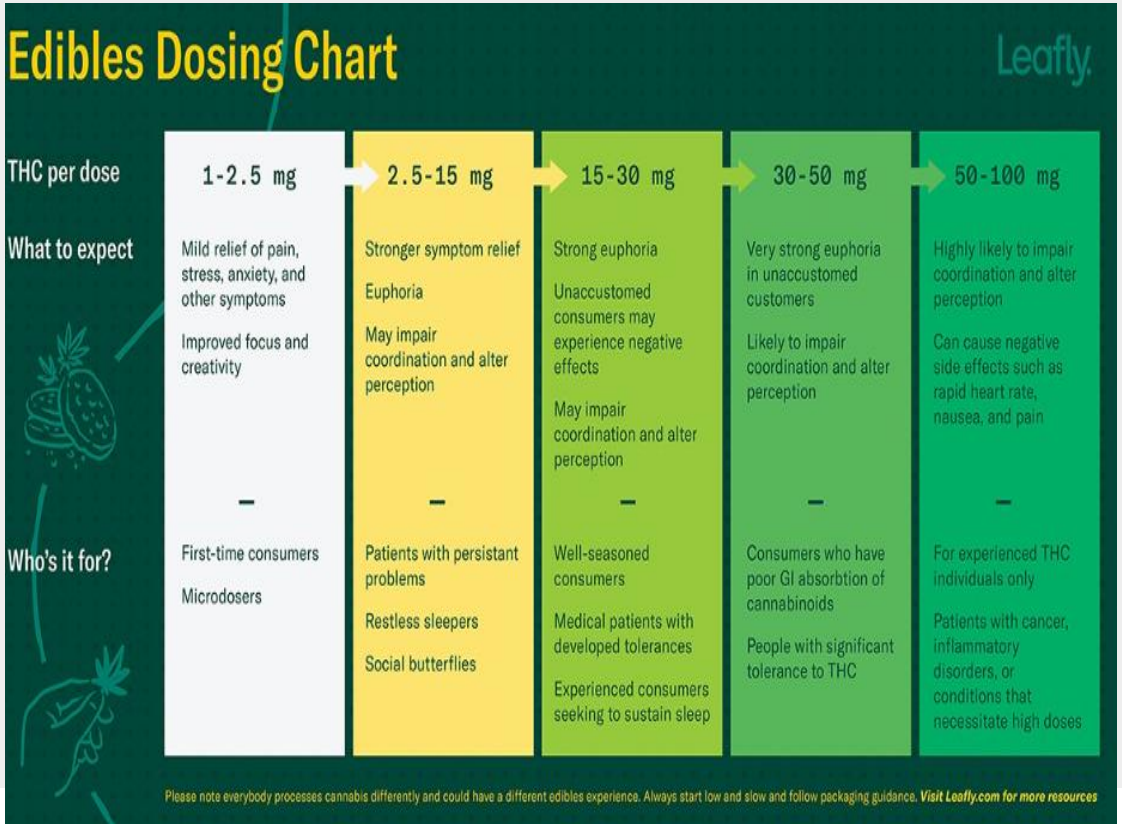
SAFE DOSAGE AND STORAGE



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Thank you

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