

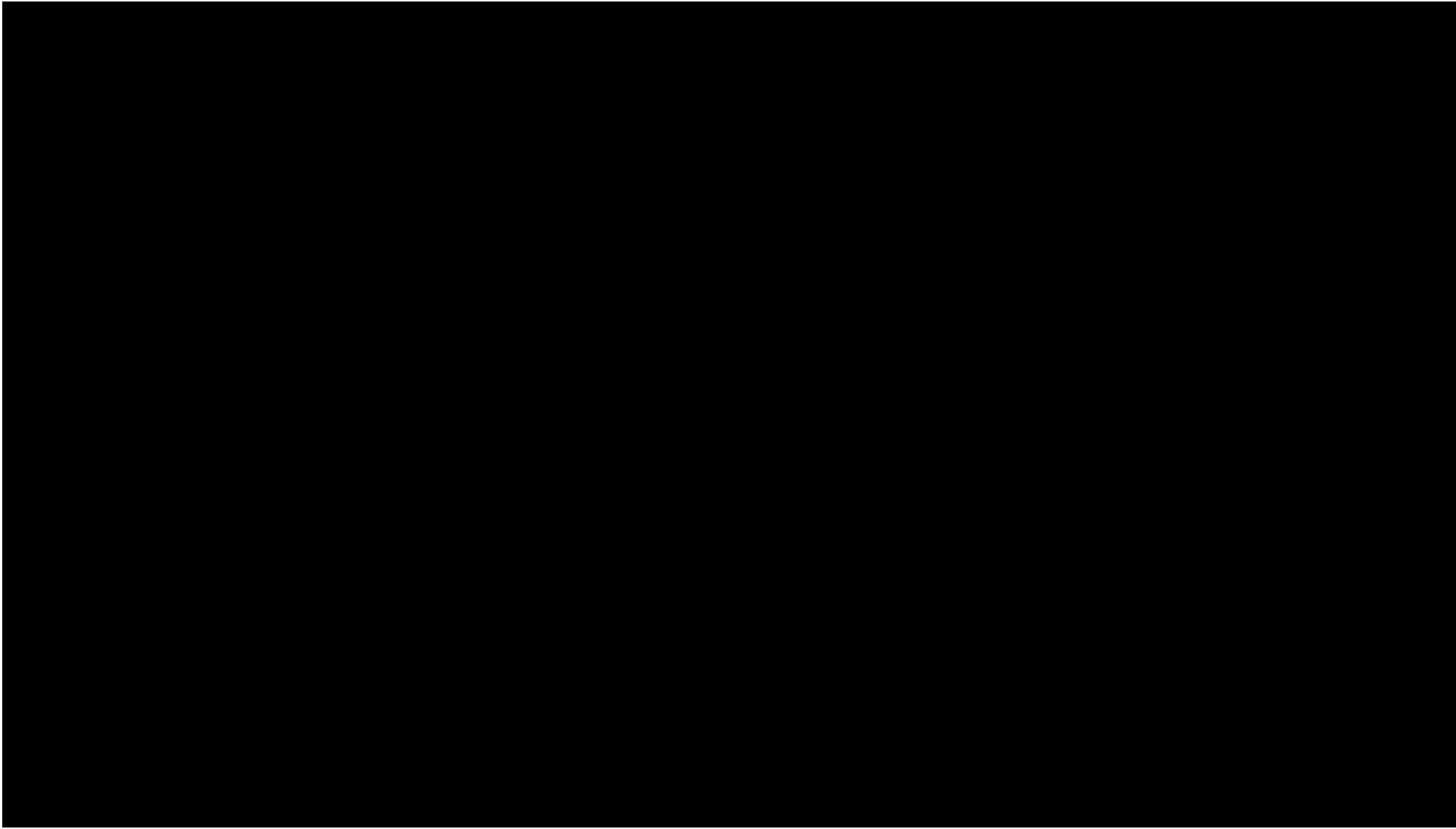
DRUGS: FACTS, CAUSES AND MYTHS

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What are Drugs?

- **Substances which affect your:**



CONSCIOUSNESS



MOOD



COORDINATION



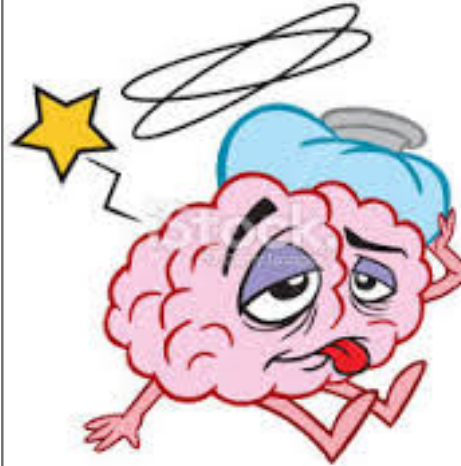
**THINKING
PROCESS**

- Psychoactive substances,
- Narcotics,
- Psychotropics,
- In layman terms: 'DRUGS'

**How are Drugs Different
from Each Other?**

Some drugs lower
the brain functioning

**BRAIN
DEPRESSANTS**



Alcohol
Sedative tablets
Opioids

Some drugs activate
the brain functioning

**BRAIN
STIMULANTS**



Amphetamines
Cocaine
Tobacco

Alcoholic beverages



Various preparations of alcohol

Beer (4-8%)

Wine (8-12%)

Country made liquor
(20-30%)

Spirits (Indian
Made Foreign
Liquor, IMFL)
(40-45%)

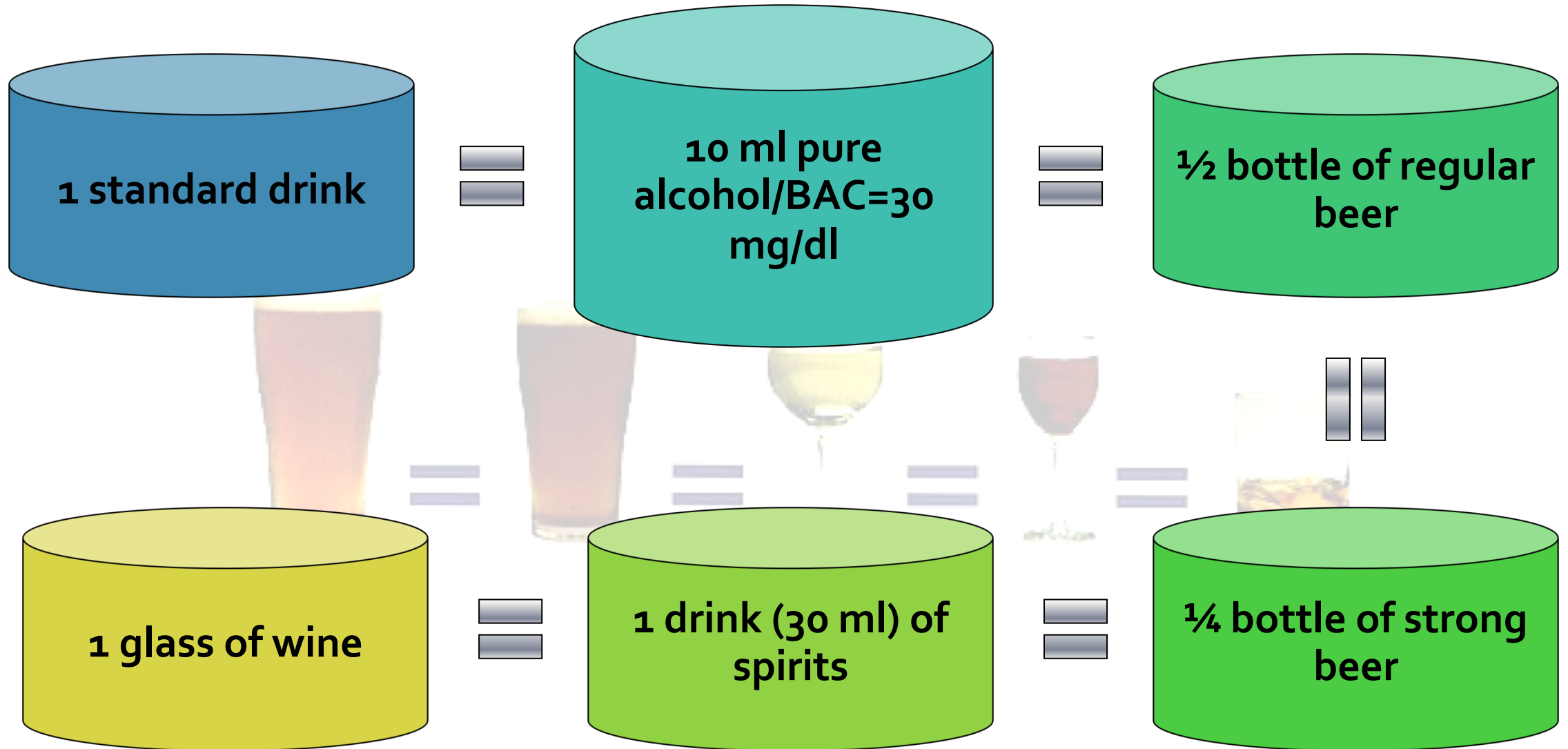
Vodka

Whiskey

Rum

Gin

A standard drink



What happens after you drink?

- The effect depends upon the concentration of alcohol in your blood
 - Blood Alcohol Concentration (BAC)
- *However, the effects are greatly influenced by individual variations*

BAC mg/dl	Effects
< 80	Euphoria, feeling of relaxation and talking freely, clumsy movements of hands and legs, reduced alertness but believes himself to be alert, impaired driving ability.
80-100	Noisy, moody, impaired judgement
100-200	Blurred vision, unsteady gait, gross in-coordination, slurred speech, aggressive, quarrelsome, talking loudly.
200-300	Amnesia for the experience – blackout.
300-350	Coma
350-600	May cause or contribute to death

Alcohol Withdrawal

MILD

- Anxiety, restlessness
- Inability to sleep
- Tremors
- Craving
- Palpitation and sweating
- Breathlessness

SEVERE

- All features of mild withdrawal
- Disorientation
- Hallucinations
- Seizures ('rum fits')
- Can be fatal

Opioids



Opioids

- Substances with opium like effects (analgesic) are called as opioids
- Derived from naturally occurring plant: *papaver somniferum*
- Purest form - Opium (dried latex)

- **Commonly known as:**
 - Afeem, Doda, Smack, Brown sugar, Junk, Dope, H, White horse, Horse, China white, Skunk, Skag, Hell dust, Thunder, Chiva, Big H, Aunt hazel

Type of Opioids

Natural

- Morphine
- Codeine

Semi-synthetic

- Heroin/Brown Sugar/Smack
- Buprenorphine

Synthetic

- Methadone
- Pentazocine
- Dextropropoxyphene

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Can be taken

- Orally
- Inhaling (“chasing the dragon”)
- Injections

Opioids: Effects

- *The effects differ widely between new and dependent users*

New users

- Who is not in pain
→ an unpleasant reaction / vomiting.
- Who has pain or anxiety → some relief

Regular users

- Short lived intense experience – “rush”.
- A state of profound apathy
- A dreamlike state
- Psychomotor agitation/retardation
- Impaired memory and attention
- High-risk behaviours

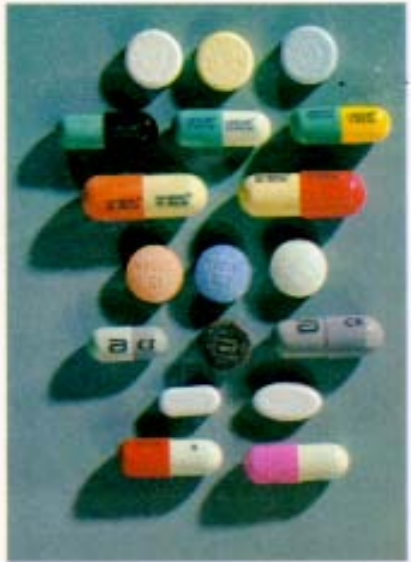
Opioid withdrawal

Very distressing, but never fatal !

Lasts from a few hours to few weeks

- “Cold Turkey”
- Opening of all holes !
 - Watering from eyes, nose
 - Vomiting
 - Loose motions
- Bodyache / pain
- Anxiety, restlessness, insomnia
- Premature ejaculation

Sedatives-Hypnotics



Sedatives – Hypnotics

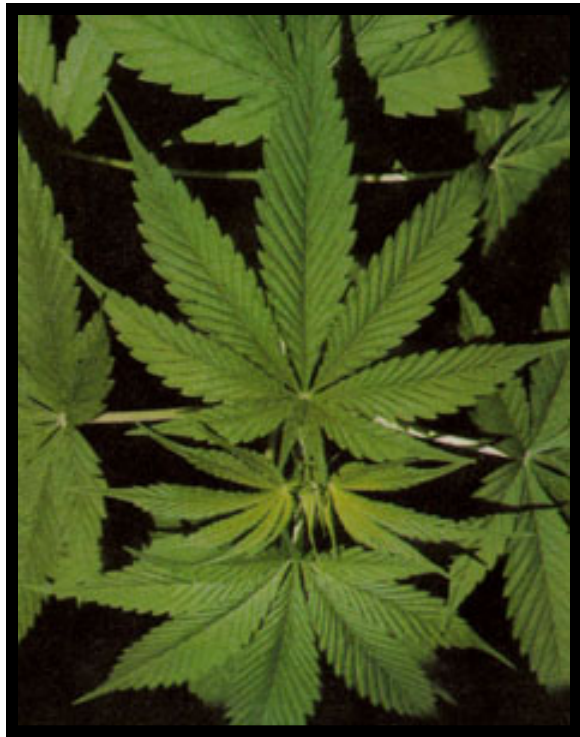
Medications for:

- Sleep (Diazepam)
- Allergy (Promethazine, pheniramine)
- Mental illness: anxiety, depression

Act as brain depressants

- Produce relaxation, sleep

Cannabis



Cannabis products

- Bhang (leaves) **Oral**
- Ganja (dried flowering stem of the plant) **Smoked**
- Hashish (extracted from the resin covering the plant) **Smoked**
- Hashish Oil (extracting THC using chemical methods) **Smoked**
- Active ingredient: delta 9-tetrahydrocannabinol (THC)

- Commonly known as
 - Marijuana, Dope, Pot, Grass, Weed, Mary Jane, Doobie, Bud

Cannabis: Effects

- Physiological symptoms – red and watery eyes, racing heart, dry mouth, increased appetite
- A dreamy state with an increased tendency to fantasize
 - State of well being and enjoyment followed by drowsiness.
- Perceptual and sensory distortions.
 - Can prolong reaction time and impair coordination
 - Sounds and colors may become more intense
- “Bad Trip” : restlessness, fear and even panic
- Driven activity
 - Subject knows that one’s activities are meaningless, yet is unable to control them.

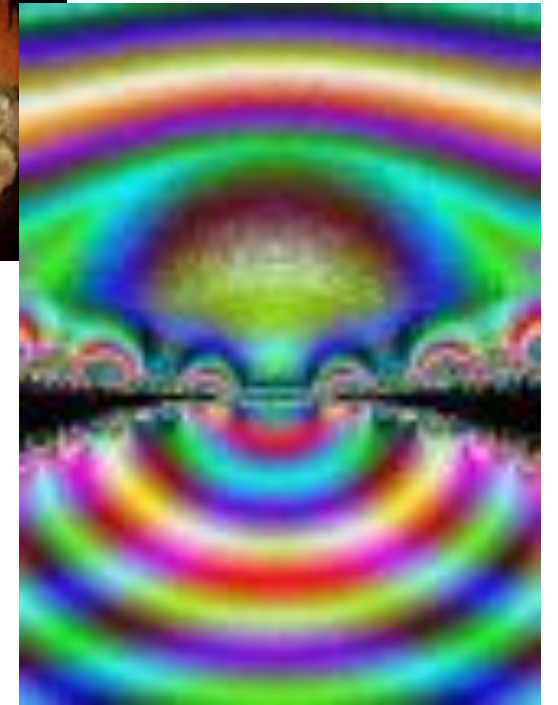
Cannabis: Effects

- “Amotivation Syndrome”
- Associated with poor school performance, drop-out
- Common co-morbid psychiatric conditions - psychosis

Cannabis withdrawal

- Primarily psychological
- General, but intense discomfort
- Intense craving
- Anxiety, restlessness

Stimulants



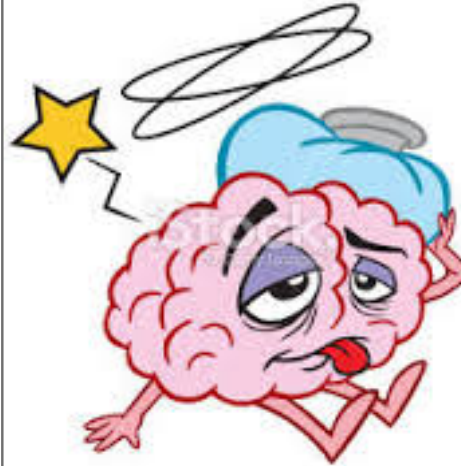
Desoxy (Methamphetamine) Tablets

Anonymous Photographer, © 2002 Erowid.org



Some drugs lower
the brain functioning

**BRAIN
DEPRESSANTS**



Alcohol
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**BRAIN
STIMULANTS**



Amphetamines
Cocaine
Tobacco

Stimulants

- Cocaine
- Amphetamines
- Hallucinogens
- Tobacco
- Inhalants

Cocaine

- Manufactured from coca plant (cocaine hydrochloride extracted)
- Usually snorted or swallowed, but can be smoked or injected
- **Fun fact:** an ingredient in coca-cola till 1903
- Commonly known as:
 - Chitta, Coke, Blow, Big C, Dust, Line, Rail, Snow, Powder, Stash, Pearl, Bump

Amphetamines

- Manufactured drug with active compound -dexamphatamines (ADHD medication)
- Can be swallowed, injected, smoked or inhaled
- Pills can be ingested orally, crushed and snorted, dissolved in water and injected, or smoked (inhalation of the vaporized drug).
- "Glass" and "ice" (pure methamphetamine, which look like clear crystalline rock) is most often smoked (vaporized and inhaled) in a glass pipe
- "Crystal" the powder form of methamphetamines, is consumed orally, injected, or inhaled.

Street Names

- Bennies, black beauties, copilots, eye-openers, lid poppers, pep pills, speed, uppers, wake-ups, and white crosses, Whizz, Ice, Uppers, Crystal, Glass, Goofballs, Streetballs

Hallucinogens

- *Manufactured:*

- LSD (Lysergic acid diethylamide) ... Acid, Blotter, Yellow Sunshine
- Ketamine
- MDMA (3,4-Methylenedioxymethamphetamine).. *Ecstasy*
- PCP (Phencyclidine).. *Angel dust*

- *From Plants:*

- Datura (from plant known as Devil's snarls)
- Magic Mushrooms (contains psilocybin)
- Mescaline (active ingredient of the peyote cactus, *Lophophora williamsii*. Can also be made synthetically)

Stimulants: Effects

- Immediately after smoking or injecting - extremely pleasurable 'rush' or 'flash'.
 - Enhanced mood and body movement, euphoria
 - Increased respiration
 - Increased heart rate, blood pressure
 - Insomnia
 - Reduced appetite
- Hallucinogens
 - Vivid perceptual experiences
 - Hallucinations
 - Delusions

Stimulant/Hallucinogens: Withdrawal

- Lethargy
- Hypersomnia / sleepiness
- Fatigue / sad mood
- Craving
- Anhedonia / lost interest

Tobacco



Tobacco products: Smoked Tobacco



Hookah



Cigar



Cigarette



Pipe



Bidi

Tobacco products: Smokeless Tobacco



Khaini



Chewed tobacco



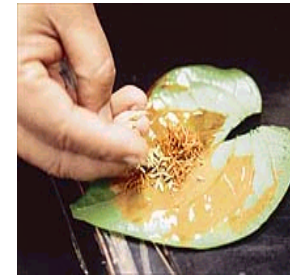
Zarda



Snuff

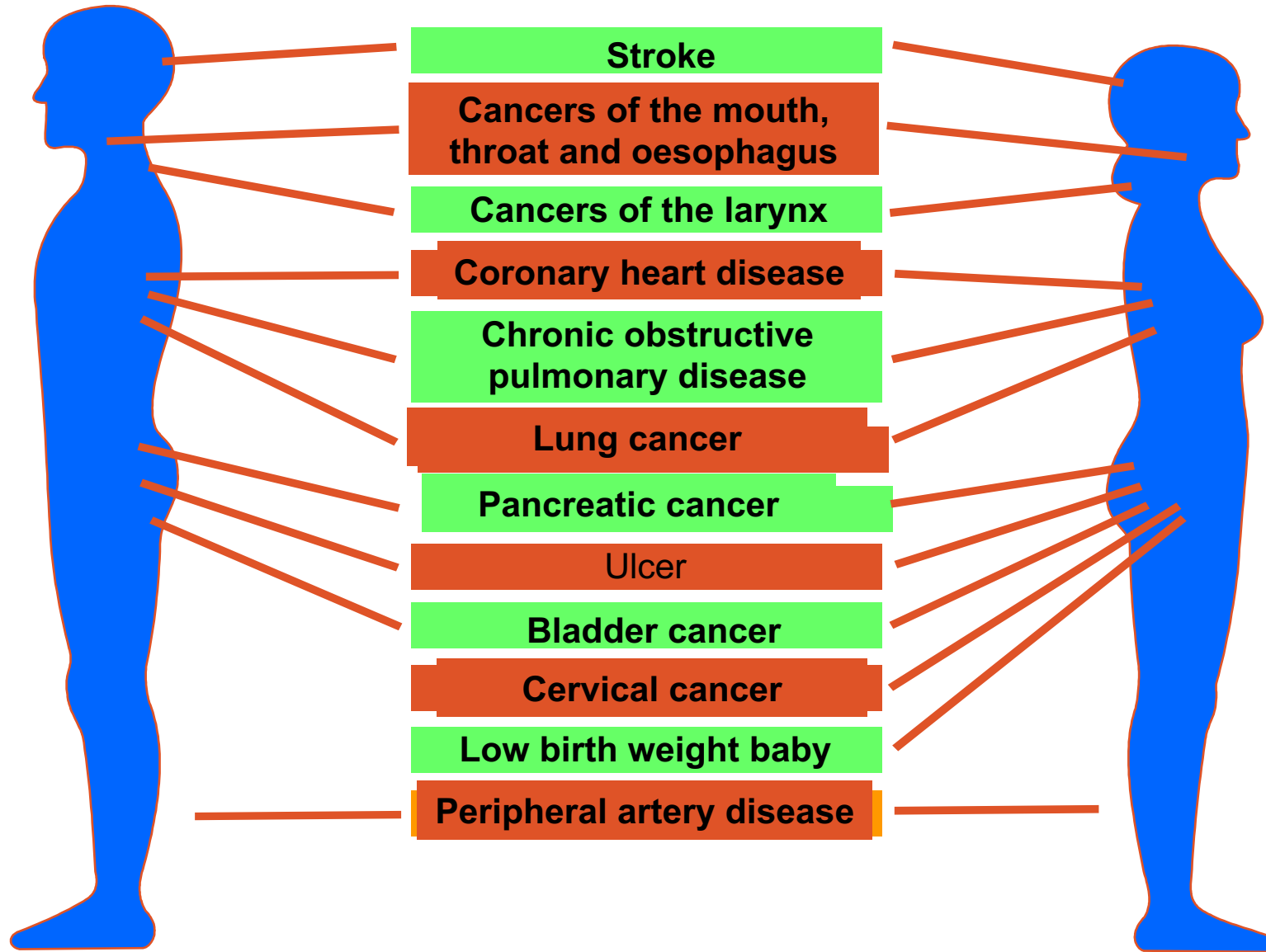


Gutkha



Paan

The health risks of Tobacco



Volatile solvents (Inhalants)



Inhalants

- Industrial products – never made for consumption
- Products: whitener fluid, paint thinners, puncture tubes, spray paints, gasolines, glue
- Can be breathed in through the nose or the mouth
 - “Sniffing” or “snorting” through the nose
 - “Bagging”—sniffing or inhaling fumes from substances sprayed or deposited inside a plastic or paper bag
 - “Huffing” from an inhalant soaked rag stuffed in the mouth
- Commonly poured on a piece of cloth/shirt sleeve/rag/towel and inhaled

Inhalants: Acute Effects

- Stimulation/increased alertness
- Disinhibition
- Euphoric mood
- Altered sensory experiences (in some cases)
- Sensation of warmth and flushing
- **Followed by....**
 - Slurred speech
 - Drowsiness and sleep
 - Disorientation
- Respiratory depression may lead to cardiac arrhythmia → **“Sudden Sniffing Death Syndrome”**

Inhalants: Long Term Effects

- Drastic and irreversible neurological and neuropsychological disturbances
- Shrinking of grey matter
- Motor, cognitive and sensory deficits
- Dysfunction in brainstem
- Cancer
- Impairment of immune system
- “Fetal solvent syndrome”

Consequences of Drug Use

IMMEDIATE / SHORT TERM

FUN

ENJOYMENT

STUDY FOR
LONGER PERIOD

BEHAVING LIKE AN
ADULT

BE PART OF
THE GROUP

IMPROVE
CONCENTRATION

DANCE, SING

TALK TO
OPPOSITE
GENDER

**IMMEDIATE /
SHORT TERM**

**Road traffic
Accidents**

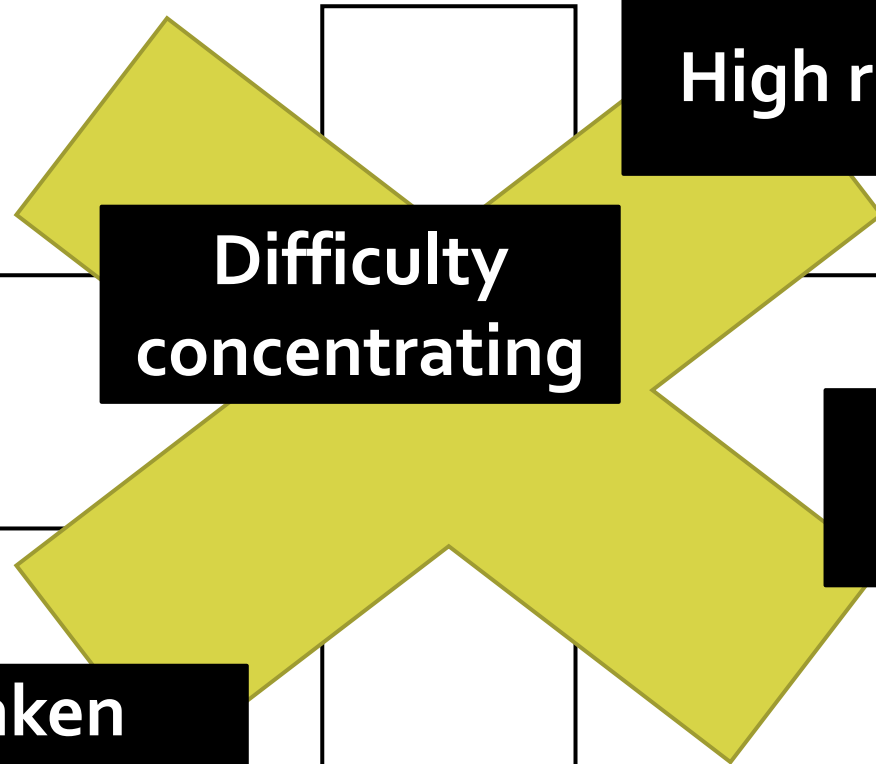
High risk sex

**Difficulty
concentrating**

Falls/Injuries

Vomiting

**Drunken
driving →
Police arrest**



LONG TERM CONSEQUENCES

- Cancers
- Liver disease
- Lung problems

Physical

- Depression
- Anxiety
- psychosis

Mental

- Arrests
- Imprisonment

Legal

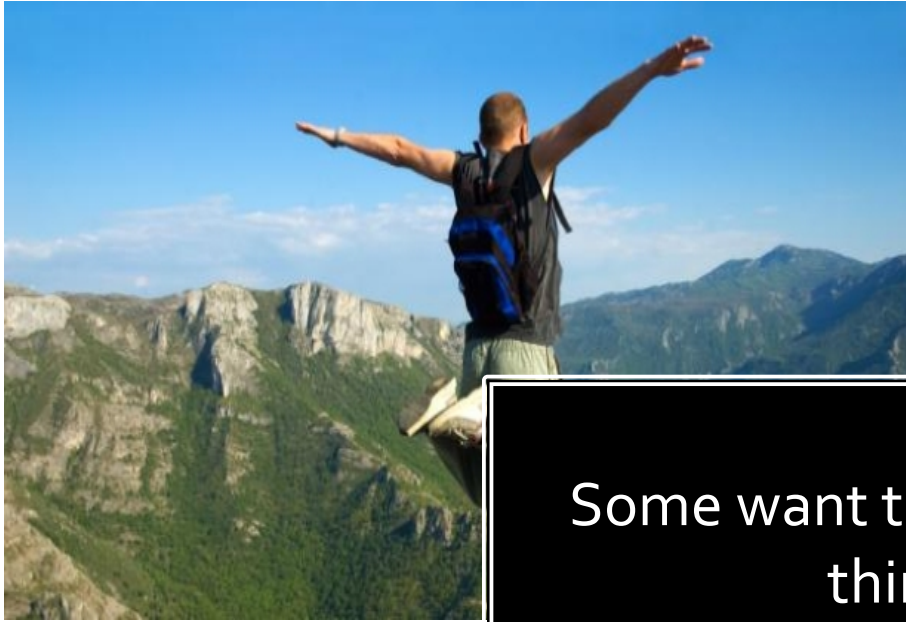
- Outcast by family
- Fights

Social

- Difficulty in working
- Loss of job
- Loss of money

Occupational

Why Do People Take Drugs?



Some want to try out new things
SENSATION SEEKERS
RISK TAKING/CURIOSITY





Some want to be like their friends
PEER INFLUENCE



Some may be suffering from mental illnesses

SELF MEDICATION



Some may feel socially anxious/shy/awkward
LOOSENING THEMSELVES IN PARTIES

**SENSATION SEEKERS
RISK TAKING/CURIOSITY**

PEER INFLUENCE

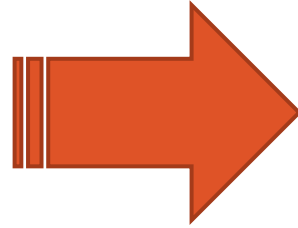
SELF MEDICATION

**LOOSENING
THEMSELVES IN
PARTIES**

EXPERIMENTATION

- Availability
- Socio-cultural factors
- Peer norms

EXPERIMENTATION



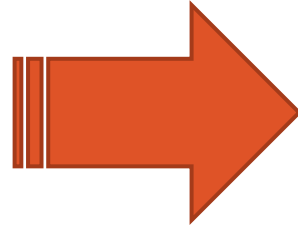
REPEATED USE

Drug Intake



**Repeated
Drug intake**

EXPERIMENTATION



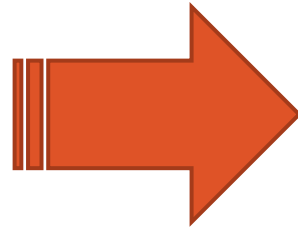
REPEATED USE

Drug Intake

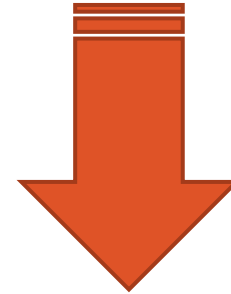


Repeated Drug
intake

REPEATED USE



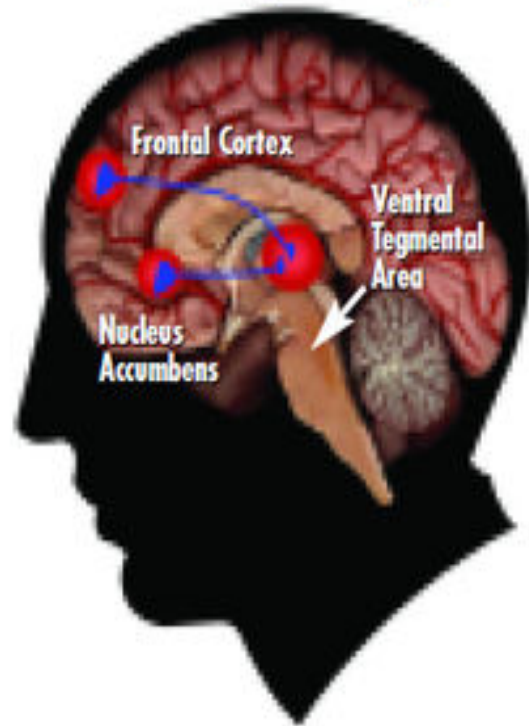
**HARMFUL USE /
ABUSE**



**ADDICTION /
DEPENDENCE**

DRUGS OF ABUSE TARGET THE BRAIN'S PLEASURE CENTER

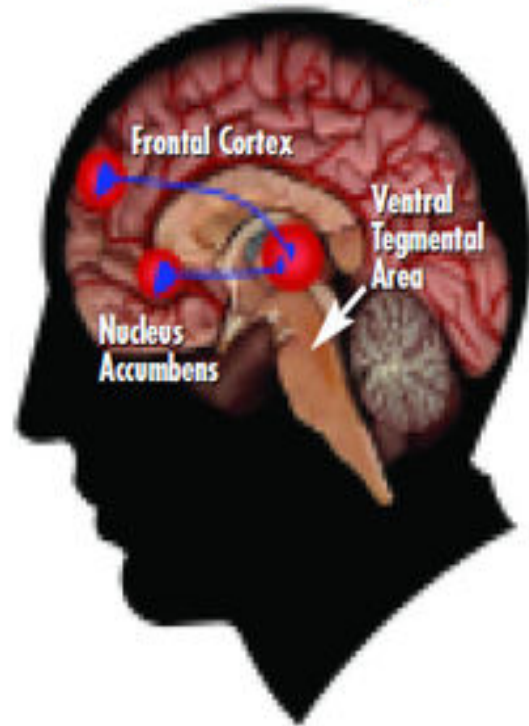
Brain reward (dopamine) pathways



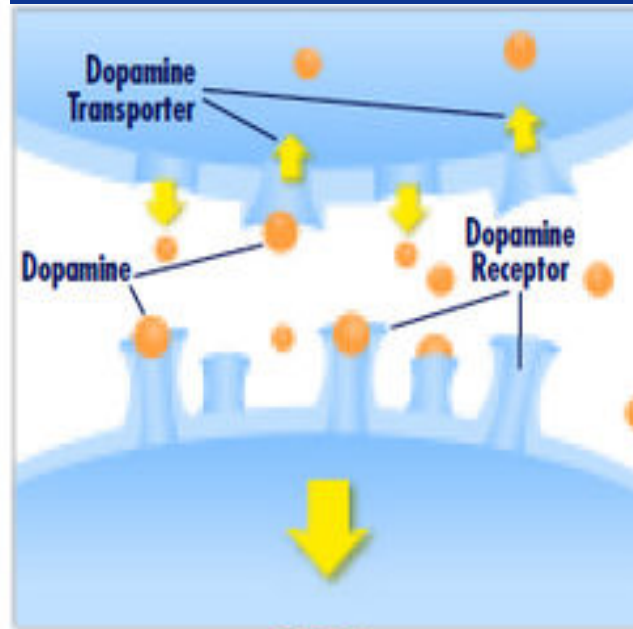
These brain circuits are important for natural rewards such as food, music, and sex.

DRUGS OF ABUSE TARGET THE BRAIN'S PLEASURE CENTER

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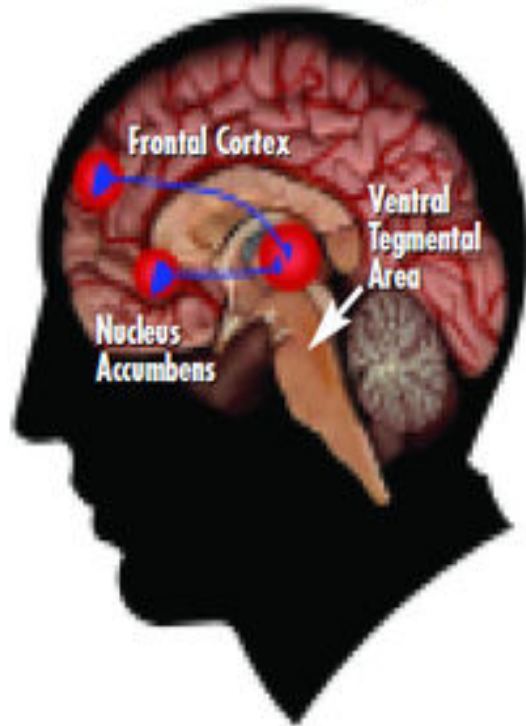


FOOD

Typically, dopamine increases in response to natural rewards such as food.

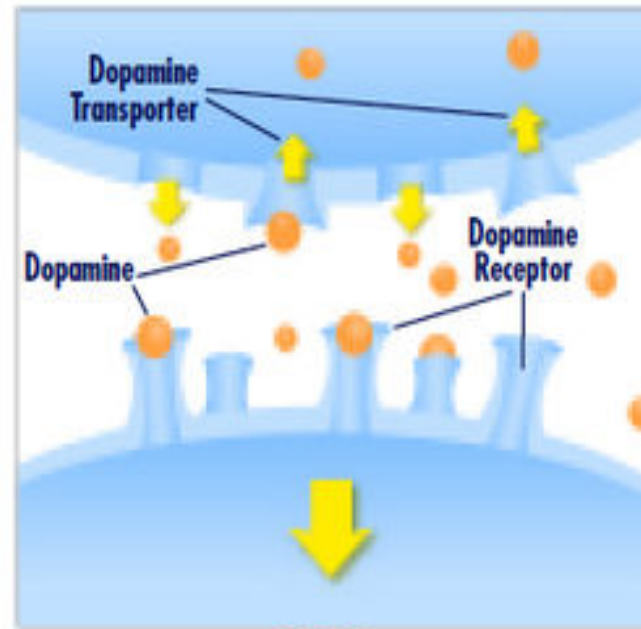
DRUGS OF ABUSE TARGET THE BRAIN'S PLEASURE CENTER

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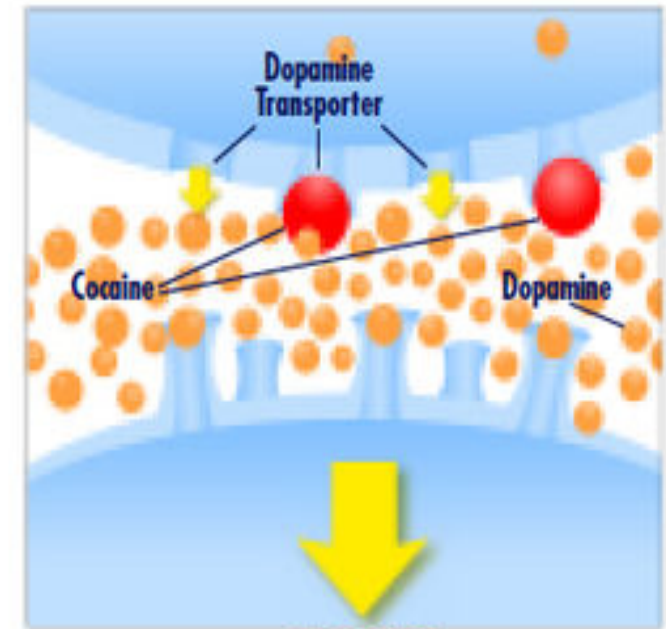


These brain circuits are important for natural rewards such as food, music, and sex.

Drugs of abuse increase dopamine

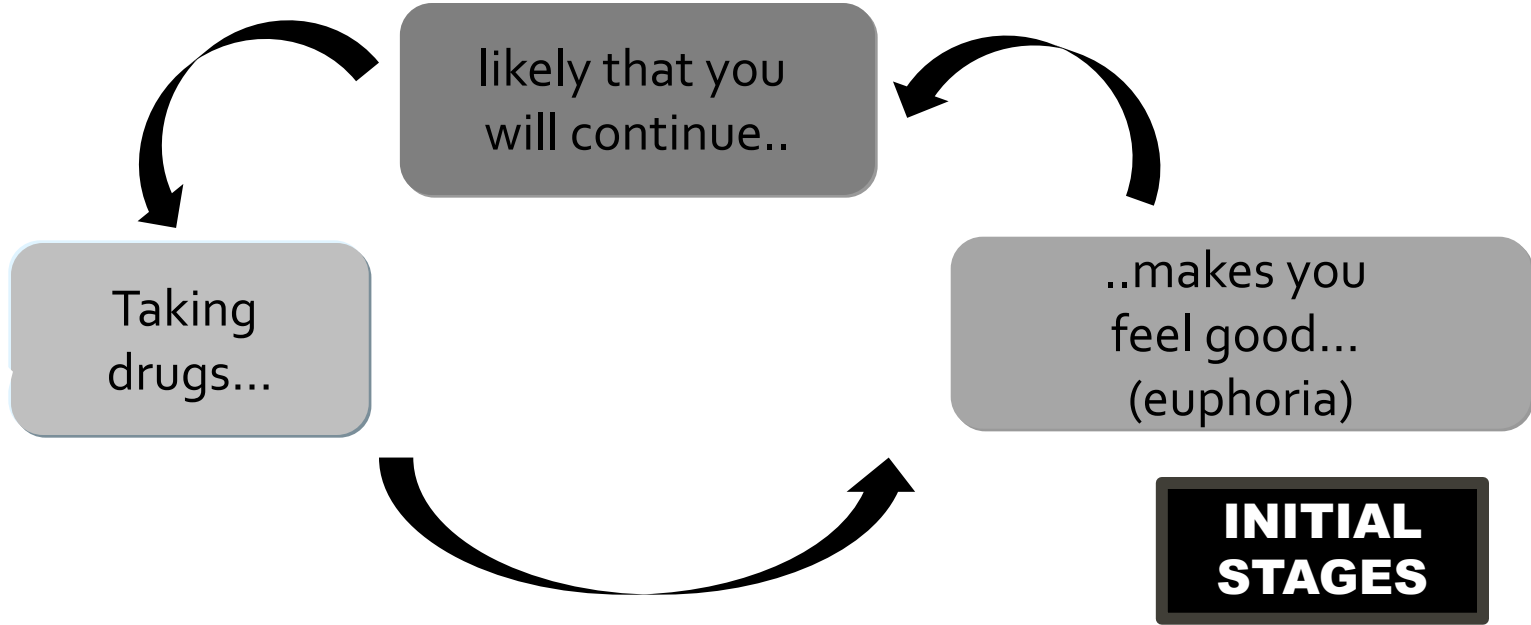


FOOD



DRUGS

Typically, dopamine increases in response to natural rewards such as food. When cocaine is taken, dopamine increases are exaggerated, and communication is altered.



ADDICTION / DEPENDENCE

**NEED
TO USE
DAILY**

CRAVING

WITHDRAWALS

**INCREASE TIME
ON DRUGS**

**NEGLECT OF
OTHER
PLEASURES**



**Who is vulnerable to
developing addiction??**

Vulnerability to Addictive disorders

Which youngsters are at greater risk?

FAMILY HISTORY

AVAILABILITY

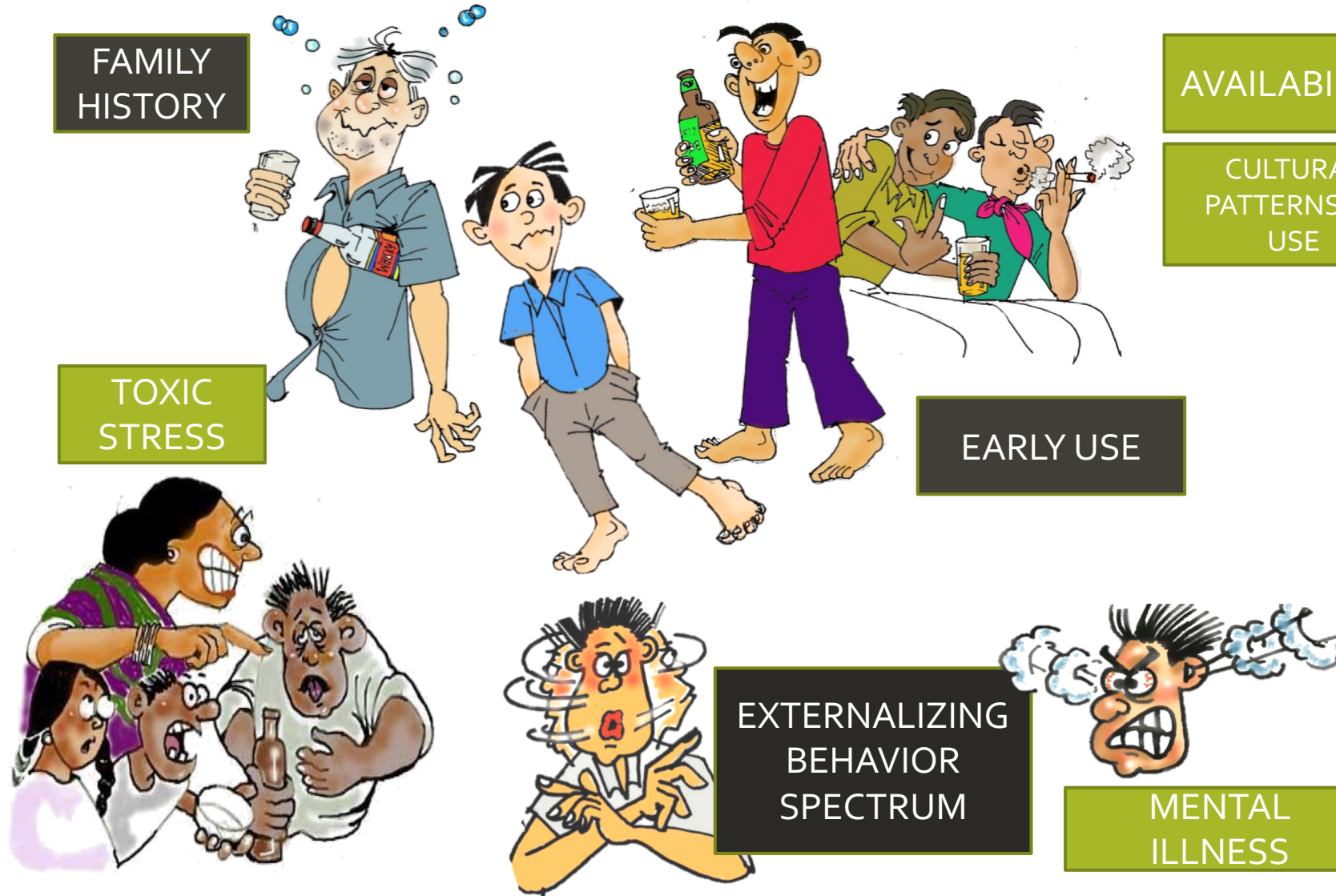
CULTURAL PATTERNS OF USE

TOXIC STRESS

EARLY USE

EXTERNALIZING BEHAVIOR SPECTRUM

MENTAL ILLNESS



How to Identify When Someone is Using?

Direct Signs

- Signs of intoxication/withdrawal
- Attempts to seek money for buying drugs
 - Repeatedly asking for money
 - Stealing from parents, friends
 - Selling personal/family items in exchange for money
- Significant amount of time 'unaccounted'
 - Absenteeism from school, tuition,
 - Lying about one's whereabouts

Indirect signs...

- Smell of alcohol, smoking, inhalants
 - On clothes, vehicle, bag,
 - Use of mouth-fresheners/mints/gums to cover-up smell

- Stains
 - Nicotine stain on clothes; small burn holes on clothes
 - Stain of inhalants on sleeve, tie, collar, kerchief,

- Possession of
 - Matchbox/lighter, empty tubes/bottles of inhalant fluids, alcohol caps, etc.

Indirect signs...

- Redness of eyes
- Burn marks on fingers, hands
- Rapid change
 - mood, energy, speech
- Appearing excessively sleepy on many occasions
- Decline in personal hygiene
- Change in appetite

Indirect signs...

- Change in friends circle
 - Seeking other drug-using children
 - Break-up with old, non-drug using children
- Loss of interest in activities that were earlier pleasurable
- Falling grades

Myths and Facts

Myths and Facts

- Myth: Teenagers are too young to get addicted.
- Fact: Addiction can happen at any age. Even unborn children can get addicted because of their mother's substance use.

Myths and Facts

- Myth: Alcohol / drugs relieves stress. It helps deal with problems.
- Fact: Alcohol / drugs only make people forget and not care about their troubles. When the effect wears off, the problem is still there.

Myths and Facts

- Myth: Drug addicts are people with bad character.
- Fact: Drug Addiction is an illness which can affect anyone. There are multiple factors responsible and individuals' personality is just one of them.

Myths and Facts

- Myth: *All of the other kids do drugs. I need to fit in.*
- Fact: If you really want to fit in, stay sober. Most young people don't take drugs.

Myths and Facts

- Myth: *Taking drugs is a good way to loosen up at parties*
- Fact: It is a dumb way to loosen up. Makes you act silly, say things you shouldn't say, and do things you wouldn't normally do.

Myths and Facts

- Myth: *Using drugs now and then doesn't affect my thinking or my grades.*
- Fact: Use of these drugs leads to poor concentration and memory problems which can become permanent.

Myths and Facts

- Myth: Breezers, *Beer and Wine are safe forms of alcohol*
- Fact: Alcohol is alcohol ... it can cause you problems no matter how you consume it

Myths and Facts

- Myth: Once an addict, always an addict.
- Fact: Many people can recover from dependence, while others find it difficult. Recovery is a lifelong process that may require multiple treatment efforts.

Myths and Facts

- Myth: One can stop using drugs anytime.
- Fact: In case of people who are dependent, Withdrawal symptoms, and other social factors can make stopping difficult. But there are people and programs that can help.

Myths and Facts

- **Myth:** This presentation is over.
- **Fact:** There is one more slide...

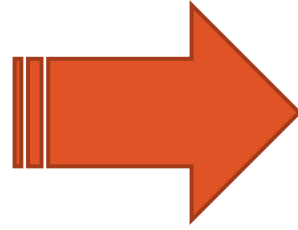
Myths and Facts

- **Myth:** Small amount of alcohol daily is good for health.
- **Fact:** Though in some European studies small amount of **wine** consumption has been found to reduce risk of **heart** diseases, there is **not enough evidence** to recommend regular alcohol use.

Thank You for your patience

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EXPERIMENTATION



ADDICTION?

- **Biological**
- **Genetic**
- **Mental Illnesses**
- **Personality - poor coping skills, sensation/novelty seeking**
- **Family problems – broken family**