

Smoking interventions In the clinic

Melissa Romeo

Tobacco Treatment Specialist AASCP
D&A Clinical Nurse Consultant

Raising the topic can be uncomfortable

People often don't want to talk about smoking

- Its my last vice
- I don't need any more stress
- I've tried before
- I cant use those patches... I am allergic to them
- I have cut down

A starting point

- Why is the patient/client here?



We need some good news!

- What are the benefits?
- Current health improvements
- Savings
- Mental Health e.g. reduced anxiety



An easy conversation



Acknowledgment

**SOMETIMES
YOU WIN,
SOMETIMES
YOU learn.
NOT LOSE!**

Discrepancy



I've heard all this before

- Capture their interest
- Its good to know when you are good to go

It makes you think!

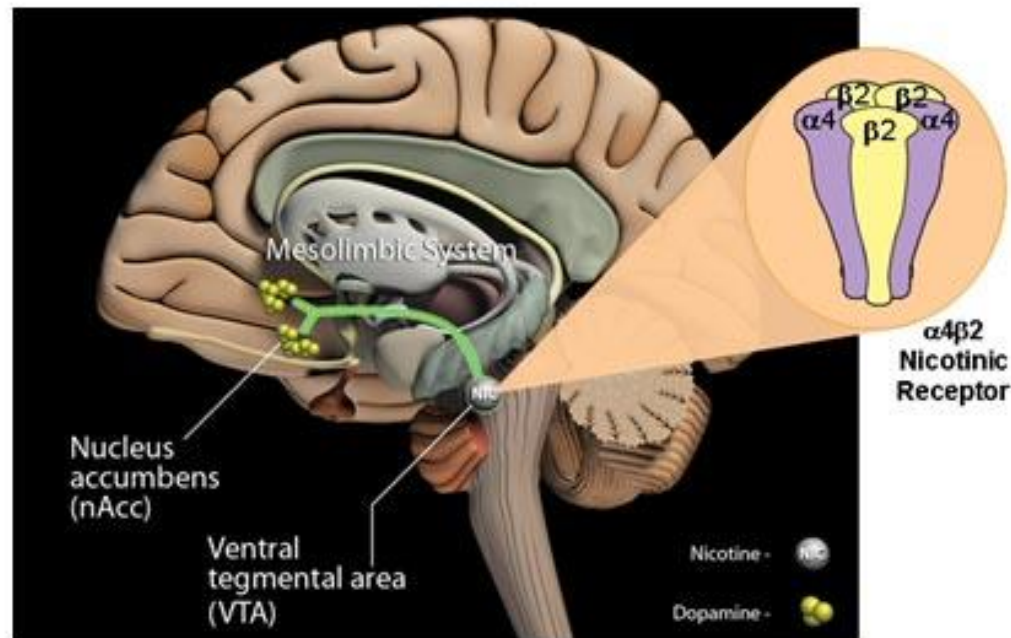


Addiction

- Physical
- Psychological

Physical Addiction

Nicotine in the Brain

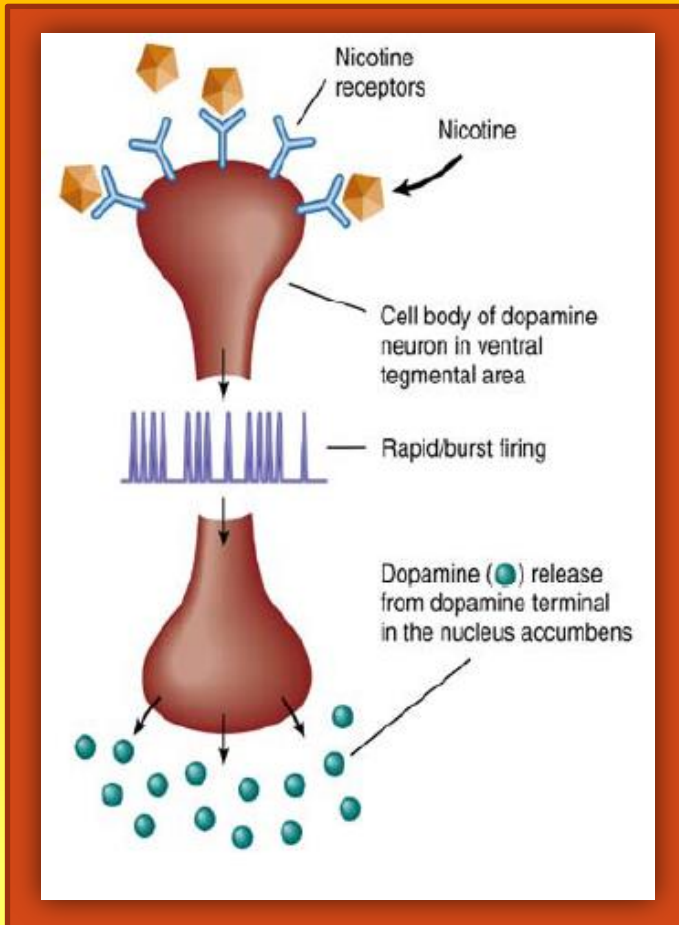


■ Nicotine binds predominantly to nicotinic acetylcholine (nACh) receptors in the CNS; the primary is the $\alpha 4 \beta 2$ nicotinic receptor in the Ventral Tegmental Area (VTA)

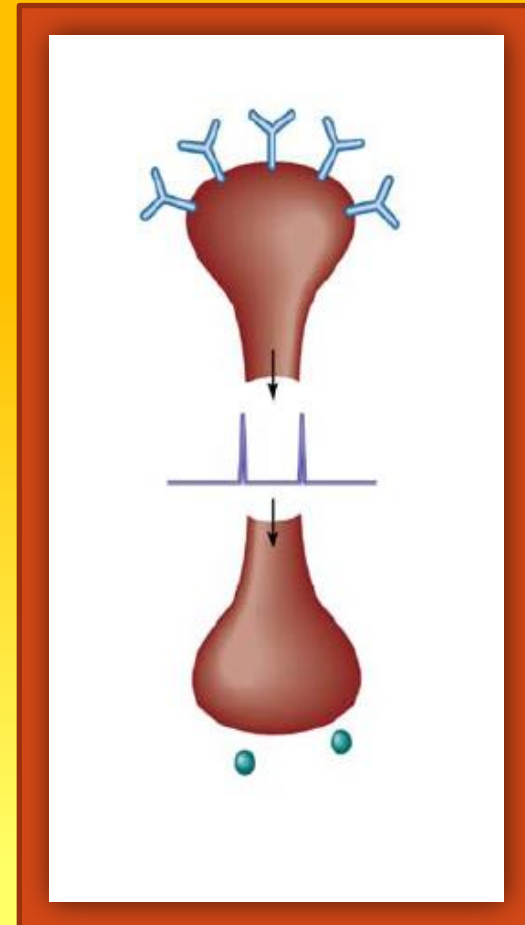
■ After nicotine binds to the $\alpha 4 \beta 2$ nicotinic receptor in the VTA, it results in a release of dopamine in the Nucleus Accumbens (nAcc) which is linked to reward

Physical Addiction

How nicotine works



Going cold turkey



Source

Foulds J. The neurobiological basis for partial agonist treatment of nicotine dependence: varenicline. International Journal of Clinical Practice 2006;60:571-576

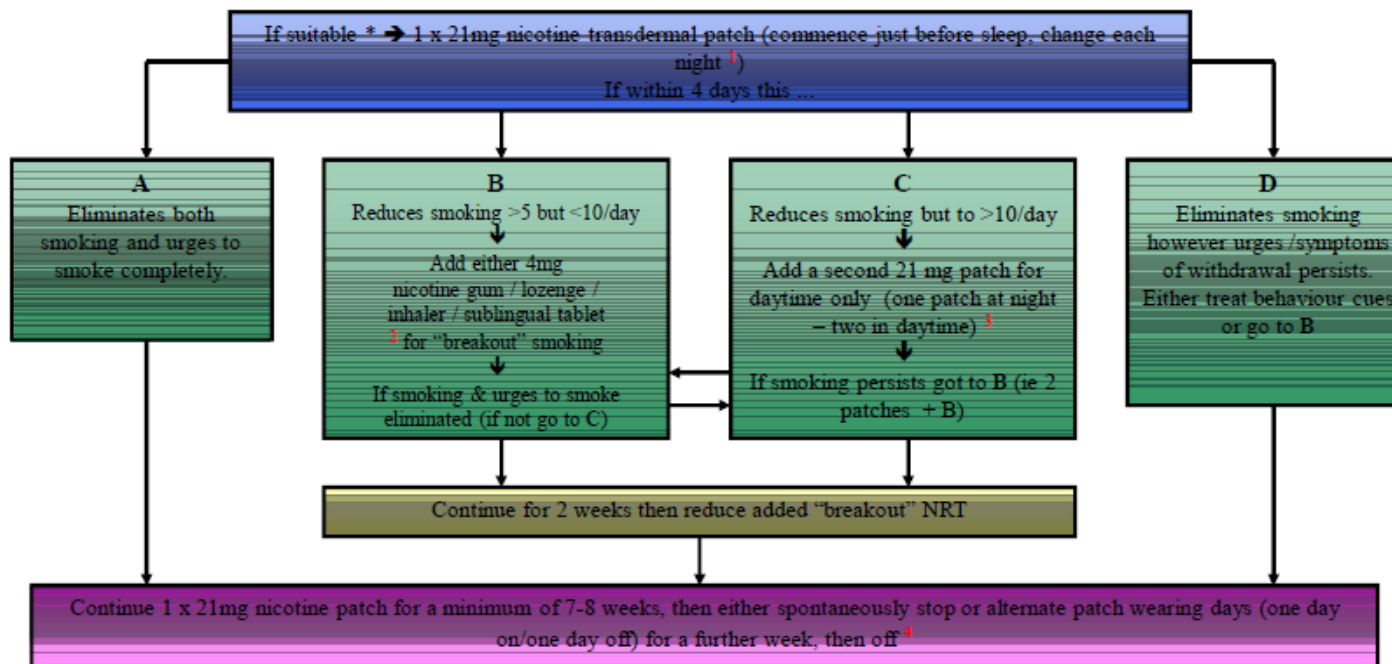
Using Nicotine Replacement Therapy

Bombarding and down-regulating
nicotine receptors



Nicotine Replacement Requirements

Bittoun Combination Nicotine Replacement Therapy Algorithm[#]



* **KEEP IN MIND CONTRAINDICATIONS:** 1) **PREGNANCY OR LIKELIHOOD** (all NRT OK but not Patch)
2) **RECENT CARDIOVASCULAR EVENT** (48hrs)

¹ Applying patch last thing before sleep allows the slow rise of nicotine overnight - the likelihood of 1st cigarette of the day "urge" is strongly diminished.

² Either 4mg nicotine gum or lozenge depending on patient choice. Inhaler or sublingual tablet recommended over the others if patient needs faster reinforcement.

³ No evidence in our experience of toxicity. Consider reducing concentrations if nausea occurs.

⁴ There is no evidence for weaning (or reduction) of patch strengths

Nicotine Replacement Requirements

Determining nicotine replacement requirements

- 35 ng/ml (Example of a preset requirement for a 25 a day smoker , CO is 24)

Dosing of NRT

- Smokers have a preset requirement for nicotine
- This is why cutting down doesn't work

Nicotine Replacement Requirements

— 30 ng/ml (Example of a preset requirement)



If the patient doesn't
smoke, we will
precipitate withdrawal



— 7 ng/ml (16 hour patch)

Nicotine Replacement Requirements

- Many people have been underdosed on NRT
- This often explains their bad experience and reluctance to use this form of treatment

Nicotine Replacement Requirements

— 30 ng/ml (Example of a preset requirement)



— 7 ng/ml (16 hour patch)

Nicotine Replacement Requirements

— 30 ng/ml (Example of a preset requirement)



— 10 ng/ml (24hour patch)



— 7 ng/ml (16 hour patch)

The Rapid Nicotine Metaboliser

— 50 ng/ml (Example of a preset requirement)



— 20 ng/ml (16 hour patch)

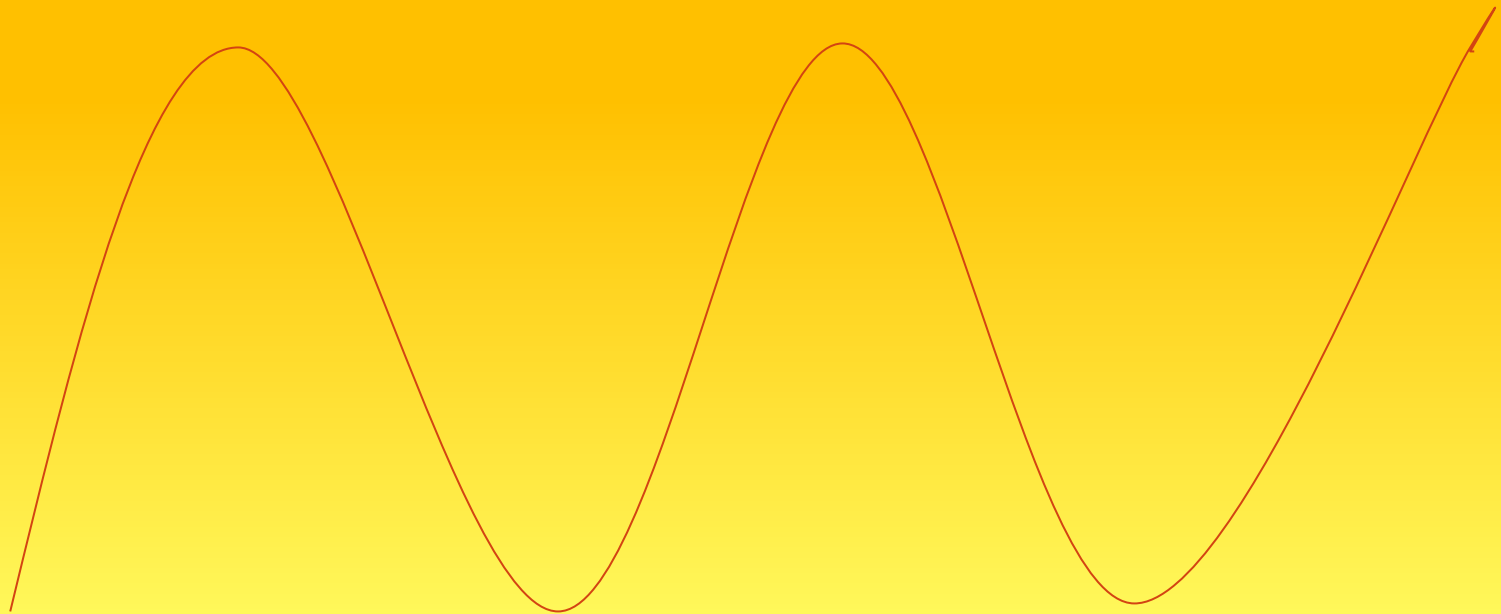
— 10 ng/ml (24 hour patch)



— 7 ng/ml (16 hour patch)

Nicotine Delivery When Smoking

Smoking is pulsatile delivery



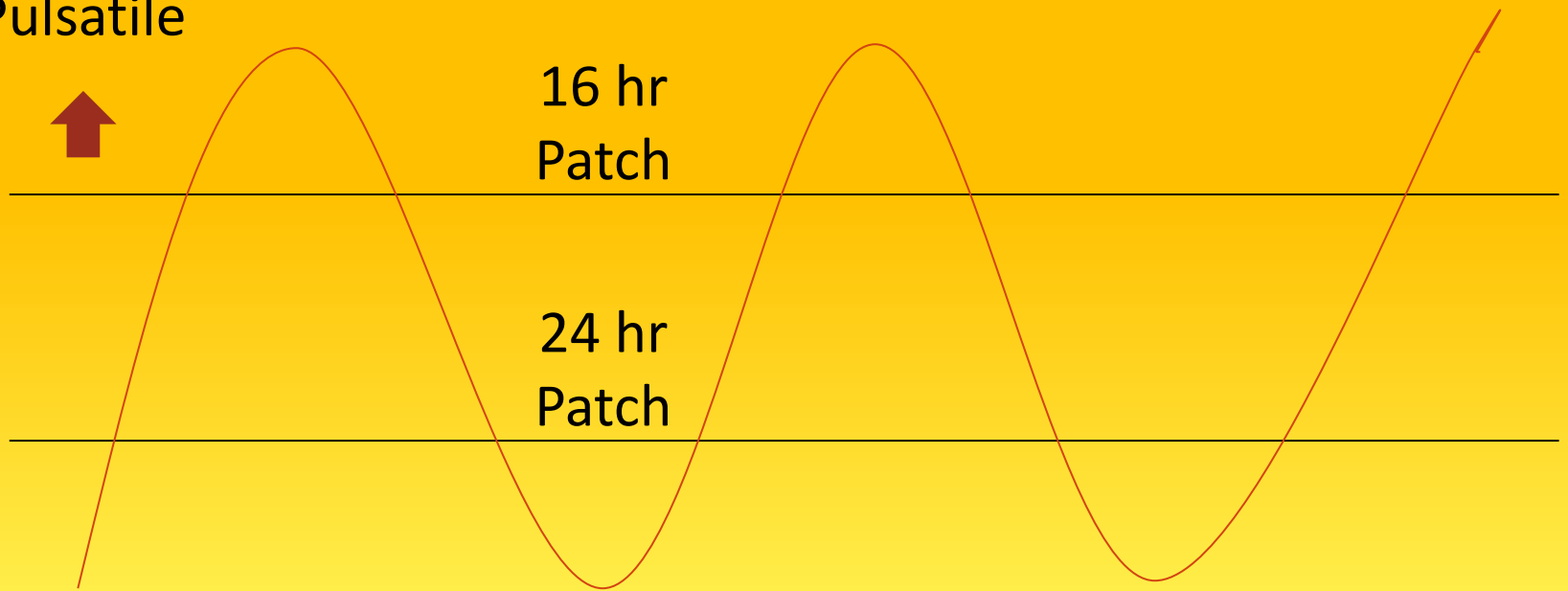
Smoking vs NRT

Pulsatile



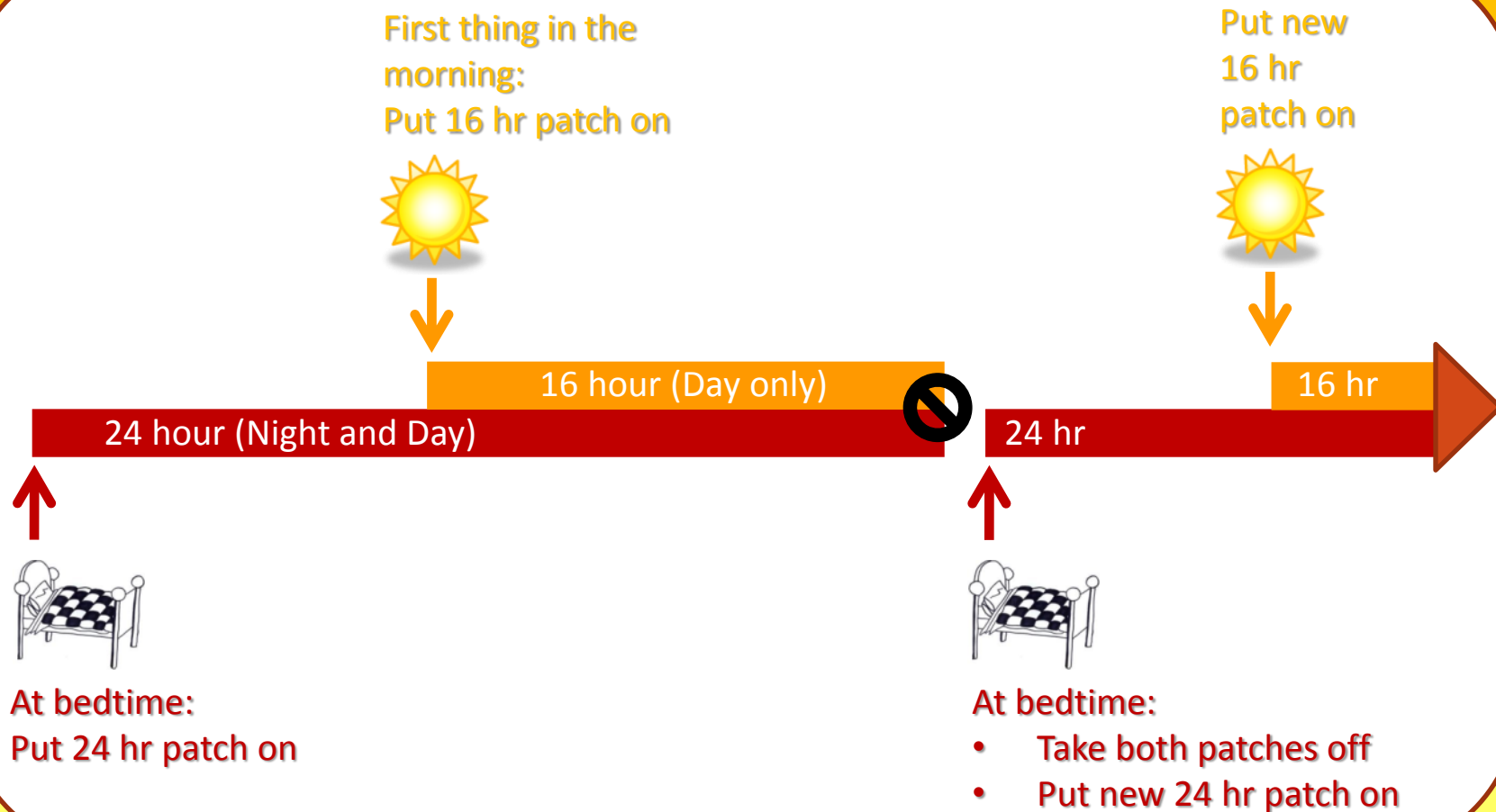
16 hr
Patch

24 hr
Patch



Nicotine Replacement Therapy

Night and Day



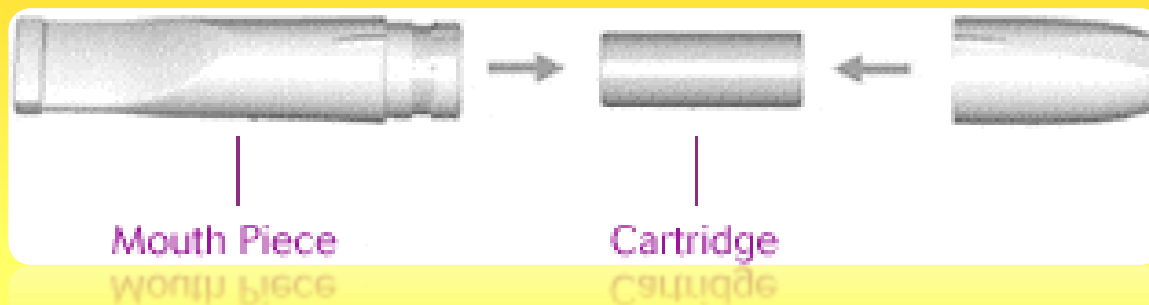
Types of Nicotine Replacement Therapy (NRT)

- **Continual**
 - Patches
- **Pulsatile**
 - Inhalers
 - Gum
 - Lozenges
 - Strips
 - Micromist

Patches



Inhalers



Gum



Quickmist



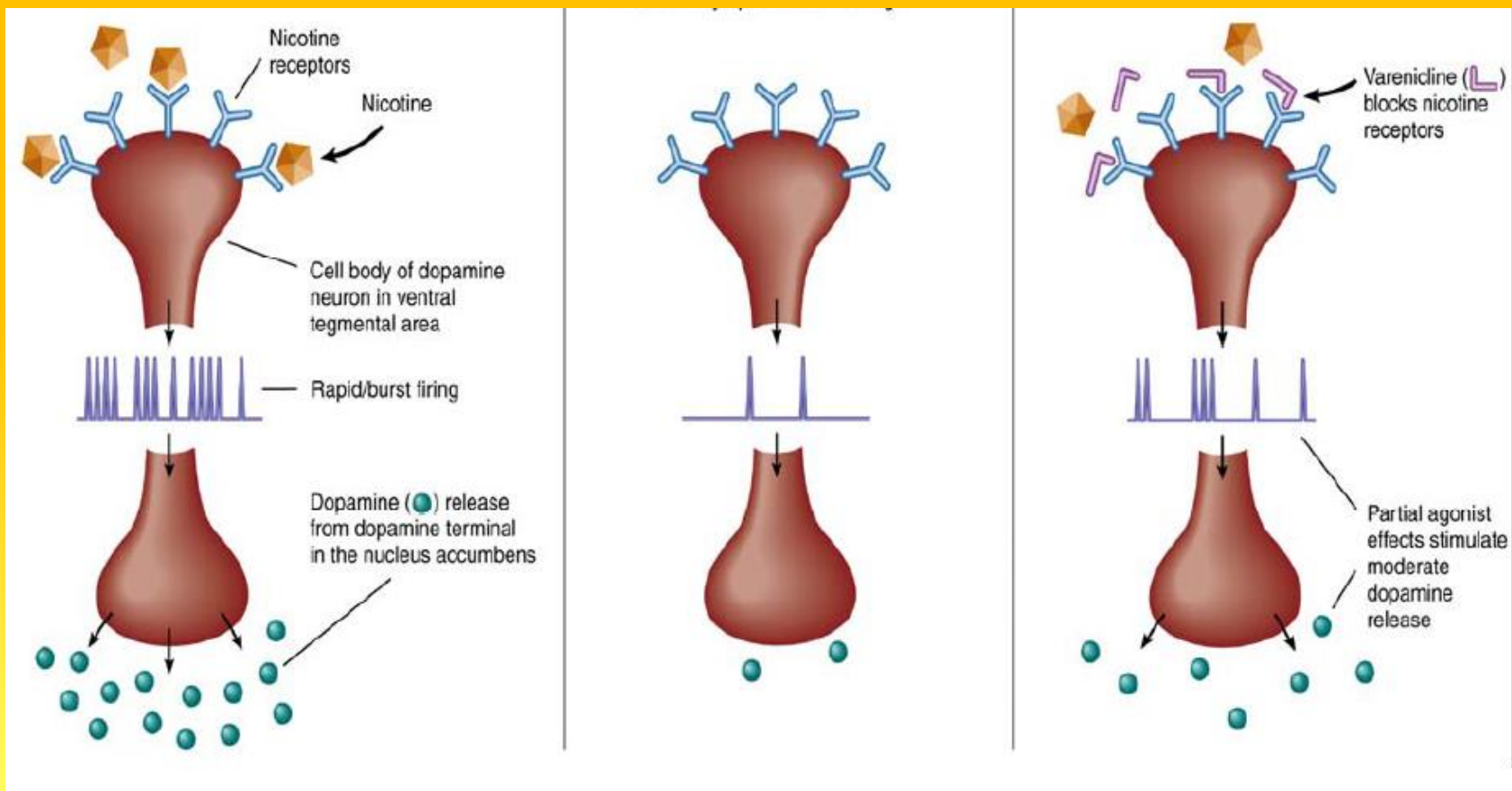
Strips



Lozenges



How Champix works



Source

- Foulds J. The neurobiological basis for partial agonist treatment of nicotine dependence: varenicline. International Journal of Clinical Practice 2006;60:571-576

Supporting someone on Champix

- Explain what to expect
- Explain how we know its working
- Encourage clients to eat breakfast and regular low GI meals
- It is important to stop smoking when you no longer enjoy it
- Take the whole Champix course

Pharmacological Interactions and Considerations

Cigarette smoking normally accelerates the metabolism of some Pain killers, sleeping tablets and antipsychotic medications

Implications: When patients quit smoking they have higher serum blood levels of these drugs due their slower metabolism, which leads to increased effect, despite no change in dose.

Interactions with Caffeine and Alcohol

- When people smoke it speeds up the way your body processes caffeine and alcohol

Implications: when you stop smoking

- You become a cheap drunk
- if you drink your normal amount of caffeine you will have the effect of twice as much caffeine.

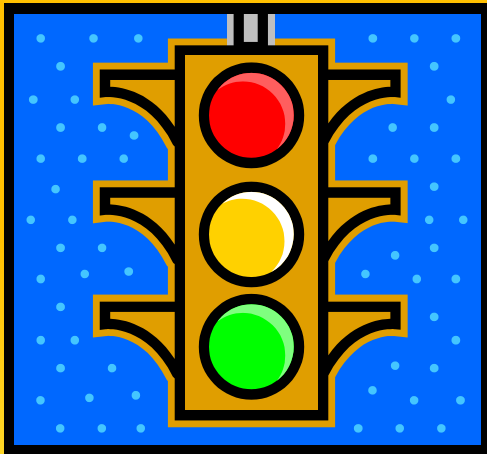
Other Chemical Interactions



Alcohol, Glucose and Caffeine

Psychological Addiction

Psychological Addiction

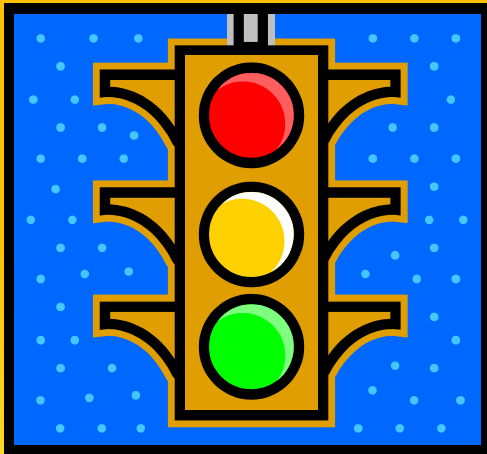


Red Light zone

“I don’t smoke in this situation.”

Example: In the car

Psychological Addiction

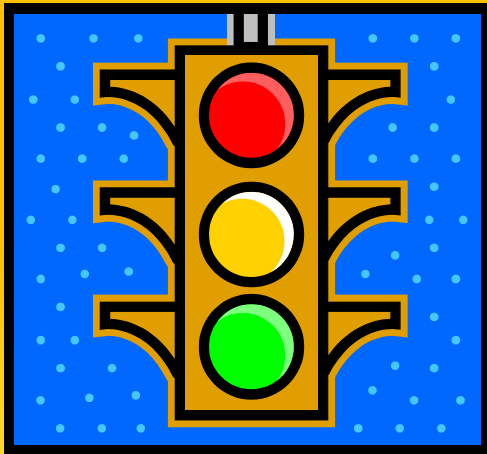


Green Light zone

“I usually allow myself to smoke in this situation.”

Example: On my verandah

Psychological Addiction



Yellow Light zone

“I’m subconsciously contemplating a smoke
in this situation.”

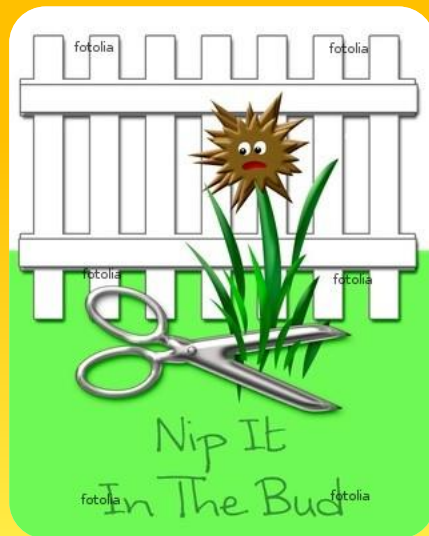
Example: Parking the car

Change Your Personal Rules

**You have to plan how you are going
to stop each smoke**

You cant just hope you will stop

Nip it in the bud



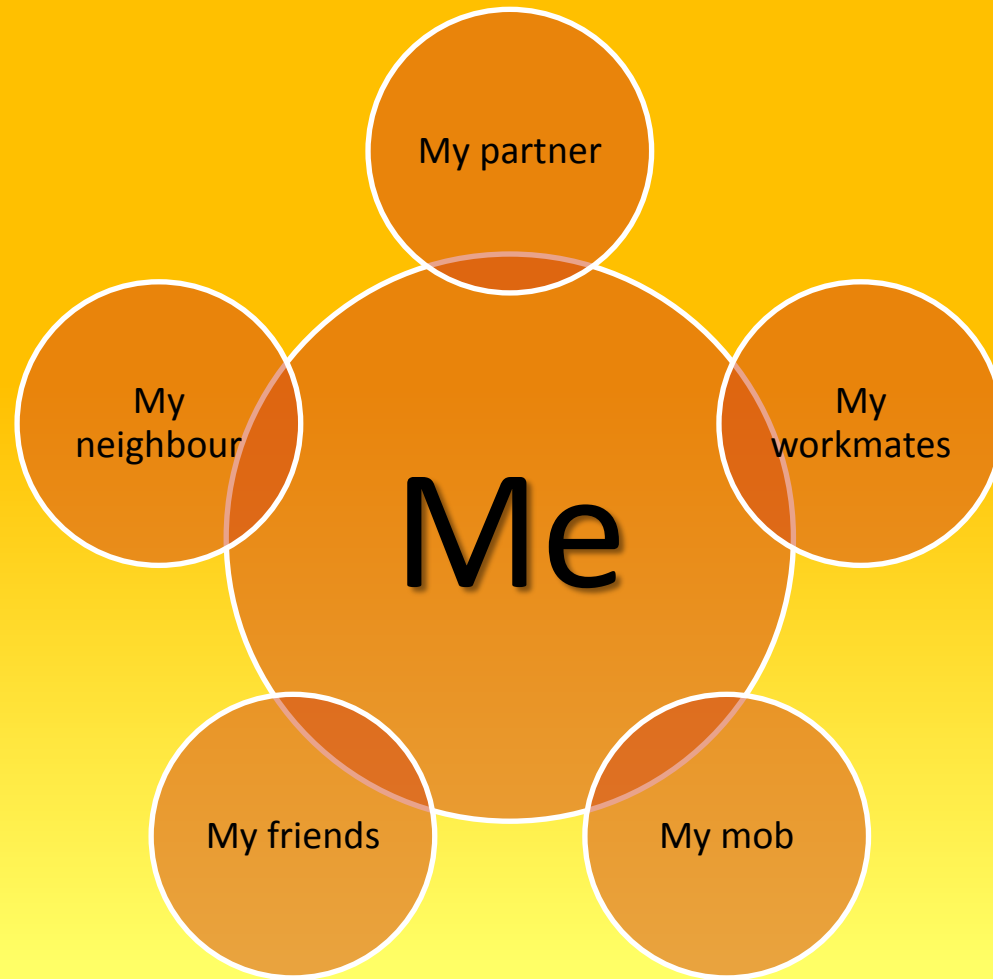
Your thoughts affect your feelings.

Feelings move to craving

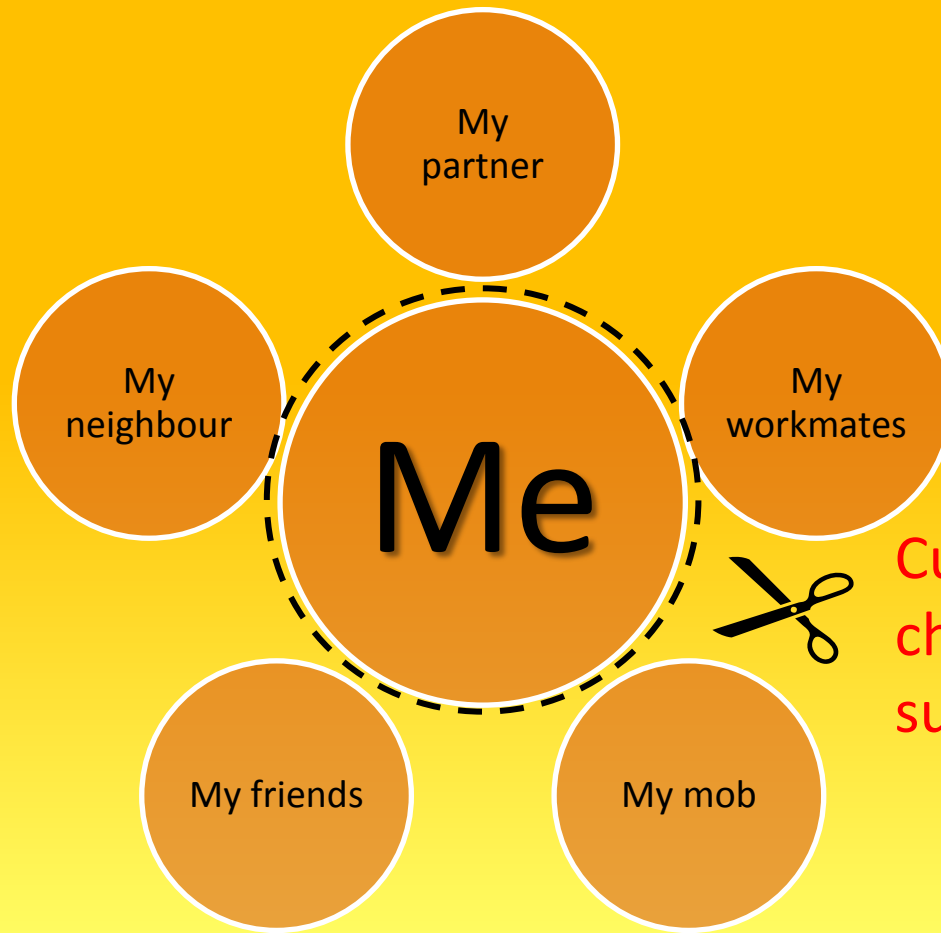
Cigarette Currency

- In Aboriginal communities cigarettes are often used as currency or a payment
- Sense of entitlement
- Subconscious justification

Chain of Supply



Chain of Supply



Cut off your
chain of
supply

Chain of Supply

Cutting off your chain of supply,
doesn't mean cutting off the person . . .

It means cutting off your entitlement
to their smokes.

Chemical Cues



Chemical Cues

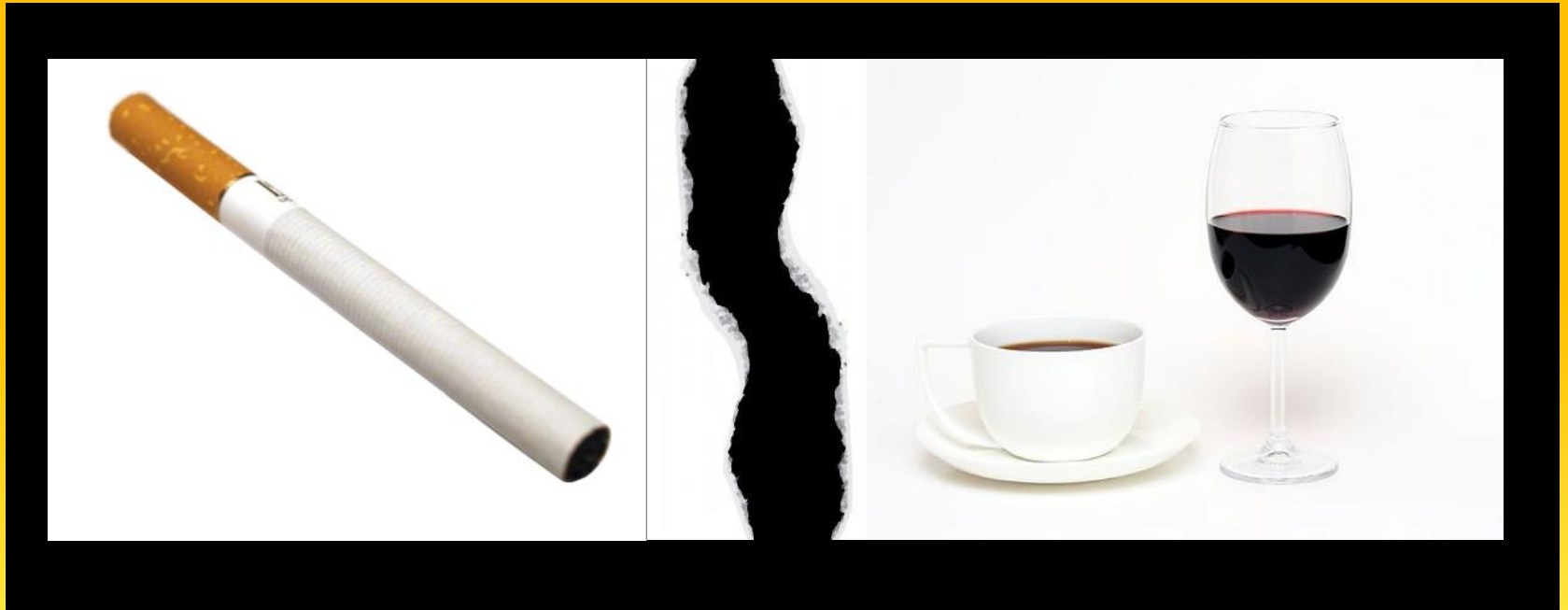


=



Nicotine raises blood glucose levels.
If you don't smoke you look for something
sweet to replace it

Situational Cues



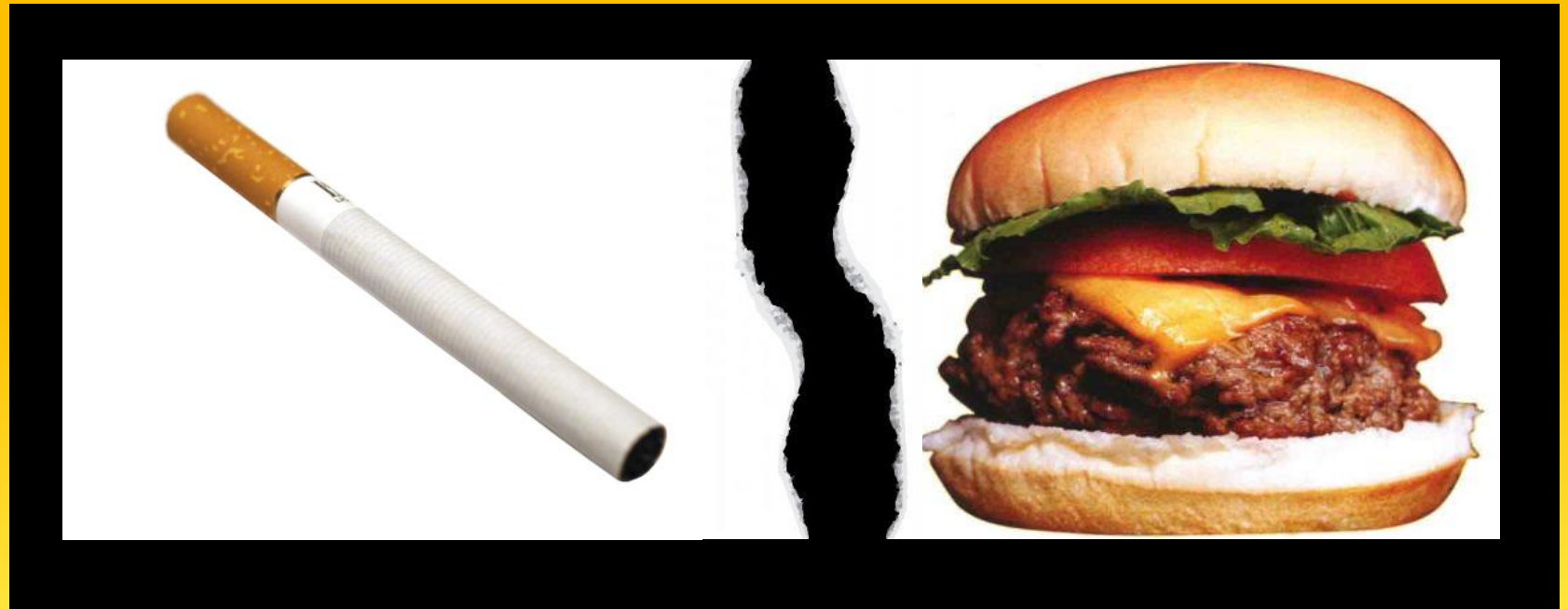
We need to “divorce” these things.

Situational Cues



Smoking when talking on the phone
We need to “divorce” these things.

Situational Cues



Smoking after a meal
We need to “divorce” these things.

What role do smokes have in my life?

Some examples may be:

- Sugar lift
- Stress reliever
- Little ritual
- Time out
- Reward
- Something to do with my hands

How can I replace these things?

Pull a weed . . . Plant a flower



Why is it so hard?

The love/hate relationship



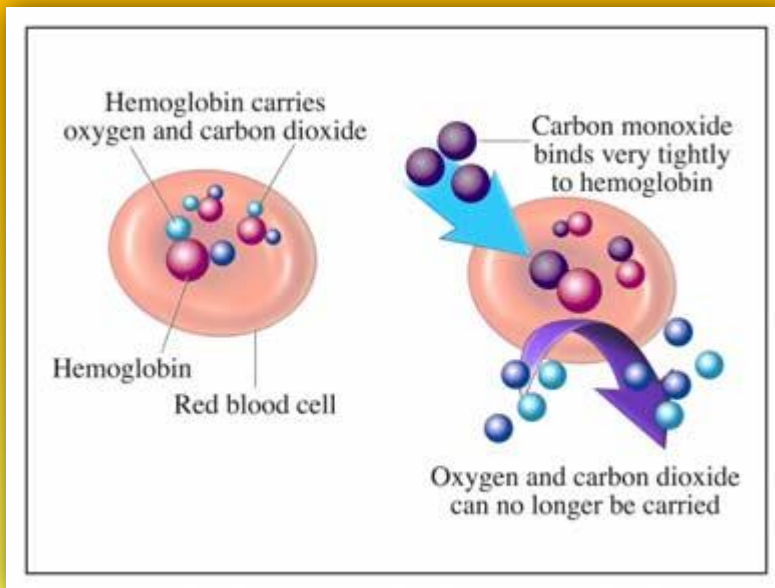
Carbon Monoxide

- Physiological Effects
- Monitoring / Measuring

Carbon Monoxide

- Physiological Effects

CO Affinity



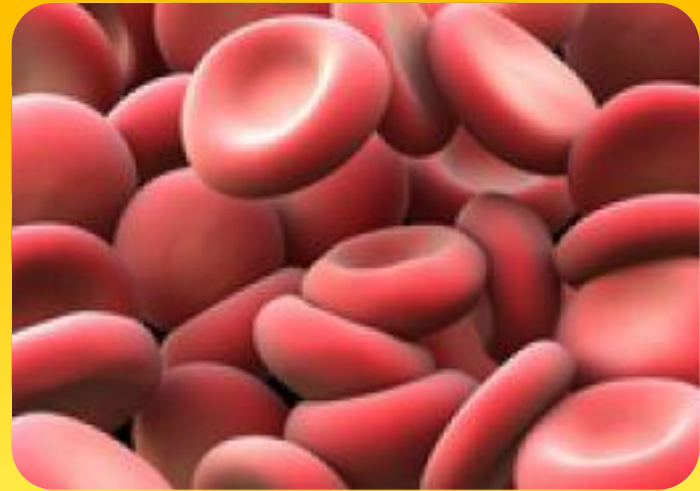
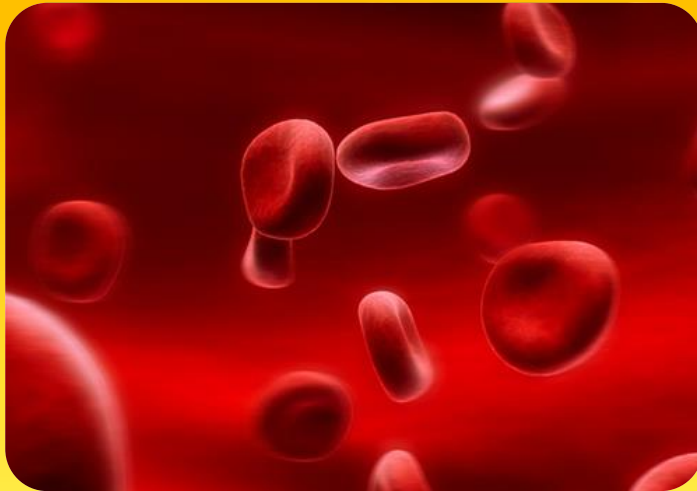
A simple description



Carbon Monoxide

- Physiological Effects

Impact of high levels of carbon monoxide



Leads to smoker's Polycythemia

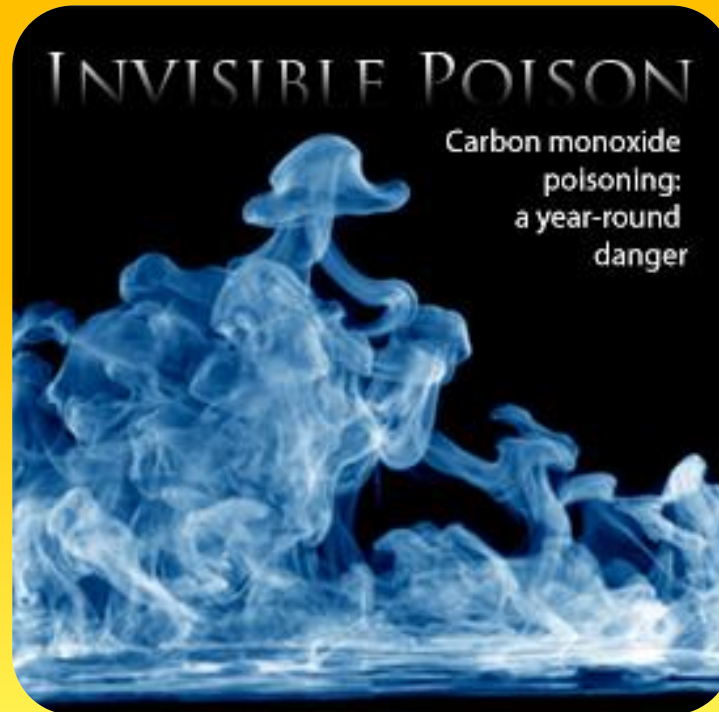
Carbon Monoxide



- What are we looking for?
- What do we need to know?

Carbon Monoxide

What makes it higher?



Where there's smoke there's . . . carbon monoxide

Carbon Monoxide - Cannabis



Carbon Monoxide

- Measuring



Q&A with Melissa and Danielle