

The image shows the cover of a spiral-bound notebook. The cover is a light beige or cream color with a fine, woven texture. A silver metal spiral binding is visible along the left edge. The text is centered on the cover.

The Dangers Of METHAMPHETAMINES

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METHAMPHETAMINES

- METH: WHAT IT IS
- HOW METH WORKS
- SIGNS AND SYMPTOMS OF USE
- SHORT AND LONG TERM EFFECTS
- THE “TWEAKED” VIDEO

WHAT IS METH?

- METHAMPHETAMINE IS THE MOST POWERFUL FORM OF AMPHETAMINE
- IS A STIMULANT
- MAN MADE FROM HIGHLY TOXIC INGREDIENTS
- IS HIGHLY ADDICTIVE
- CHEAP AND EASY TO OBTAIN

WHAT IS METH?

- **METH IS ONE OF THE MOST DANGEROUS DRUGS OUT THERE**
- **THERE IS NO SUCH THING AS 'EXPERIMENTATION' WITH THIS DRUG**

METH

- **1ST USE: PSYCHOLOGICALLY ADDICTIVE**
- **3RD USE: PERMANENT BRAIN DAMAGE**
- **6TH USE: PHYSICAL ADDICTION**

METH

- AFTER 3 WEEKS OF USE:
**THE BODY STOPS MAKING
DOPAMINE**
- AFTER ONE MONTH OF SMOKING
METH: PIECES OF A PERSON'S LUNG
CAN COME UP WITH COUGHING

WHAT IS METH?

- THE BASIC INGREDIENT IS PSEUDOEPHED; DECONGESTANT IN COLD MEDICINE
- “COOKS” GRIND THE PILLS UP, ADD OTHER CHEMICALS LIKE LYE, SULFURIC ACID, LANTERN FUEL, ETC. TO MAKE METH

HOW IS METH USED?

- SMOKED
- SNORTED
- INJECTED
- EATEN

EFFECTS OF METH

- **INTENSE RUSH**
- **INTENSE SENSE OF PLEASURE**
- **CONFIDENCE**
- **STRENGTH**
- **ALERTNESS**
- **INTENSE SEXUAL EXPERIENCE**

HOW METH WORKS

- METH CAUSES THE RELEASE OF
2 NEUROTRANSMITTERS

DOPAMINE
ADRENALINE

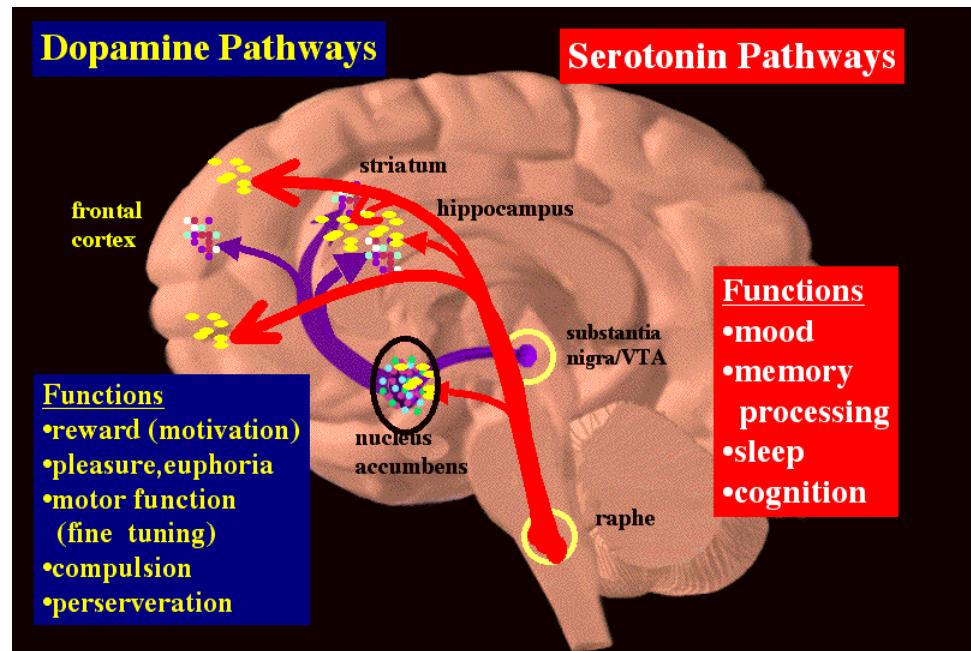
DOPAMINE

- **DOPAMINE IS NECESSARY FOR SEVERAL BODILY FUNCTIONS**
- **REGULATES MOVEMENT**
- **BUT MOST IMPORTANT:**

DOPAMINE

**PROVIDES FOR THE SENSE OF
“PLEASURE”**

HOW METH WORKS



HOW METH WORKS

- BECAUSE OF THE HUGE SURGE OF DOPAMINE IN THE BRAIN, THERE IS A MORE INTENSE AND LASTING “HIGH”
- EFFECTS CAN LAST 4-24 HOURS

HOW METH WORKS

- **ADRENALINE: FIGHT OR FLIGHT**
- **INCREASES HEART RATE**
- **INCREASES BLOOD PRESSURE**
- **DILATES PUPILS**
- **CAN INCREASE PHYSICAL STRENGTH**

HOW METH WORKS

- METH CAUSES THE BRAIN'S NEURONS TO RELEASE AN ENZYME TO DESTROY THE EXTRA DOPAMINE
- THIS ENZYME ALSO CHANGES THE BRAIN'S ABILITY TO MAKE DOPAMINE
- RESULTING IN BRAIN DAMAGE TO DOPAMINE SYSTEM

HOW METH WORKS

- **1ST: THE RUSH**
- **2ND: BINGE PHASE:** Use Meth for days at a time without eating or sleeping
- **“TWEAKING”** when the euphoria is over, the user is tired, strung out. The user can become paranoid and aggressive during this phase
- **3rd: THE CRASH:** The user runs out of the drug or their body stops responding, usually characterized by sleeping great lengths of time. This phase can lead to signs of “Withdrawal”, intense depression and craving for the drug

SIGNS AND SYMPTOMS OF USE

- FLUSHED, TENSE APPEARANCE
- DILATED PUPILS
- BLOODSHOT EYES
- EXCESSIVE, RAPID SPEECH
- A CHEMICAL ODOR TO BODY
- EXCESSIVE SWEATING
- NAUSEA, VOMITING
- DIARRHEA
- RESTLESSNESS
- REPETATIVE BEHAVIORS
- PICKING AT SKIN
- INABILITY TO SLEEP OR EAT
- SEVERE WEIGHT LOSS
- IRRITABILITY

SIGNS AND SYMPTOMS OF USE

- OPEN SORES
- BURNS TO MOUTH OR FINGERS
- ROTTING TEETH
- TEETH GRINDING
- LIPSMACKING
- TREMORS
- NYSTAGMUS
- SEIZURES
- OILY HAIR
- ACNE
- MEMORY LOSS
- DEPRESSION
- PARANOIA
- HALLUCINATIONS
- AGGRESSIVE BEHAVIOR

SIGNS AND SYMPTOMS OF USE

- **THE MOST IMPORTANT SIGN:**

**GIVING UP THE USUAL THINGS
THAT BRING PLEASURE, JOY OR
HAPPINESS FOR THAT PERSON**





SHORT TERM EFFECTS

- INCREASED HEART RATE
- INCREASED BLOOD PRESSURE
- HEART ATTACK
- HYPERTHERMIA
- SEIZURES
- STROKE
- COMA
- **DEATH**

LONG TERM EFFECTS

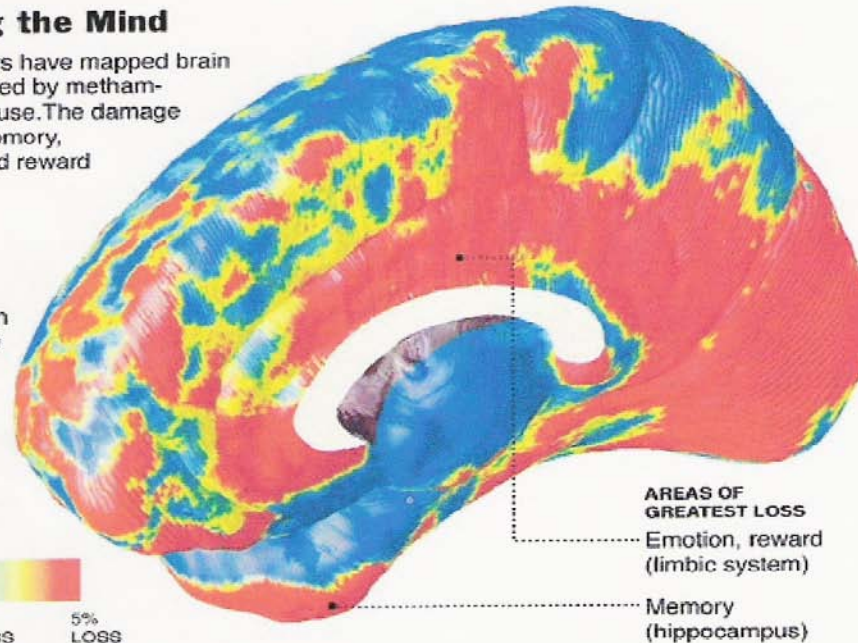
- SEVERE DEPRESSION (SUICIDE)
- IRREVERSIBLE BRAIN DAMAGE
- PSYCHOSIS (PARANOID SCHIZOPHRENIA)
- PARKINSON-LIKE SYMPTOMS
- ALZHEIMER-LIKE SYMPTOMS
- KIDNEY FAILURE
- LIVER FAILURE
- DISEASE LIKE HIV/HEPATITIS C
- CANCER
- **DEATH**

Pattern of Brain Damage in Methamphetamine Abusers

Eroding the Mind

Researchers have mapped brain decay caused by methamphetamine use. The damage affected memory, emotion and reward systems.

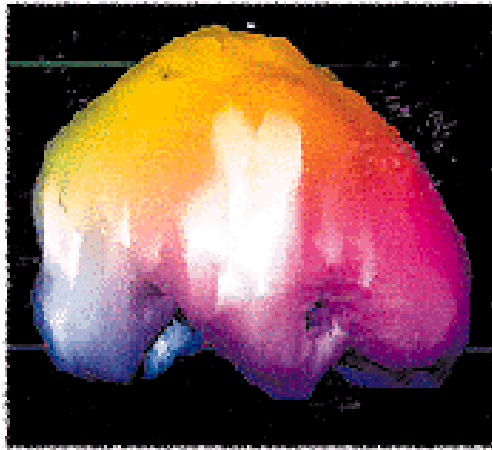
Average difference in brain tissue volume of methamphetamine users, as compared with non-users:



Source: Dr. Paul Thompson, U.C.L.A.

[Brain Tissue Loss in Methamphetamine Abusers \[High Resolution JPEG Image\] \[High-Resolution TIFF Image\] \[Very High-Resolution JPEG Image, white background\] \[black background\]](#)

This image shows the pattern of brain tissue loss in methamphetamine users, relative to healthy adults, mapped using MRI scans. Brain regions involved in drug craving, emotion and reward, and hippocampal brain regions involved in learning and memory, lose up to 10% of their tissue. *Red colors denote brain regions with greatest tissue loss, blue colors regions that remain relatively intact. Hippocampal volume reductions are linked with poorer memory performance in the methamphetamine users. At the same time, a 7% volume increase occurs in the brain's white matter, suggesting an inflammatory response to chronic drug use.*



LONG TERM EFFECTS

- THE MOST SIGNIFICANT ISSUE:

Once the **DOPAMINE** cells are damaged or dead, a person can not feel pleasure or contentment in a “normal” way. This inability to feel “pleasure” can be very long lasting, even **permanent**.

A silver metal spiral binding is visible on the left side of the page, looping through a series of holes in the paper.

“TWEAKED”

NOW FOR THE VIDEO