Information as a Part of Treatment

When users in recovery realize that their inability to control their impulses to use may be the result of changes in the brain rather than a fundamental character flaw, they can begin to accept their addiction and take charge of their lives. Providing this information in a clear, accessible, and engaging way is a powerful treatment tool.

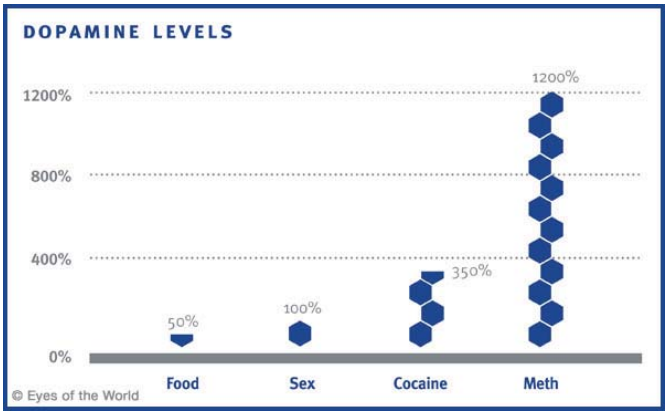
- A well-informed patient understands the goals of recovery and can more effectively participate in his or her treatment.

- Providing accurate information facilitates treatment efforts by allowing patients to understand the biological basis of their addiction and recovery.

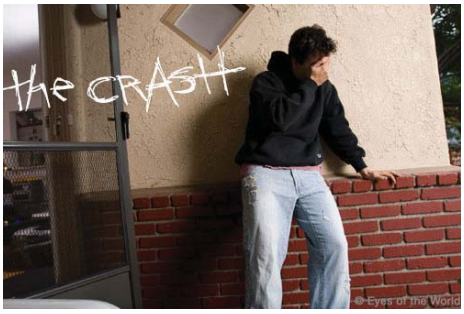
- When family members understand addiction and recovery, they can more actively play a larger role in the patient's support system.

Meth Increases Dopamine

Dopamine is the brain chemical that allows us to feel pleasure. Meth unnaturally raises dopamine levels to more than 10 times the amount caused by life's normal pleasures, including eating and having sex. In stimulating this dopamine release, meth creates an intense rush of pleasure. This powerful rewarding effect is a major part of the biology of meth addiction.



The Crash



When meth users end a run of meth use, they experience "the Crash." Severe fatigue, anxiety, depression, and confusion occur, and meth craving is often strong. Life can feel hopeless, recovery impossible. Much of the emotion that people feel during this period is caused by chemical changes in the brain, specifically a lack of dopamine. Fortunately, within 2-10 days some recovery of dopamine occurs, allowing the newly abstinent user to make it out of "the Crash." The body and brain begin to recover with proper sleep, nutrition, and exercise.

Tolerance to Meth

As tolerance to meth develops, users consume larger doses, take meth more often, and change methods of use. Tolerance contributes to many of the negative consequences of meth use. Because people need more meth to get high or even feel normal, they need more money to buy it. People plunder family savings, sell possessions, and even steal or get involved in other crimes. This futile effort of taking more and more meth and feeling less and less effect is part of the long destructive spiral of addiction.

Meth-Induced Psychosis

Most people who use meth in extended binges hear voices and see things during those binges. These hallucinations lead to extreme anxiety and paranoia. The combination of hallucinations and feelings of fear and paranoia is known as meth-induced psychosis. Meth-induced psychosis is caused by meth's effect on at least three areas of the brain: the visual cortex, the auditory cortex, and the amygdala. For most people, these psychotic episodes pass when they stop using and get some sleep. In some severe cases, the symptoms can persist for days. In a very few cases, meth-induced psychosis can be long-term and possibly permanent.

Meth Causes Aggression

Meth stimulates the emotional center of the brain (the amygdala). The longer meth is used, the more sensitive and hyperactive the emotional center of the brain becomes. The result is powerful negative emotions that can turn into aggression for little or no reason. Depending on the person and the circumstances, this reaction can range from irritability and moodiness to verbal attacks and even physical violence. When people stop using, get sleep, and begin to repair their bodies, their brains also repair and this behavior subsides.

How We Train Our Brains to Be Triggered

No one starts using meth because he or she craves it. Craving develops over the course of use. As we've seen, using meth releases large amounts of dopamine, creating intense pleasure. The brain automatically associates or "connects" the people, places, things, and emotions surrounding meth use with this powerful feeling of pleasure. We call these "triggers" for using meth. For an addicted meth user, thinking about or coming into contact with these triggers will actually cause a release of dopamine in the brain, which creates a powerful craving for meth. Triggers generally fall into two categories: external triggers, which are the people, places, and things that users have associated with meth use; and internal, or emotional triggers, which are intense emotional states (for example, anger, fear, joy, desire, etc.) that often occur in association with meth use.

The Inability to Stop Craving

When meth users try to stop using, they become discouraged about their inability to resist cravings. Sincere promises to stop are often broken within hours of being made. Self-esteem is damaged and hopelessness sets in. Despite the enormous negative consequences to their lives, they still crave the drug, and once the craving starts, they have a diminished capacity to say, "Stop." Some people fear that craving will always result in relapse and that they cannot possibly live life forever fighting these powerful urges. If they do relapse, they often think it is "proof" that "cravings are irresistible." It is therefore important for meth users to learn that they can resist craving and that the cravings become less severe the more recovery time they have. A simple rule to follow is, "Don't use meth today and it will be easier not to use tomorrow."

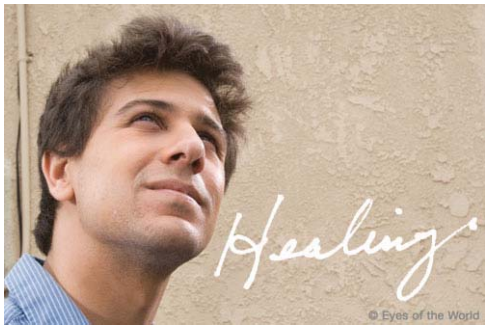
The Recovery Process

The first six months of recovery from meth are often challenging. For many people, the early months of recovery can be like an emotional roller coaster as recovering users progress from acute to protracted withdrawal. Although the severe symptoms of acute withdrawal from meth subside fairly quickly, recovery takes much longer.

Many people continue to experience an unpleasant period of days or weeks characterized by a vague and prolonged emotional state best described as "the absence of pleasure," or anhedonia. People report difficulties thinking clearly and focusing. They may also have periods of fatigue interspersed with insomnia, as well as irritability and feelings of anxiety and depression. This state can be difficult to recognize and describe, but there is often the sense that "my brain just isn't working right." Some people feel as if they will be stuck in this stage forever, and may think, "If this is how sobriety will feel for the rest of my life, I can't do it."

During this period it is crucial for patients to remember that if they remain abstinent from meth, these symptoms will subside. The only thing that will make the symptoms persist and worsen is if they use meth. Focusing on staying sober "one day at a time" is a central principle to success during this period.

The Brain Heals with Abstinence from Meth



The good news about recovery is that, with abstinence from meth, brain functioning returns to normal and brain structures repair themselves. As healing progresses, people's ability to think, feel normal emotions, and control their behavior returns. The story of meth and the brain offers a lesson in hope. If a person stops using meth, develops a healthy lifestyle, and stays in recovery, their brain will heal.