

## Understanding Addiction

In order to help us understand how drugs affect the body, in the simplest terms, I have found the following analogy brings understanding to those outside the medical and scientific professions.

Before we start, a couple of things need to be understood.

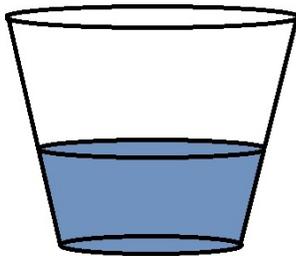
The neurochemicals that naturally occur within our body are used to control our body's many functions. For example serotonin is our natural mood stability neurochemical, dopamine allows us to feel pleasure, and endorphins are our natural painkillers. For most humans our various neurochemicals are replenished by:

1. Eating
2. Resting
3. and exercise.



This bucket indicates a healthy, normal person.

If we think of our body as a bucket of neurochemicals the basic principle is that our body's bucket wants to remain full (The medical word for this is homeostasis). In order to fill our bucket each day we eat healthy and get our required rest and exercise. This allows our body's neurochemical "bucket" to remain filled. Whenever the body experiences illness, injury, or we're not eating, resting or exercising, the body's neurochemical system is strained and depleted. When the neurochemicals are depleted, the human body does not function at 100% and the individual will show signs or symptoms such as moodiness, depression, agitation, etc.



This bucket indicates a person who is experiencing illness, injury or is unhealthy.

## Drugs and Alcohol

Now enter drugs and alcohol. All the drugs of abuse mimic or block natural neurochemicals. For example, heroin mimics the body's natural endorphins and causes large releases of dopamine.

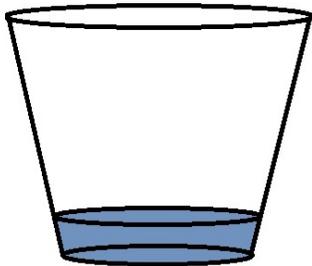
So when a person injects heroin, the body perceives that its neurochemical "bucket" has overflowed. An overflowed neurochemical bucket is called "getting high." The body wants a full

bucket—not an overflowing bucket. When this happens the body controls the only thing it has control over; the natural neurochemical. In our example of a heroin user, **that person's body begins shutting down production of the natural endorphins and neurochemicals** since the body can't tell the difference between heroin and natural endorphins.



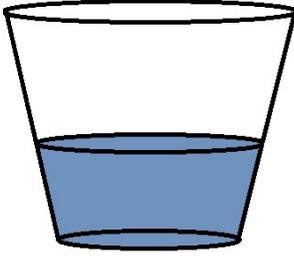
This bucket shows a person after using drugs.

Heroin's blood life (how long it keeps you high) is between four to six hours. After this four to six hour high, the user not only has lost the heroin in their system, but they also are experiencing a depletion of their **natural production** of endorphins. This means that without the heroin, the user's "bucket" is actually significantly depleted **since their body has stopped producing endorphins and neurochemicals naturally**.



This bucket exemplifies a person, after the drug has left their system. Their neurochemicals are extremely depleted.

At this point the user's body is craving normalcy, like the bucket of a healthy person. Unfortunately for most drug users, that craving leads to more drug use in order to restore their "bucket" and so the cycle repeats itself... until after multiple uses (how many depends on the drug and the individual) the user has established a "new normal" for their own natural neurochemical production; which at a certain point is so diminished that the user relies on the drug in order to feel "semi-normal."



This bucket illustrates an addict's "normalcy." Even after using their drug of choice again to replenish the bucket, it cannot reach a normal level because their natural production of neurochemicals has shut down.

It is at this point the user is addicted to the drug and without the drug the user can't function normally. **Once an addict stops using drugs and alcohol, in best case scenarios it takes the human body on average one to two years for the neurochemical system to return to normal production. However, if an addict uses again just once, the process starts all over.**

This simple analogy rings true for other addictive substances, such as alcohol, cocaine, marijuana, methamphetamines, painkillers, tobacco—the list goes on and on.

Without God's healing, the evidence has shown that an addict will never again have a completely full neurochemical bucket.

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Devin retired in 2014 as a Lieutenant with the Torrance Police Department in Southern California after working as a police officer for over thirty-two years. In addition to his years of administrative experience Devin specialized in patrol, narcotics and field training programs; becoming an industry and court recognized expert in these fields in both state and federal courts. Devin was a veteran narcotics investigator, with over nine years of full-time narcotics experience working as an investigator, a supervisor and as a commander of a Special Investigations Division.

Devin began teaching narcotic related topics in 1991 and since that time he has taught thousands of students extensively throughout the United States on various narcotics related topics for Local, State and Federal Law Enforcement Agencies as well as to private industry, school students, teachers and parent groups. Devin was an IACP Certified Drug Recognition Expert and Drug Recognition Expert Instructor from 1995 until 2006.

Today Devin is a lifetime member of the California Narcotic Officers' Association and he was the California Narcotic Officers Association 2005 recipient of the Al Stewart State of California Narcotic Officer of the Year award. He continues to provide training and consulting services for schools, public agencies, law enforcement, probation, and private businesses.