UNDERSTANDING ADDICTION

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 people, our various neurochemicals are replenished by:
1. Eating
2. Resting
3. and exercise.

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.

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 the production of the natural endorphins and neurochemicals since the body can’t tell the difference between heroin and natural endorphins.
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 depletion of their natural production of endorphins. This means that without the heroin, the user’s “bucket” is significantly depleted since their body has stopped producing endorphins and neurochemicals naturally.

This bucket is an example of 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 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 is an example of an addict’s “normalcy.” Even after using their drug of choice again to replenish the body, it cannot reach a normal level because the 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.

By Devin Chase
Teamchasetraining.com
http://21stcenturypolicingsolutions.org
Used by permission.