LSD

LSD is a synthetic compound that is created in the laboratory. It is the most potent hallucinogenic substance known to man. Given equal amounts, LSD is 100 times more powerful than psilocybin (the active chemical in mushrooms). A typical dose contains 50-150 micrograms of LSD.

History of Synthesis
LSD was first synthesized by Sandoz Laboratories in 1938 as a potential stimulant for the circulatory and respiratory systems. The benefits to the drug were not realized and the study was discontinued. In 1943, a chemist, Albert Hoffman, at the laboratory accidentally ingested a small dose of LSD and realized the psychedelic properties of the compound.

Methods of Ingestion
LSD is typically taken orally in the form of tablets, tabs, or drops from dropper bottle. Tabs are blotter paper that have been soaked in LSD and then cut up into small pieces. Other forms include pills, liquid sugar cubes and powder.

How LSD Works in the Body
LSD is absorbed by the bloodstream and makes it way up into the brain. The exact pathways that are affected by LSD are not completely known. LSD has a chemical structure similar to a neurotransmitter called serotonin. It is thought that the effects of LSD are caused by the stimulation of serotonin receptors on neurons, perhaps in the brain area called the raphe nuclei.

Effects on the Body
The effects of the drug are focused primarily on the nervous system. The behavioral effects that LSD can produce include hallucinations, confusion, panic, psychosis and anxiety. People often have emotional reactions like extreme happiness, fear, or sadness. Distortion of the senses and loss of a sense of time and space are also common effects. Other physical effects to the body can include dilated pupils, increased heart rate, excessive sweating, and dry mouth.

Chemical Name: D-lysergic acid diethylamide (LSD)

Chemical Formula: C₂₀H₂₅N₃O
Duration of LSD Effects
The effects of LSD can last anywhere from 6 to 8 hours depending on the concentration of the drug. Users of LSD often experience a period of 2 to 6 hours afterward where it is difficult to sleep.

Duration of LSD in Your Body
There is no clear evidence for how long LSD lasts in your body. Most experts believe that traces of LSD remain in your body for the rest of your life.

Detection Methods
LSD can show up in standard urine tests for 4 days after ingestion of the drug. A common misconception is that LSD can be found in spinal taps for years after ingestion. Spinal fluid does not concentrate LSD and spinal taps are far too dangerous and painful to be a typical drug testing method.

LSD Addiction
LSD is not considered to be an addictive substance since it does not produce the drug craving nature of substances such as nicotine or cocaine. LSD user will quickly build a tolerance to LSD, requiring larger and larger doses to experience the small effects.

Flashbacks
Many LSD users experience flashbacks, a recurrence of certain aspects of a user’s time on LSD, without the user taking LSD again. Flashbacks can occur suddenly within a few days of ingestion of the drug or more than a year after the drug was taken. The mechanism of the flashback is not fully understood and whether or not residual amounts of LSD are involved in the event.

Resources
http://faculty.washington.edu
http://leda.lycaeum.org
http://www.streetdrugs.org
http://www.erowid.org
http://www.nida.nih.gov