STIMULANTS AND DEPRESSANTS

I. Stimulants - Included in this category are the amphetamines (Dexedrine, Benzedrene), methylphenidate (Ritalin), and other drugs such as Preludin.

A. Effects include : euphoria, anorexia, insomnia.

B. Increase blood pressure and pulse, dialate pupils, etc. (sympathetic variables).

C. Increase talkativeness, thoughts, associations, decrease fatigue, may alleviate depression.

D. Tolerance to effects develop with time, so dose must be increased to maintain effects.

E. Withdrawal after chronic usage:

1. Withdrawal leads to depression, fatigue, sluggishness.
2. Withdrawal counteracted by heroin or more amphetamines.
3. Withdrawal not physically dangerous, but is emotionally distressing.

F. High dose chronic usage causes a paranoid psychosis, which resembles paranoid schizophrenia. "Speed freaks" are often aggressive and paranoid.

G. Stimulants probably work through their ability to increase norepinephrine and dopamine availability in the brain.

H. Amphetamine-like psychostimulants are legitimately used to treat:

1. Hyperkinetic children.
2. Patients with narcolepsy.

They are probably not indicated for the general treatment of:

1. Obesity.
2. Depression.
3. Fatigue.

I. Amphetamines may be taken by mouth or injected.

J. Associated illnesses include arteritis, serum hepatitis, weight loss, insomnia, paranoia, starvation, talc emboil of lungs, addiction to other drugs.

K. Psychostimulant habituation is difficult to cure since it feels good.

II. Depressants - Included in this category are the sedative hypnotics, which are barbituates (Seconal, Amytal, Pentothal, etc.) and the non-barbituate sedatives hypnotics (Doriden, Quaalud, etc.).

A. All cause depression of CNS function:

1. First higher centers, then lower centers (including respiration and cardiovascular centers).
2. All disinhibit inhibitory centers.
3. All cause sedation and decreased anxiety.
4. Effects are much like alcohol.

B. All cause withdrawal after tolerance is developed.

C. Withdrawal = delerium, shakiness, confusion, hallucinations, agitation, seizures, hyperthermia:

1. All sedative hypnotic drug withdrawal is dangerous.
2. Sedative hypnotics should be withdrawn slowly, over 2-3 weeks.

D. People can be addicted and have withdrawal on regularly prescribed doses of sedative hypnotics.

E. Lethality:

1. Sedative hypnotics are very dangerous. One can die from sleeping tablets if taken with alcohol.
2. Sedative hypnotics are frequently used in suicide attempts.

F. Minor tranquilizers: Miltown, Valium, Librium. Above phenomena can occur with meprobamate (Equamil, Miltown).

1. Valium and Librium have low lethality and addiction potential but these potentialities are possible.
2. Valium and Dalmane are useful for insomnia and are preferred to the sedative hypnotics.