

Further data on tolerance are supplied by Gelvin and McGavack, who studied 27 obese patients attending the Welfare Island dispensary. They took an initial dose of 15 milligrams of Dexedrine per day, rapidly increased to a maximum of 30 milligrams, and were permitted to eat as they pleased.

After 8 weeks, 47 percent were maintaining a weight loss of 1 pound per week; after 12 weeks, only 23 percent continued to lose even that much.

Twenty weeks after the beginning of treatment only one patient was still losing weight.

The use of amphetamine to correct faulty eating habits has been suggested, but studies with animals have shown how difficult this is. Harris gave intramuscular injections—2.5 to 20 milligrams d-amphetamine sulphate—to dogs 1 hour before feeding, with the result that food intake was substantially decreased.

In the case of one dog—16 kilograms in weight—who was given injections of 10 milligrams per day, food consumption was reduced by 87 percent and body weight by 27.4 percent within 32 days.

After 30 days, an injection of saline solution was substituted for the amphetamine. The animals' appetite immediately increased greatly; obviously conditioning by the amphetamine regime could not be sustained without the anorectic effect of the drug itself.

Similarly, the experience of most physicians treating patients for obesity suggests that little long-term learning effect can be attributed to the amphetamine regime; most patients, once they stop using amphetamines or become tolerant to them, resume their former eating habits.

A second series of papers on obesity and amphetamines emerged in the 1950's, heralding the use of combination drugs in which amphetamine was supplemented with a barbiturate, in most instances amobarbital.

The advantage was reported to be an easing of the emotional extremes found in obese patients.

These studies, most of them uncontrolled and methodologically unsound, stated that patients lost weight, as with amphetamine alone, but also improved in mood.

No data indicated that the combination drugs were any more effective than amphetamines alone.

In the late 1950's a third series of studies began to appear, dealing with the effectiveness of new amphetamine congeners or new forms—for example, "timed release" packaging—of already existing amphetamines.

These drugs all share the same basic chemical skeleton and have effects, including adverse ones, very similar to amphetamine sulphate, although it was claimed for one drug after another that it had fewer "side effects."

W. Modell writes that:

It seems unlikely that any minor structural change in this group which continues the same theme will separate the action that may be clinically undesirable.

Yet it is precisely this which is inferred from many claims made for these drugs, namely the recurrent claims for reduced incidence of insomnia, anxiety, and nervousness, with potent anorectic effect.