

Dr. GRINSPOON. As a matter of fact, I am about to get to that.

In 1938 a research group led by Poul Bahnsen compared 100 normal subjects receiving amphetamine with an equal number receiving placebo; 19 of the active drug group and 1 control reported a reduction in appetite.

The first attempts to apply these observations to the clinical management of obesity were made that same year by M. F. Lesses and A. Myerson, and by P. Rosenberg in 1939; both papers reported favorable results.

Since then a long series of reports and clinical studies has agreed with them. For example, S. C. Harris, A. C. Ivy, and L. M. Searle found that seven obese patients lost more weight when taking amphetamine than when taking placebo.

Those who lost most were the ones who ate least, so the main cause of weight loss was apparently suppression of appetite rather than something like higher activity level.

Harris also conducted another experiment in 1947 to investigate the possibility that weight can be lost with amphetamines even when caloric intake is maintained.

Ten volunteer medical students agreed to eat 3,000 calories per day. During weeks 1 and 2, the students received no medication, and during weeks 3 and 4, they received placebo.

During this control period totaling 26 days, there was an average weight loss of 0.7 pounds. This the authors attribute to the fact that for some of the subjects a 3,000-calorie diet was inadequate to maintain body weight.

For study weeks 5 to 13, half of the students received 10 milligrams of d1-amphetamine before each meal, and the other half received 5 milligrams. During week 5, the subjects in both groups lost an average of 1 pound. However, the amounts leveled off quickly, and the total average loss for the active medication phase was only 1.85 pounds. The authors concluded that reduction of caloric intake, not increase in motor activity or metabolic rate, is the essential variable in weight loss from amphetamines.

Another useful study was conducted by D. Adlersberg and M. F. Maver on 299 obese patients who were being treated in a clinic of a large general hospital.

Treatment groups were arranged as follows: Group A patients were treated with dietary restrictions alone; group B began with this, but after 2 to 5 months oral thyroid medication—2 to 3 grains desiccated thyroid daily—was added; and group C, after 3 months of dietary restriction, received amphetamine sulphate—5 to 10 milligrams twice daily, 1 to 2 hours before lunch and dinner.

Although all three groups lost weight, group C—diet plus amphetamine—was the most successful. However, dosages had to be increased over time to maintain weight loss and overcome tolerance.

A useful contribution of this study is the authors' attempt to differentiate between long- and short-term results.

The most impressive weight losses for all three groups occurred in the first 1 or 2 months. Overall, amphetamines emerged as superior to the thyroid regime; but interestingly, in the long run diet alone compared favorably with diet and amphetamine.