

term problem with major social and psychological determinants. Frequently recognized psychological factors are chronic tension and depression, unusually strong oral dependent needs, inability to tolerate frustration, and substitution of food for other forms of gratification. These psychological characteristics may lead to dependence on many kinds of drugs as well as on food. As in the case of depressive reactions, it may be illogical to include in the treatment of such a condition drugs that have a strong potential for causing dependence. "In fact, the use of amphetamine-type drugs is contraindicated for alcoholic persons and other dependence-prone persons" (3).

Short-Term Effect: It is granted by most that amphetamines can induce a period of appetite suppression and increased weight loss for a few weeks. Whether this is of lasting value is questionable, however, since in most cases obesity continues to be a problem over a period of years. Very few short-term gains in treatment of obesity have been translated into long-term successes. More importantly, it is likely that short-term effectiveness is caused more by a stimulant effect than by any direct effect on the appetite control center of the brain. Thorn and Bondy (13), in their textbook article, state:

As a result of stimulation, or a "lift," the patient's drive toward overeating may be significantly modified and as far as he is concerned, the over-all effect of the drug is "appetite-depressing." Obviously, drugs which create such a state of euphoria may lead to habituation in certain individuals.

Modell (14) pointed out in his 1960 report:

Central stimulation, not a specific central depressant effect on appetite, is then the common mechanism through which these drugs act; it is clear, therefore, why undesirable central stimulant effects, which have constituted their chief clinical limitation, have thus far appeared to be indivisible from anorexigenic action.

In other words, obese patients may use the drugs in the same way the "speed freak" does—to obtain a "high."

There is also some doubt whether amphetamines are effective in the short term. Again from Modell's report (14):

The amphetamines present special problems in the evaluation of their effectiveness. Patients often promptly recognize the drug by one or another of the central stimulant effects (usually the "lift"). Thus, they can distinguish between drug and placebo when these are used in what theoretically appears to be a well-designed clinical evaluation with a double-blind control. In patients with emotional disturbances particularly, who include most compulsive overeaters, the ability to distin-

guish medication from placebo by any effect other than the one under examination (in this case weight loss) makes it exceedingly difficult to prevent bias and psychological factors from shaping the apparent effects of the drug.

Long-Term Effect: Thorn and Bondy (13) evaluate pharmacological treatment of obesity as follows:

Depression of appetite by a pharmacologic agent can facilitate weight loss, although it is apparent that as soon as the pharmacologic effect wears off, or the medication is discontinued, appetite will return and weight gain will recur unless the patient's inherent capacity to control his food intake has been altered fundamentally. *That the pharmacologic agent used for these purposes be devoid of serious toxic side effects is axiomatic [emphasis added].*

Unfortunately there is no pharmacologic agent available at this time which acts primarily by depressing the "appetite center."

In her textbook article Albrink (15) devotes 3,600 words to the treatment of obesity. This is her discussion of amphetamines:

Drugs. Appetite-suppressant drugs of the amphetamine group are effective for only a few weeks. Dependence on their stimulatory effect occasionally makes withdrawal a problem. Such drugs have no demonstrated role in the long-term management of obesity.

Reinforcing this opinion is the report of the AMA Committee on Alcoholism and Addiction and Council on Mental Health (3):

In long-term (more than a few weeks) programs of weight reduction, the superiority of these substances to placebo has not been demonstrated.

In 1959 Stunkard and McLaren-Hume (16) reviewed the literature on the treatment of obesity. Their summary states:

A review of the literature on outpatient treatment for obesity reveals that the ambiguity of reported results has obscured the relative ineffectiveness of such treatment. When the per cent of patients losing 20 and 40 pounds is used as a criterion of success, the reports of the last thirty years show remarkably similar results. Although the subjects of these reports are grossly overweight persons, only 25% were able to lose as much as 20 pounds and only 5% lost 40 pounds.

In 1966 Glennon (17) reported a follow-up:

Review of the literature since 1958 did not reveal a successful long-term study using a diet regimen by itself or in combination with drugs, psychologic treatment, or an exercise program.

Astwood (18) is even more negative in his evaluation of all methods of treatment, including the pharmacologic.