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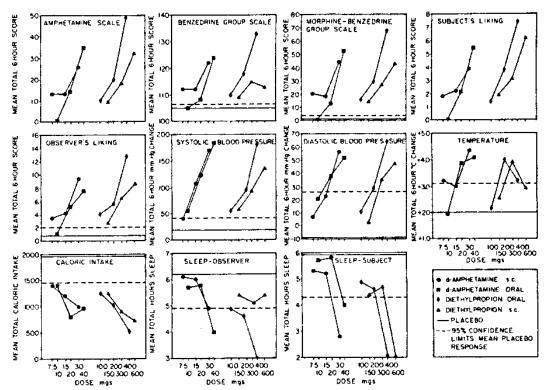


Fig. 2. Dose-response curves for placebo condition, and subcutaneously (s.c.) and orally administered diethylpropion and d-amphetamine. Each point represents the mean response of 9 subjects. Responses for subjective scales represent the sum of the scores for the first 7 observations (total 6 hour scores). For blood pressure and temperature, responses are calculated as the sum of the changes from the mean of the predrug controls for the first 7 observations (total 6 hour change). Total caloric intake and total sleep time calculations are described in the text. All subjects gave zero scores on the "amphetamine" and subject's "liking" scales for placebo administration.

administered diethylpropion, subcutaneously administered d-amphetamine, and orally administered d-amphetamine—produced qualitatively similar subjective effects and euphoria as evidenced by significant dose-related scores on the "Amphetamine Group," "Benzedrine Group," "Morphine-Benzedrine Group," and "liking" scales (Fig. 2). Furthermore, both subjects and observers predominantly identified the four drug conditions as "amphetamine" or "cocaine" (Table I).

By both routes diethylpropion and d-amphetamine increased systolic and diastolic blood pressure, increased rectal temperature, and decreased caloric intake (Fig. 2). As reported by observers (Fig.

2), subcutaneously administered diethylpropion and d-amphetamine did not produce significant sleep decreases, whereas when administered orally, both drugs decreased sleep. As reported by subjects (Fig. 2), the largest dose of each four drug conditions significantly decreased sleep.

Significant pupillary dilation was observed only with the 300 and 600 mg subcutaneous doses and the 400 mg oral doses of diethylpropion. Tachycardia occurred with all four drug conditions with a trend for pulse rate to be negatively correlated with blood pressure.

Although diethylpropion and d-amphetamine produced qualitatively similar syndromes, diethylpropion was less potent