

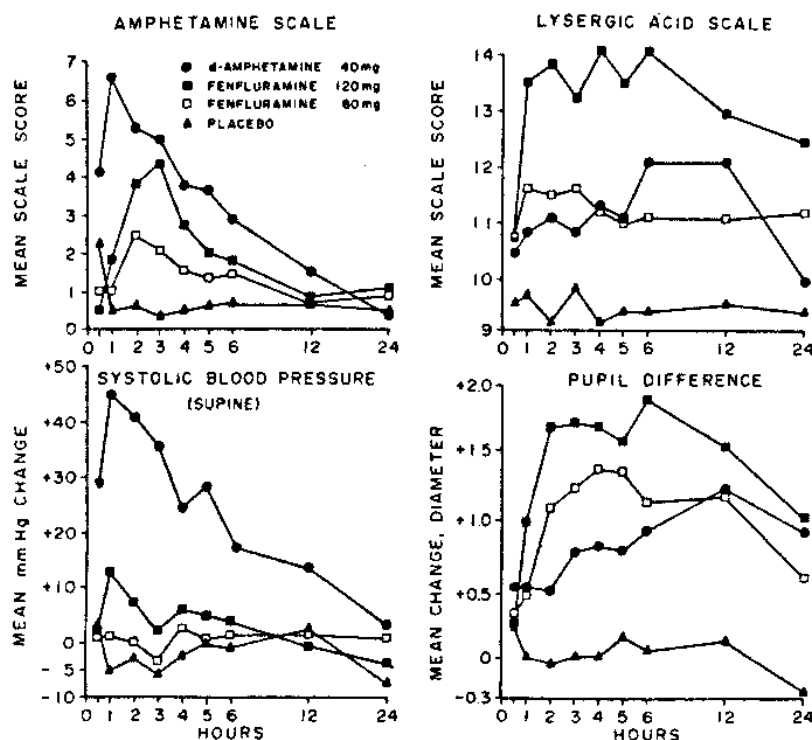


Fig. 2. Time-action curves for amphetamine and fenfluramine. Each point represents the mean change from 8 subjects. Euphoric effects (amphetamine scale) were paralleled by elevation of supine blood pressure while dysphoric effects (LSD scale) were accompanied by mydriasis.

related increase in pupil diameter; the effect of amphetamine by this measure during the first 6 hr was, by comparison, relatively slight (Fig. 1). Fenfluramine also elevated systolic and diastolic blood pressures, but less than did amphetamine. Although not statistically significant, there was a trend for pulse rate to increase with fenfluramine and to decrease with the larger dose of amphetamine. The larger dose of amphetamine caused hyperpyrexia and differences in standing and supine blood pressure, the latter being manifested 24 hr later (Fig. 1). As may be seen in Fig. 2, the pressor effects of amphetamine and fenfluramine generally assumed a time-course paralleled by the duration of euphorogenic effects (Amphetamine Scale). The mydriatic and LSD Scale responses were of much longer duration.

**Appetite and sleep.** Amphetamine, 40 mg, and fenfluramine, 120 and 240 mg, reduced caloric intake at the three meals following drug administration, but because of a large

variability, only the effects on the noon meal were statistically significant. Valid relative potency calculations for this effect indicate 4.2 mg of fenfluramine equivalent to 1 mg of amphetamine as an anorexiant, but with admittedly wide 95% confidence limits (2-412). Both fenfluramine and amphetamine caused significant reduction in self-estimated sleep time (Fig. 1); only amphetamine, however, reduced observed sleep time.

**Subjective effects.** Significant degrees of euphoria were produced by amphetamine as indicated by elevated Amphetamine, MBG, and Subjects' Liking Scale scores (Fig. 2). This euphoric response tended to change gradually in a stepwise fashion during the 6-hr interval. The dysphoric items (LSD Scale) elicited by amphetamine were not significantly different from placebo in this small series. Seven of 8 subjects rated the larger dose of amphetamine as more euphorogenic than the 20-mg dose, and a significant dose relationship could be shown