MIDDLE-OF-THE-NIGHT ADMINISTRATION OF HYPNOTICS. Timothy A. Roehrs. Sleep Disorders Center, Henry Ford Hospital, Detroit, MI.

Eighteen patients with sleep maintenance insomnia received placebo for 3 nights of adaptation and screening in the sleep laboratory. Then they received 2 consecutive nights of midazolam (15 mg), temazepam (30 mg) and placebo (one treatment per week) in a balanced crossover design, administered in the middle of the night (3.5 hr after bedtime). Both drugs significantly improved sleep over the 4.5 hr in bed after treatment. In the morning (5 hr post drug) significant performance decrements and reduced daytime sleep latency (7 hr post drug) were found with temazepam, but not midazolam.

CHLOROCITRATE AFFECTS BODY WEIGHT INDEPENDENT OF CALORIC INTAKE IN MAN. Stanley Heshka,* S. Bloom, C. Nauss-Karol, Å. Nyman,* K. Porikos and J. Kral.* St. Luke's-Roosevelt Hospital,* New York, NY, Hammersmith Hospital, London, England, Hoffmann-La Roche Inc., Nutley, NJ and Foothills Hospital, Calgary, Alberta, Canada.

A newly-developed peripherally-acting anorectic drug, chlorocitrate, was tested in two double-blind crossover studies of 16 obese men on a metabolic ward. 200 mg orally once daily did not affect food intake, body weight or hunger ratings. Meal-stimulated release of 10 GI polypeptides was studied. Gastrin, neurotensin, pancreatic polypeptide, and GIP release was inhibited. At 900 mg daily for 7 days the subjects lost more weight or gained less versus placebo by an average of 1.6 kg. Hunger ratings were not lowered. Food intake was reduced by only 1800 kcal/week.

EFFECTS OF NALTREXONE ON SPONTANEOUS FOOD INTAKE OF OBESE MEN. C. A. Maggio, E. Presta, E. F. Bracco, H. R. Kissileff, J. R. Vasselli and S. A. Hashim. Obesity Research Center, St. Luke's-Roosevelt Hospital Center, New York, NY.

The effects of the long-acting opiate antagonist naltrexone on spontaneous food intake were investigated in eight male obese (49.2% overweight) paid volunteers maintained on the platter service method in a metabolic unit for 28 days. Naltrexone, in doses of 100, 200 and 300 mg/day, or acetaminophen placebo were administered orally, under double blind conditions, for 3-day periods each according to a Latin Square design. When the effects of the naltrexone doses were combined and compared to placebo, five subjects showed caloric intake reductions and overall intake was reduced nonsignificantly by 301.5±198.1 kcal/day.

THE EFFECTS OF CAFFEINE ON FREE RECALL. George Erikson. University of North Dakota, ND.

The present study investigated the effects of caffeine on memory for word lists. Twelve groups of male and female college students classified as high or low impulsive were administered 0 mg/kg, 2 mg/kg, or 4 mg/kg of caffeine. Subjects listened to four word lists presented at a fast rate and four at a slow rate. Caffeine influenced recall only when the words were presented at the slow rate, and its influence differed as a function of the subject's impulsivity level. The results generally suggest that caffeine impairs recall, possibly by increasing subjects' levels of distractibility.

SMOKING CESSATION AND WEIGHT GAIN. Sharon M. Hall. University of San Francisco, CA.

Factors related to weight gain after quitting smoking were investigated in two treatment outcome studies. In the first study year-long abstainers who participated in a smoking cessation and relapse prevention program gained more weight than relapsers. Weight history, number of cigarettes smoked at pretreatment, pretreatment blood cotinine, and estimated nicotine intake correlated positively with weight gain. Sex differences were found for the relationship between weight and abstinence. The second study added a nicotine gum component to the previous treatment program. Evidence was found for nicotine gum as an anorexic agent, especially among women.

MENSTRUAL CYCLE AND CIGARETTE SMOKING BEHAVIOR. D. R. Cherek and J. L. Steinberg. Louisiana State University School of Medicine in Shreveport, LA.

Female cigarette smokers participated in daily two-hour sessions over at least two consecutive menstrual cycles. Automated measures of each cigarette puff and its duration was recorded. Comparisons in these measures were made between premenstrual and menstrual portions and the rest of the cycle. The majority of subjects evidenced increases in the mean number of cigarette puffs per session and/or the total puff duration per session during menses or the premenstrual portion of the cycle.

CEREBRAL DOMINANCE, CIGARETTE SMOKING AND PERSONALITY IN COLLEGE STUDENTS. Gayle M. Boyd and Irving Maltzman. UCLA, CA.

In two experiments questionnaires were given to college students on personality, substance use, and a measure of preferred style of thinking which indicates preferences for cognitive processes and strategies differentially associated with the cerebral hemispheres. Heavier smokers showed preferences for verbal and analytic processes while light smokers favored imagerial and intuitive approaches. Non smokers were intermediate between light and heavy smokers. When non-smokers were equated with smokers on Sensation Seeking and experimentation with marijuana, their preference scores were similar to light smokers. A theory of nicotine reinforcement is discussed which proposes that smoking modualtes the balance of activity between the two cerebral hemispheres by differentially activating the non-dominant hemisphere.