

## EFFECT OF PECAN CONSUMPTION ON STOOL FAT.

E.H. Haddad and J. Sabaté. Department of Nutrition, Loma Linda University, Loma Linda, California, 92350.

Although nuts are excellent sources of nutrients and beneficial fats, their consumption is avoided by some because of their high caloric density. The aim of this study was to investigate the effect of a pecan-rich diet on stool weight and stool fat content. After a 2-week adaptation period, subjects were fed in random order a diet rich in pecans (20% energy from pecans) and a diet free of nuts as reference, each for 4 weeks. The pecan and control diets provided 43% and 30% of energy as fat respectively. 48-hour stool collections were obtained from 6 subjects during each dietary period. For any given subject, stool frequency did not change and stool weights were not different on the pecan than on the control diet (mean  $\pm$  SEM:  $313 \pm 45$  compared with  $251 \pm 53$  g/day). Stool fat and the percentage of fat in stools, however, were significantly greater on the pecan than on the control diet (mean  $\pm$  SEM:  $25.2 \pm 3.8$  compared with  $6.3 \pm 1.0$  g/day,  $P < 0.01$  and  $8.3 \pm 1.1$  compared with  $2.9 \pm 0.5$  %,  $P < 0.001$ , respectively). Also, subjects consuming pecans required more energy to maintain stable body weights. This study suggests that a nut-rich diet does not lead to weight gain. The increased excretion of stool fat may have resulted from lower levels of fat absorption due to the structure of lipid storing granules in nuts or to various nut fiber components.

Funded by National Pecan Shelters Association.