ANTIHISTAMINES - Some piperazine antihistamines were once frequently used as antiemetics in early pregnancy. Animal studies have shown that three commonly used drugs — meclizine (Bonine), cyclizine (Marezine), and chlorcyclizine — are teratogenic in the rat (C. T. G. King et al., J. Pharmacol. Exp. Ther., 147:391, 1965). The severity of these deformities and their frequency, approximating 100 per cent, led to concern about their use in man. Although retrospective studies, including thousands of infants whose mothers had taken these drugs, found no increased incidence of abnormalities, most Medical Letter consultants consider it prudent to avoid them during the first three months of pregnancy. Nausea of pregnancy is more safely managed with small, frequent feedings.

VITAMINS - Excessive quantities of vitamins may harm the fetus. Very large amounts of ascorbic acid are now widely used to prevent and treat colds and other acute respiratory infections. Such high doses taken during pregnancy may cause scurvy in infants when birth abruptly removes them from the high ascorbic acid environment (W. A. Cochrane, Can. Med. Assoc. J., 93:893, 1965). Synthetic vitamin K given in large doses near term can raise serum bilirubin concentration and increase the possibility of kernicterus. High maternal doses of pyridoxine have been implicated in withdrawal seizures in infants (W. A. Cochrane, cited above).

CONCLUSION - Many drugs taken during the first three months of pregnancy are teratogenic. An even greater number produce fetal injury when taken after the first three months or at term. The 1962 Amendment to the Food, Drug and Cosmetic Act requires testing of new drugs in pregnant animals before testing in man, but there is often a difference between teratogenic effects in animals and humans. Drugs that do not produce these effects in several species of animals might still be teratogenic in humans; careful clinical observation over many years is essential to exclude injurious effects. Unless a drug is urgently needed, it should not be administered during pregnancy, especially during the first trimester or close to the time of delivery.