was performed) about their diet, medications, illnesses, family and medical history, and exposure to environmental and occupational agents. They obtained information about the outcome of the pregnancy from the obstetrician (77% of the pregnancies) or the mother. Of the 22,748 women who participated in the study, 339 had babies with birth defects. About one third of those babies (121) had defects that originated in the cranial neural crest, where retinol-related defects might be expected.

The prevalence of cranial-neural-crest tissue defects was 3.5 times higher when dietary and supplemental intake of preformed vitamin A exceeded 15,000 IU than when it was 5,000 IU or less. When only supplemental intake of preformed vitamin A was considered, the prevalence of such defects was 4.8 times higher when the intake exceeded 10,000 IU than when it was 5,000 IU or less. The smoothed exposure-effect curve indicated that the threshold beyond which risk began to rise was a total intake of about 10,000 IU/day. The Recommended Dietary Allowance for women, including women who are pregnant, is 800 retinol equivalents (about 2,700 IU).

Until now, the evidence implicating vitamin A as a human teratogen had consisted largely of evidence of teratogenicity in animals; some information, much of it anecdotal, that considerably larger doses of preformed vitamin A are teratogenic in humans; and the known teratogenicity in humans of retinoids such as isotretinoin. Because β-carotene (a precursor of vitamin A) is "considerably less toxic" than the preformed vitamin, FDA has advised women of childbearing age to choose fortified products that contain vitamin A in the form of β-carotene rather than the preformed vitamin.

It is important that information about folic acid and vitamin A not be confused. Women of childbearing age are encouraged to increase their consumption of folic acid to prevent spina bifida and anencephaly. In an editorial accompanying the vitamin A report, Oakley and Erickson said that one good way for women to meet these requirements is "to take a single, daily multivitamin preparation that contains 0.4 mg of folic acid and no more than 8000 IU of vitamin A."

Oakley and Erickson also called on manufacturers that have not already done so to meet 1987 recommendations from the Centers for Disease Control and Prevention, the Teratology Society, and the Council for Responsible Nutrition: limit the amount of vitamin A in prenatal multivitamins to 5,000-8,000 IU and in all other multivitamins to 10,000 IU; specify the amount of retinol, retinyl esters, and β-carotene on the label; and use β-carotene rather than preformed vitamin A.

Guidelines focus on common substance-use disorders

Alcohol, cocaine, and opioid use disorders are the focus of practice guidelines created by the American Psychiatric Association and published as a supplement to the November 1995 issue of American Journal of Psychiatry.

According to the guidelines, psychiatric management is the "foundation" of the treatment of substance-use disorders. Its objectives are to establish and maintain a therapeutic alliance with the patient, monitor the patient's clinical status, manage intoxica-

Desogestrel, gestodene contraceptives may carry greater thromboembolic risk

Combination oral contraceptives that contain desogestrel or gestodene may carry about a two-fold greater risk of nonfatal venous thromboembolism than do older low-dose combination oral contraceptives, reported FDA. FDA advised women to "discuss these contraceptives with their health care providers and make an informed choice based on the benefits and risks and individual preferences."

The agency did not recommend that women stop using the products.

FDA's conclusion is based on analysis of data from three studies: one sponsored by the World Health Organization, a trial conducted through the Boston Drug Surveillance Program, and a European study coordinated by investigators from McGill University in Canada. Gestodene-containing oral contraceptives are not available in the United States. Desogestrel is marketed in combination with ethinyl estradiol.

According to FDA, the average annual risk of nonfatal venous thromboembolism is 4 cases per 100,000 for healthy women who are not pregnant and not taking hormones, 10-15 cases per 100,000 for women taking older low-dose oral contraceptives, and 20-30 cases per 100,000 for women taking products that contain desogestrel or gestodene.