

Low-fat diet good for big kids, too

Researchers recently reported that infants benefit from a diet low in saturated fat (SN: 3/4/95, p.132). Now, a study shows that a low-fat diet helps prepubertal boys and girls who have high concentrations of cholesterol in their blood.

In the study, 663 children age 8 to 10 took a battery of tests to measure their psychological well-being, blood pressure, and cholesterol and micronutrient concentrations in their blood, report Ronald M. Lauer of the University of Iowa in Iowa City and his colleagues in the May 10 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. The children had a minimum of 175 milligrams of cholesterol per deciliter (mg/dl) of blood.

About half of the children and their families were given only pamphlets on healthful eating. The others received the pamphlets plus frequent group and individual nutritional and behavioral counseling over 3 years. Nutritionists recommended that the children eat less than 150 mg of cholesterol per day and derive no more than 28 percent of their daily calories from fat.

After 3 years, both groups of children had similar, healthy growth rates and similar concentrations of iron in their blood. However, the children receiving intensive counseling saw their so-called bad cholesterol — low-density lipoprotein (LDL) — drop by an average of 15.4 mg/dl. In the group that got no counseling, LDL decreased by an average of 11.9 mg/dl.

The children in the group receiving counseling also had lower rates of depression. The support they received during their group sessions may have helped them with more than their cholesterol readings, the scientists suggest.

Researchers tested the youngsters for depression to see whether the lowered cholesterol had altered their mental health. Studies of adults have indicated that people with very low cholesterol are more apt to suffer from depression and to attempt suicide (SN: 3/11/95, p.157).

Preeclampsia linked to drinking milk

Women who drink less than one glass of whole milk a day or three or more glasses confront a higher risk of developing preeclampsia — pregnancy-related high blood pressure — than women who drink one or two glasses, researchers report.

The findings come from data on the dietary habits and health of 9,291 pregnant women.

A team of scientists collected the data between 1959 and 1966; two other researchers recently reanalyzed those findings to determine the relationship between preeclampsia and milk intake. Barbara Ellsworth Richardson of Texas A&M University in College Station and Donna Day Baird of the National Institute of Environmental Health Sciences in Research Triangle Park, N.C., report the results of their reanalysis in the April AMERICAN JOURNAL OF EPIDEMIOLOGY.

While it's probably the extra fat that causes preeclampsia in the milk lovers, low calcium may be responsible for the condition in women who drink less than a glass, Richardson and Baird contend.

Previous studies had suggested that dietary fat may change the concentration of lipids or other compounds in the blood that help trigger the "cascade of adverse vascular changes associated with preeclampsia" (SN: 6/13/92, p.390), Richardson and Baird note.

Other researchers have shown that giving women low-fat supplements that contain more calcium than four glasses of milk does not increase their risk of developing preeclampsia, they note.

The finding of preeclampsia among women who drink little milk supports studies showing that increasing calcium intake lowers blood pressure, Richardson and Baird add.

About 20 to 30 percent of women of reproductive age still drink whole milk, the authors report.

Lisa Seachrist reports from San Francisco at the annual meeting of the American College of Obstetricians and Gynecologists

Cyberdoc explains medical procedures

Imagine an attentive, caring physician taking half an hour to make sure you fully understand the risks of a medical procedure you're facing, as well as possible alternatives to it. Sound like a blast from the past in this era of managed care? No, it's more like the wave of the future, thanks to information technology. An interactive computer system unveiled last week may make your next visit to the doctor a multimedia experience.

The system, known as the Patient Advise and Consent Encounter (PACE), enlists touch-screen technology, animation, and an actor-doctor narrator to guide patients methodically through the biology and risks of 13 different obstetric and gynecologic procedures. PACE also describes alternative treatments. Topics include vaginal birth after cesarean section, tubal ligation, and breast lumps.

Like a CD-ROM encyclopedia, PACE allows patients to skim over familiar topics yet explore in more detail areas they don't understand. At the end of each section, the narrator gives the patient an "interactive quiz" to ensure that she comprehends both explored and unexplored topics. Finally, both the patient and the physician get a printout of the entire session.

The physician's printout "alerts the doctor to any types of inconsistencies or indications that the patient really didn't understand either the condition or the procedure so that she can make a truly informed consent," says Larry P. Griffin, director of program services for the American College of Obstetricians and Gynecologists. PACE enhances physician-patient communications, a prospect that Griffin says could significantly decrease the number of malpractice suits brought against these medical specialists.

At least one major malpractice insurer agrees. Physicians who employ PACE in their practices get a 5 percent discount on their premiums from P.I.E. Mutual of Cleveland. Given that incentive, physicians may be eager to introduce their patients to the newest cyberdoc.

Hot, humid days trigger premature labor

Can those languid, steamy, sticky days of summer trigger labor in pregnant women? Although the proposition sounds like an old wives' tale, Shoghag Lajinian, chief resident at the SUNY Health Science Center of Brooklyn, N.Y., was sure she saw more women in premature labor during the hottest, most humid days of the year.

To test her observation, she checked the New York heat and humidity index for every day from January 1993 to February 1994 and compared it to the number of women who entered preterm labor. She found that women at risk for preterm labor were twice as likely to begin contractions during the hottest period as during the coldest period of that year.

Several earlier studies in rabbits by other researchers indicated that heat and dehydration increase blood concentrations of the contraction-inducing hormone oxytocin and the antidiuretic hormone (ADH). "My study doesn't show that this is happening in women, but it is something we should look at," says Lajinian.

In the meantime, she cautions women at risk of preterm labor to avoid excessive heat and drink plenty of fluids to prevent dehydration.



Patient touches PACE screen to explore treatment options.