‘Marker’ may help detect breast cancer

NEW IN MEDICINE

Marilyn Dunlop

The leader of a Toronto research team is working with a Canadian company to devise methods for detecting early breast cancers by using a protein known as PSA as a marker.

Prostate specific antigen is a clear marker of prostate cancer. But researchers at the University of Toronto have found that it also appears in about a third of breast cancer tumors in women.

Breast cancer patients who produce the protein live longer and are at less risk of relapse than those who do not, researchers report in the Canadian Journal of Clinical Biochemistry.

Team leader Dr. Eleutherios Diamandis of Toronto Western Hospital adds that, in test tubes, breast cancer cells can be stimulated to produce PSA.

“This tissue culture system could be used to test the efficacy of anti-cancer agents and possibly aid in the design of new anti-tumor drugs,” he says.

Prenatal Nutrition: The women’s health centre at St. Joseph’s Hospital in Toronto is providing prenatal nutrition support so babies will have a better chance of attaining normal weight by the time they are born.

Pregnant women visit the centre once a week for two hours, during which time they receive milk, orange juice, nutritional snacks, food supplements and informal health education, according to a report in Ontario Medicine.

It says the program, funded to the tune of $538,900 by Health Canada, has proven cost-effective. The total cost per woman for 22 weeks is $422.72, whereas the care needed for one low birth weight infant on average adds up to $80,000.

Food and Drugs: People taking anti-clotting drugs, such as warfarin, should avoid excessive consumption of green leafy vegetables, according to the Canadian Pharmaceutical Journal.

It says greens such as turnip greens, brussels sprouts, broccoli, spinach, alfalfa, cabbage, lettuce, asparagus, kale, peas, watercress and green tea are high in vitamin K, which can play a role in reversing the effects of anti-clotting drugs.

Also, women taking birth control pills are advised to avoid large amounts of caffeine, especially before bedtime. Oral contraceptives increase the effect of caffeine and may overstimulate the nervous system, the journal says.

According to the publication, the effect of food on drugs is often overlooked, forgotten or not taken seriously.

Dioxin Link: Endometriosis may be linked to exposure to dioxin, according to a report in Scientific American.

Endometriosis is a painful condition in which tissue from the lining of the uterus grows in other areas of the body, such as the bladder or intestine. It affects one out of 10 women in their childbearing years.

Research in Florida showed that 79 per cent of females in a colony of rhesus monkeys exposed to dioxin, an industrial pollutant, developed endometriosis. Severity depended on exposure.

Scientists at Health and Welfare Canada have also found that many female rhesus monkeys exposed to PCBs (polychlorinated biphenyls, related to dioxin) developed endometriosis, the report says.

Scientists don’t know how dioxin might cause endometriosis, but animal studies have shown it disrupts the immune system. And, says the report, researchers are increasingly convinced the pollutant acts like a hormone, often mimicking estrogen. Endometrial cells respond to the menstrual cycle, building up as estrogen levels increase.

Marilyn Dunlop’s column appears Saturdays.