Artichokes: Possible Cancer Fighter?

A compound derived from the milk thistle family of plants—which includes artichokes—may help prevent sun-related skin cancer. When rubbed on the skin of hairless mice prior to ultraviolet light exposure, the compound silymarin appears to prevent the redness and swelling associated with sunburn. It also significantly decreased the number of skin cancers in the areas it was applied. So far, researchers have only tested the artichoke nectar on mice, but results suggest that this compound should be tested on humans.

A New Role For Dentists

A recent study suggests routine dental X rays can reveal an important indicator of the patient's vulnerability to stroke. X rays can show calcium deposits in the carotid arteries, a sign of advanced atherosclerosis, a major cause of stroke. This research gives dentists a frontline role in stroke prevention.

Women and Words

Women have long been known for their verbal skills, and new findings may explain why. An Australian study determined that the speech-and-language-related portions of the brain may be proportionately larger in women than in men. Researchers compared healthy brain sections acquired from the autopsies of ten men and eleven women ranging in age from forty-six to ninety-two. The volume of the brain sections were measured by individuals who did not know the age and sex of the deceased person. As expected, the men's brains tended to be larger because men are generally bigger than women. But the size of two key speech-related brain regions were the same in both men and women, meaning that, proportionately, the female sections were 20 to 30 percent larger. These findings suggest an anatomical reason why women often test higher in verbal fluency, verbal memory, and some fine motor skills.

No More Shots?

Imagine a drug delivery system so effective that, in the future, shots may be rendered obsolete. Research is under way on drugs encased in plastic "microspheres," which are coated with special biodegradable materials that stick to the intestinal wall and allow time-released drugs to dissolve slowly into the bloodstream. The tiny spheres deliver drugs made of large molecules, which usually have to be administered by injection. The microspheres could be a welcome new technology for people who must endure frequent shots for conditions such as diabetes, allergies, or infertility. They may also be useful for chemotherapy in cancer patients, in the treatment of ulcers and other intestinal disorders, and to prevent blood clots.

Two Developments in Bladder Infection Prevention

Researchers have developed a vaccine that may help prevent urinary tract infections (UTIs), a painful condition that is experienced by half of American women at some point in their life. In a recent study, a vaccine made of a molecule found on E. coli, the bacteria responsible for 85% of bladder infections, was injected into mice and reduced the amount of bacteria in the bladder 100 to 1,000 times. The vaccine is now being tested on monkeys, but clinical trials are needed to determine if it will be effective in humans.

Another study has found that a special vaginal suppository might also be effective as a vaccine to help prevent recurrence of UTIs. The suppository contains inactivated bacteria that, when applied directly on the vaginal lining, can activate the immune system. In a clinical trial of women with repeated cases of UTIs, those who received three vaginal suppositories at weekly intervals had fewer UTI recurrences than women given placebos.

Gender Differences in Bingeing

Binge eating is a problem for both men and women, but they seem to be doing it for different reasons. A recent survey of 1,100 patients in weight-loss programs reports that women tend to binge when they are angry or sad, or they use food as a source of comfort when alone and depressed. Obese men were found to binge in positive social situations when celebrating or encouraged by others to eat. The findings could have important implications for designing gender-specific treatment strategies.