Absolving Caffeine

Coffee and caffeine do not increase breast-cancer risk, according to one of the most definitive studies on the subject to date. Researchers at Harvard School of Public Health and Harvard Medical School measured the dietary habits of 85,987 women periodically for 22 years, during which time 5,272 women developed breast cancer. There was no increase in breast-cancer risk among women who regularly drank four or more cups of caffeinated coffee per day or consumed at least 700 milligrams of caffeine daily from food and drinks; older (postmenopausal) women with high caffeine consumption even had a small (12 percent) decrease in risk. "I believe that coffee has nothing to do with breast cancer, and women should not be avoiding it because of breast-cancer risk," says Ganmaa Davaasambuu, lead author of the study. This does not mean that coffee is completely benign, she adds—excess caffeine can cause other side effects, such as irritability and difficulty sleeping. Also, of course, "caffeine is addictive," she points out, so variable intake can cause withdrawal symptoms.

Skin Transformer

Old skin can become young again, scientists have shown. Dermatologists identified a gene that drives aging in human and mouse cells; when they deactivated it in the skin of aged mice, the skin became youthful-looking again within two weeks. Evidently, aging is a process that can be switched on and off, says Howard Y. Chang, assistant professor of dermatology at Stanford University. These mice were bred with an altered version of the gene that could be manipulated by the application of a particular cream; now scientists have to figure out how to achieve a similar result in humans, which might take five to ten years. Also, the long-term consequences of blocking the gene are unknown, Chang cautions. For now, he advises staying out of the sun and using sunscreen, since UV light is a major activator of the gene in the skin.

Cigarettes and Sleep

There's a newly discovered downside to smoking: It leads to restless sleep. In a study of 40 healthy smokers and 40 non-smokers of similar age and weight, the two groups slept for the same amount of time, but smokers had higher levels of brain activity during sleep and reported feeling less rested during the day. "In the absence of any other medical conditions, sleep is still impacted by smoking," says Naresh M. Punjabi, associate professor of medicine and epidemiology at Johns Hopkins University. Nicotine may affect the sleep-wake cycle, causing stimulation early in the night (when levels of it are high) and mild withdrawal later (when levels are low), he says. Poor sleep impairs mood, functioning, and health—and may make it harder for smokers to quit, he says. In fact, getting more sleep is associated with higher rates of smoking cessation, a different study has shown. Punjabi says that future research could determine whether appropriately timing the delivery of nicotine-replacement therapy could improve quitters' chances of success by preventing withdrawal and improving sleep quality.