

A new study by Harvard researchers in Botswana found that women can take the anti-AIDS drug, Nevirapine, to protect their unborn children without endangering their ability to undergo life-saving antiretroviral treatment later on.

Researchers from the Institute for Regenerative Medicine in North Carolina recently reported that freely floating cells in the amniotic fluid of pregnant women have the same traits as embryonic stem cells, including an ability to grow into brain, muscle and other tissues that could be used to treat a variety of diseases.

“Evidence-based medicine”, a phrase and process devised by a team of researchers from McMaster University in 1991, has been listed as one of the 15 greatest medical breakthroughs since 1840 by British Medical Journal.

Researchers at the Massachusetts Institute of Technology have found that taste preferences changed when informed of a secret ingredient prior to consumption. Subjects were given two beers to taste, a regular draft and another with a few added drops of vinegar. When unaware of the vinegar,



60% of the participants preferred the altered beer. Even upon discovering the addition of vinegar, their preference remained. However, when told there was vinegar before consumption, only a third of the participants preferred the modified drink. The study showed that taste experiences were influenced by their expectations.

Pre-menopausal women who eat 30g of fibre a day have half the risk of breast cancer compared to those who eat only 20g. Researchers from the University of Leeds believe that fibre affects body processes and regulation of estrogen. To consume 30g of fibre, a person would have to eat high-fibre cereal, brown or wholemeal bread and have at least five portions of fruit and vegetables a day.

A team led by Dr. Sabina Lim in South Korea has tested acupuncture therapy on mice with symptoms of Parkinson's disease, such as loss of dopamine. Almost 80% of dopamine was retained in mice treated by acupuncture whereas the control group lost about half of their original dopamine levels. Conclusive experiments in human models have yet to begin.

British scientists have injected sequences of DNA into an egg to modify the chicken chromosomes. This allows the new, genetically modified chickens to lay eggs

containing pharmaceutical compounds. This procedure will hopefully allow the production of eggs with extra nutritional value.

Researchers from Germany, Britain and Japan were able to predict decisions of the human mind through the use of functional magnetic imaging. Patterns of the brain were analyzed by computer programs to reveal specific thoughts and intentions. These brain scans will hopefully be of use to help paralyzed individuals communicate.

Yale University researchers recently discovered that lack of sleep may prevent the growth of new brain cells. In a study comparing rats that were deprived of sleep for 72

changes mood, sexual arousal, physiological arousal and brain activation in females.

The FDA has approved the first over-the-counter drug for weight loss which is a less potent dose of the prescription drug, Xenical. It supposedly allows an extra two to three pounds of weight loss for every five pounds lost by means of diet or exercise. Critics argue that this 'quick fix' is unlikely to solve America's obesity problem.

An estimated 40 million people in the U.S. receive care from physicians who do not feel that they have to disclose treatment options that they themselves find objectionable. This suggests that patients wanting information or access to controversial medical

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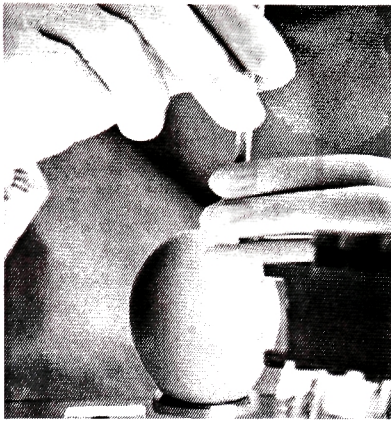
hours versus rats that were not, there were significantly fewer new brain cells in the hippocampus region and elevated corticosterone levels in the sleep-deprived rats.

University of California, Berkeley researchers have discovered that the scent of male sweat raises cortisol levels in females. Cortisol is important for maintaining arousal and a sense of well-being, in addition to other stress-related functions. The study compliments earlier findings that andrastiedone, which is found in male sweat,

treatments and procedures need to proactively question their physicians in order to receive full disclosure.

UK researchers have successfully demonstrated in mice models the phenotypic reversal of the mutant MECP2 gene, which is the cause of Rett Syndrome (RTT) - a syndrome similar to autism. The mice regained normal breathing, mobility, gait, and various electrophysiological functions of the brain. Researchers anticipate that these findings may facilitate the development of therapies that will reverse the neurological damage in

children and adults with RTT, as well as autism and other related neuropsychiatric disorders.



Researchers at McGill University have found that new drugs for the treatment of diabetes and obesity also combat certain types of breast cancers. The drugs counteract the key gene present in 40 percent of breast cancers by suppressing the PTP-1B enzyme, which is overactive in all three ailments.

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The Governor of Texas, Republican Rick Perry, has signed an order making Texas the first state in which it is mandatory that girls at the age of 11 years receive Gardasil; the vaccine against the HPV virus which is responsible for causing cervical cancer. Various conservatives and parents' rights groups argue that this vaccination condones premarital sex and contradicts the way in which they parent their children.

Preliminary results in a study of Ugandan men show that male circumcision is effective in the prevention of HIV. Men who are circumcised decrease their chances of acquiring the infection by over

50 percent. Researchers believe that the foreskin is susceptible to tears and ulcers which act as entry points for this virus. Circumcision is projected to save over 3 million lives in the next 20 years, however, there are many cultural barriers to implementing this procedure.

An ongoing, six-year Greek study found a correlation between taking midday naps and reduced risk of coronary disease. The researchers looked at over 20,000 men and women between the ages of 20 and 86 and found a 30-minute nap led to a 64% reduced risk of heart attack among workers and a 36% reduced risk among non-workers.

A recent study by London's Portland Hospital has confirmed that changing hormone levels during a woman's menstrual cycle makes them more prone to injury. Near the middle and end of their cycle, women's estrogen levels, a hormone which is responsible for muscle and ligament tissue strength, drop dramatically and often lead to back pain. This information will help women, particularly female athletes, plan their schedule according to when they are most vulnerable to pain and aid them in avoiding injury.

Since the birth of Dolly, there has been explosive interest in the process of cloning animals through the Same Nuclear Transfer Technique. Despite scientists continuing efforts, the efficiency of cloning is still depressingly low. Scientists have demonstrated that the use of keratinocytes as opposed to cumulus cells increases the efficiency of the Same Nuclear Transfer Technique by more than fourfold in male mice (5.4% vs 1.2%).

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PRIVATE HEALTHCARE: PANACEA OR PRELUDE TO DISASTER

It has been my experience in recent years that the mere mention of "private" healthcare can send Canadians into a tizzy. For many Canadians, our "public" healthcare system is a symbol of our underlying values of equality and fairness and any major infusion of private care would be courting disaster by creating a "two-tier" system (one for the rich and one for the poor). For other Canadians, our healthcare system is broken and in desperate need of repair. These individuals see the private marketplace as an obvious solution to our healthcare woes. They believe that the competition associated with enhancing private care will lead to shorter wait times, greater consumer choice, and generally a more efficient system. Many Canadians are passionate about the issue of "public" versus "private" since it confronts their core values. But issues in life are rarely black and white and the entrenchment of views is often exacerbated by commonly held misconceptions. This appears to be the case in the current healthcare debate.

One misconception is that more private care will automatically result in a better system. While market mechanisms can be powerful in achieving efficiency, the reality is that, for numerous reasons, the characteristics of healthcare markets leave them far from the market ideal. For example, it is exceedingly difficult for most individuals to assess the quality of services or to "exit the market" when they are not happy with services provided. Despite this, the lure of the marketplace has been so strong that countries continue to look for market-based solutions for their healthcare problems in the face of growing evidence that many of these initiatives have produced underwhelming results.

Another misconception is that the Canadian healthcare system is "public" while the American system is "private". In actuality, both are mixed systems which embrace elements of public and private financing and service delivery. Recent estimates of the public/private mix for financing of health services are approximately 70/30 in Canada and 40/60 in the United States. Canada has a long history of "private" healthcare. Many Canadians have private insurance to cover the cost of drugs and dental care; healthcare providers frequently operate private "for-profit" practices; and most of our hospitals are actually private (albeit not-for-profit) organizations which operate with "public" funding.

Much of the debate about "privatization" is really about the provision of "for-profit" care. Since healthcare primarily falls within provincial jurisdiction, we have some variation among the rules for providing for-profit healthcare across the country. Private healthcare is neither a panacea nor is it something to be feared and Canadians would benefit from a shift from discussing public versus private to focusing on a more nuanced discussion of the relative mix of public and private within our healthcare system.