



Short takes

Usable news & tips & items of interest

Diana Swift

The case of the...

Infertile fertile woman

A 28-year-old woman sought medical help after she had unsuccessfully tried to conceive a child for two years. A pelvic examination found her to be normal, and she had no history of menstrual abnormalities. Her periods were regular, with the minor cramping and mood changes experienced by many women during menstruation. She enjoyed normal sexual relations, and routine tests indicated that she was ovulating. In addition, her 29-year-old husband had been tested and found to have normal amounts of healthy sperm. What's the diagnosis?

Endometriosis After several more months of unsuccessful attempts to conceive, the woman underwent laparoscopy for unexplained infertility. This internal imaging procedure found

widespread adhesions of escaped uterine tissue and scarring on and around her ovaries and Fallopian tubes, which were likely preventing the uptake of sperm and perhaps the release of eggs. Endometriosis may be signalled by abnormal bleeding as well as severe pain during menstruation and/or sexual intercourse. This patient had silent endometriosis unaccompanied by symptoms. The adhesions were removed by laparoscopic surgery and the woman eventually became pregnant.

Eat this Brown rice



Brown rice is rice that has had only the outer hull removed, leaving the nutritious brown-coloured bran skin and the germ intact. This makes it a whole grain, which has more nutrients than its stripped and refined white counterpart. Brown rice is naturally rich in valuable minerals such as magnesium, selenium, manganese and zinc. The natural oil in rice bran has been shown to lower bad LDL cholesterol. Brown rice is also a good source of dietary fibre: one cup (250 mL) of cooked brown rice has about four grams of fibre, versus less than one gram for the same amount of white rice. While it takes longer to cook than white and is not as fluffy, it has a nutty flavour and a stick-to-your-ribs texture. Consuming whole grains such as brown rice has been linked to a lower risk of obesity, diabetes, colon cancer and heart disease.

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Your Medical IQ

Superfetation is...

- 1 A chemical process in which a wetting agent reduces the surface tension in a liquid — often used in antibacterial sanitizers
- 2 The excessive saturation of the blood with fats
- 3 The conception of another fetus by an already-pregnant woman in a post-conception ovulation
- 4 The imposition of PET scan images over CT scan images to determine how fast a tumour is growing

ANSWER: 3
An extremely rare condition in which a woman ovulates again after becoming pregnant. Another egg is fertilized and she conceives an apparent twin of a different development in her uterus. Superfetation occurs normally in some animals.

Immune tune-up



While it's important to get your seasonal flu shot, don't forget to keep up your regular immunizations. Vaccination is not just for kids — it's a lifelong process to protect you against serious infections. For example, all Canadian adults should maintain their immunity to tetanus and diphtheria with a booster shot every 10 years, as immunity to these diseases wears off after that time. These shots can now be combined with the pertussis (whooping cough) vaccine. Authorities recommend that you have the pertussis shot once, at the same time as one of your 10-year tetanus-diphtheria boosters. The pneumococcal vaccine is recommended for all those over age 65. Those travelling outside North America, excluding Mexico and western Europe, should consider vaccination against hepatitis A and B. All adults — especially females of child-bearing age — who have never had chicken pox need to be vaccinated for varicella (chicken pox) as this infection can cause serious complications in pregnancy. Contact your local public health department for its recommended immunization schedule and a list of vaccines provided free of charge by your province. For more information, call your local office of public health, or go to www.phac-aspc.gc.ca and click on Immunization & Vaccines.

Green insulin injection

ClikSTAR is a new offering in the line of reusable insulin pens. The sanofi-aventis product makes it easier to replace an insulin cartridge and select the right dose. "It offers flexibility and comfort. It's easy to load, easy to set up and very smooth in dialing up your dose," says Stacey Horodezny, RD, a Toronto-based diabetes educator. A reusable injector is a good choice when patients have the time to change cartridges. Preloaded pens provide a complementary option for times when patients are on the go. Ask your diabetes care provider for more information.





Tick-tock Talk

Are environmental and lifestyle factors tangibly more important than your genes in the ticking of the age clock — at least in terms of your face? Quite possibly, according to a 2009 report in the journal *Plastic and Reconstructive Surgery*. Led by Dr. Bahaman Guyuron, chair of the department of plastic surgery at University Hospitals, Case Western Reserve University, in Cleveland, the study team interviewed 186 pairs of identical male and female twins at a twins festival. Provided with digital images of the twins, a review panel scrutinized the photos, noting differences in facial features, perceived age and factors associated with an older appearance. The following environmental factors were seen to trump identical genetics when it came to the face.

- **The twin who smoked appeared older — and the longer he had smoked, the clearer the difference.**
- **The sibling who had more sun exposure, engaged in more outdoor activities or avoided sunscreens appeared older.**
- **In female twins, hormone therapy was associated with a younger look, including more abundant hair.**
- **In twins younger than age 40, a body mass index (BMI) of four points higher was associated with an older appearance, but a younger appearance after age 40. A BMI of eight points higher was associated with an older look under age 55 but a younger look thereafter.**

Other parameters linked to an older appearance were alcohol and antidepressant use (sagging facial muscles?) as well as divorce. Divorced twins were rated as looking two years older than their single, married or widowed counterparts (stress?).

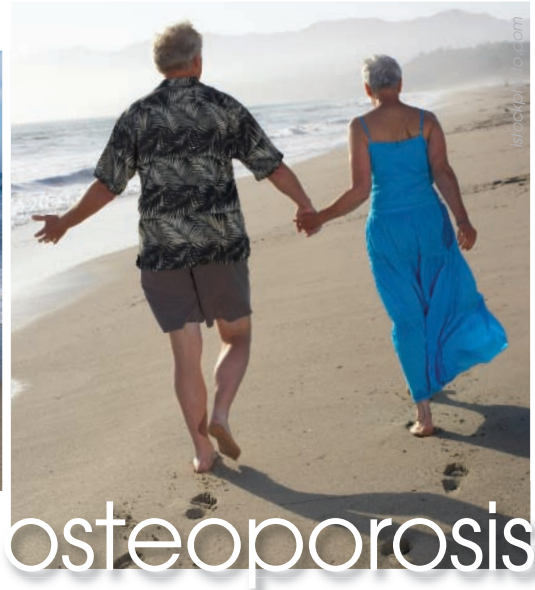


Child abuse drives cancer

Childhood physical abuse is associated with higher rates of cancer in adulthood, according to a University of Toronto study. Reporting in the journal *Cancer*, researchers found an almost 50% higher than normal risk of cancer in adulthood in people abused as children. “Few talk about childhood physical abuse and cancer in the same breath,” says Esme Fuller-Thomson, an associate professor in the faculty of social work and the department of family medicine at the University of Toronto. “This research provides important new knowledge about a potential childhood abuse-cancer relationship.”

The link remained significant even after researchers took into account three other major risk factors that can also raise cancer risk. These include other childhood stressors such as poverty and parental death or separation, unhealthy adult health behaviours (smoking, physical inactivity, alcohol consumption) and low socio-economic status in adulthood.

“One important avenue for future research is to investigate abnormalities in the production of cortisol — the hormone that prepares us for fight or flight,” says study co-author Sarah Brennenstuhl. Cortisol, which the body produces in response to stress, can suppress the immune system and make it less able to detect and destroy cancer cells. This psycho-physiological component could play a role in the abuse-cancer relationship. The role of stress is being investigated in the development of breast cancer.



PharmaNews

Monthly medication for osteoporosis

Health Canada has approved a new option for the treatment of postmenopausal osteoporosis: once-a-month risedronate sodium (Actonel) tablets. Patients now have the convenience of taking the bisphosphonate risedronate in a single 150-milligram tablet on the same calendar day of each month. In a study of almost 1,300 women, the monthly dose had similar benefits and side effects to those of the daily five-milligram dose. The new dose appeals to women with active lives who wish to minimize the inconvenience of

having to stand or sit upright for 30 minutes after taking their bisphosphonate. “The monthly option costs the same and it's easier. Patients are more compliant because they only have to remain upright for one hour once a month to prevent pain and reflux,” says McMaster University rheumatologist Dr. Rick Adachi. Bisphosphonates are antiresorptive drugs that slow or stop the dissolving of bone tissue. They can improve bone density and reduce fracture risk.

Winter sun care

The whole world may be hibernating, but the sun's ultraviolet (UV) rays are definitely not. Even in sub-zero temperatures, they can harm your skin, especially when encountered at high altitudes or reflected off of snow or ice. So in addition to moisturizing your skin to counteract the cold dry outdoor air and its arid indoor counterpart, you still need to think sunscreen.

“In winter, if there is sunlight and you add elevation — UV radiation increases as you go up

in altitude — you can get sunburnt,” says Dr. Jason Rivers, a Vancouver-based dermatologist. While the tanning and burning UVB rays are lower in winter, the deep-penetrating UVA rays stay the same year-round. Rivers suggests using an SPF moisturizer and makeup, and before a day on the slopes or trails, applying an SPF 30 or higher sunscreen and an SPF lip balm.

And while you're at it, don't forget your hands. With influenza-conscious Canadians washing



and disinfecting their mitts more often, the risk of dry chapped hands and eczema rises. So apply a thick unscented cream to still-damp hands.