

Race against time: Childhood obesity

It's of no surprise to anyone who has skimmed through the newspaper, glanced at the evening news, or simply snuck a peek at passersby that the people who make up this great province are getting wider and heavier. Recognizing this as more than a mere problem, numerous reports have been issued detailing the extent of our "obesity crisis," including our very own *Child & Youth Growth Index: BCMA Feasibility Study*. Government reports tell us we have a "national crisis" that calls for a "national response," and the topic even has its own organization and accompanying website called the Canadian Obesity Network. We know this is serious stuff.

In 2004 (the latest year we have data for), nearly one-quarter (23.1%) of adult Canadians aged 18 or older were obese. The 2004 obesity figure was up substantially from 1978/1979, when Canada's obesity rate was 13.8%. The good news is that Canada's adult obesity rate is significantly lower than that in the United States, which is 29.7%. More good news: British Columbia has the lowest combined overweight and obesity rates among adults in Canada at about 45%. However, this number is nothing to applaud.

Obese individuals tend to have sedentary leisure-time pursuits and consume more high-fat, high-sodium foods and less fruits and vegetables. As body mass index (BMI) increases, so does an individual's likelihood of reporting high blood pressure, diabetes, and heart disease. In BC, about 2000 citizens die prematurely each year due to obesity-related illnesses.

What I find startling and am very concerned about is that in British Columbia 51 000 children (7%) aged 2 to 17 years were classified as obese and 138 500 (20%) as overweight in 2004. Children are our future and this

should give us cause to worry.

The proportion of obese children has tripled in the last 25 years in Canada. In 2009, a Statistics Canada study said that Canadian children—regardless of sex or age—are "taller, heavier, fatter, and weaker than in 1981."

We know that childhood obesity is a strong predictor of adult obesity—and that can lead to serious health issues such as heart disease, hypertension, many different kinds of cancer, and type 2 diabetes.

If we want to protect our children from becoming obese—and we must—then we have to come to terms with the kind of lifestyles they are leading. In my pediatric practice I am surprised by the number of adolescents who do not participate in regular sporting activities. My mantra has always been that each young person should play one sport and participate in one activity that keeps them active. It's vitally important.

Among those kids who are physically active, the amount of time they spend kicking a soccer ball, hitting a puck, or riding a bike is less than 7 hours a week—far less than the 30 hours each week on average that Canadian teens spend online or watching TV.

To make it worse, children are eating processed food, restaurant food, and junk food. Over time this will have a serious impact on their quality of life, and will be an added strain on our health care system. Societal and economic costs are huge and are predicted to increase.

I also worry about the stigma attached to obesity. Overweight teens (and adults) often feel they are discriminated against and regarded as lazy, sloppy, self-indulgent, and blamed for their excess weight. As well, being obese can become part of their

personal identity, something they struggle with throughout their lives, which can result in poor mental and emotional health, including depression.

In March of this year, the provincial and federal governments jointly initiated a dialogue on childhood obesity in an effort to find out where the problems lie, how endemic obesity is in this country, and the best ways to tackle it. On the one hand, it's great that these two levels of government are uniting for this important endeavor, but on the other hand, much study has already been undertaken by all levels of government. To be fair, government is also acting, albeit in a somewhat fragmented way, not just "dialoging." A few years ago, the federal government implemented a number of programs including ParticipACTION, a national strategy to promote physical activity and sport participation; the Children's Fitness Tax Credit, a form of tax relief for parents with kids in sport activities; and a requirement that nutrition labeling be posted on packaged goods. Now there is a push for menu items in restaurants—both upscale and fast food—to be clearly labeled with ingredients and calorie list. Provincially, we have ActNowBC, programs through BC Parks and Recreation, and other health- and fitness-related programs through the health authorities.

As doctors, we need to do our part. The *CMAJ* has a very in-depth guideline called "2006 Canadian clinical practice guidelines on the management and prevention of obesity in adults and children" (www.cmaj.ca/content/suppl/2007/09/04/176.8.S1.DC1/obesity-lau-onlineNEW.pdf) that contains 26 chapters on specific aspects of obesity prevention and management applicable for physicians.

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- Only 40% of patients who arrived within 3.5 hours of symptom onset received a CT or MRI scan within an hour of arrival.

The study, titled “The Quality of Stroke Care in Canada,” includes data from all health jurisdictions in Canada, and examines the quality of stroke care provided in emergency response, in-hospital care, and in rehabilitation and recovery.

The study can be viewed at www.canadianstrokenetwork.ca.

New genetic mutations discovered in lymphoma study

Scientists at the BC Cancer Agency and Simon Fraser University have uncovered information that could help oncologists prevent non-Hodgkin lymphoma.

A team of 50 BCCA scientists discovered 109 genes with recurring mutations while sequencing the whole genomes of more than 100 diffuse large B-cell lymphoma tumors. They identified 26 of the repeatedly mutated genes as contributors to non-Hodgkin lymphoma based on their mutation patterns. Prior to this study, no one knew that more than two-thirds of the newly identified mutated genes were linked to lymphoma.

Oncologists hope the newly discovered genetic information will advance clinical and research collaboration on preventing the growth of non-Hodgkin lymphoma.

The journal *Nature* has published the study online at www.nature.com/nature/journal/vaop/ncurrent/full/nature10351.html.

Correction

In the In Memoriam article for Dr Gordon Keith Heydon published in the July/August issue (*BCMJ* 2011;53:301), Dr Heydon’s year of birth was listed incorrectly. Dr Heydon’s correct birth date is 15 November 1929. The *BCMJ* apologizes for this error. —Ed

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We need to be able to benchmark childhood obesity levels in this province so that we’ll know if our programs are having the desired effect. Immediate and strategic actions need to be taken, and BC doctors must work with their patients, community groups, and

government to reverse the obesity trend. If not, we’ve heard numerous times now, our kids may be the first generation to have a shorter life span than their parents. I hope we physicians will play a leading role in helping our overweight and obese patients become healthier.

—**Nasir Jetha, MD**
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on a number of factors, such as the fitness cost of resistance in that species.^{4,5} It will likely take more time to see any real impact, but reducing the selective pressure for these organisms is necessary immediately.

Among the provinces, BC has the second lowest rate of prescription of antibiotics in humans (Quebec has the lowest rate). We are on the right track, but still have a long way to go. The areas where we can likely have the biggest impact right now are decreasing the use of antibiotics for acute URTI, and avoiding the use of antibiotics in older patients with asymptomatic bacteriuria. Reserving the use of respiratory fluoroquinolones for severe refractory illness is crucial to preserve the utility of this important class of drugs.

As the medical community works to reduce unnecessary antibiotic prescribing in humans, efforts are also being directed toward collaborating with the agricultural industry to reduce overuse of antibiotics in a viable way in that sector too.

To assist in explaining the differences between viruses and bacteria to patients, and to support appropriate management of respiratory tract infections, the Do Bugs Need Drugs? program has developed print

material resources that can be ordered free of charge. For more information, or to order material, please visit www.bccdc.ca/dbnd.

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