

Who is the bad apple?

Re: Canadian medical students want more nutrition instruction, News Aug. 4.¹ This survey couldn't come at a better time. Despite what many developed countries are calling the 'obesity epidemic,' more and more physicians seem stumped when it comes to giving nutritional advice. Dr. Geneviève Moineau, associate dean of undergraduate medical education at the University of Ottawa, points out that many health issues can either be prevented or treated through proper nutrition. Why, then, is nutrition not integrated into each and every module of medical students' training?

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For the full letter, go to: www.cmaj.ca/cgi/eletters/181/3-4/133#169264

DOI:10.1503/cmaj.109-2017

Acetaminophen and asthma

I must congratulate Padmaja Subbarao and colleagues for their elegant review, Asthma: epidemiology, etiology and risk factors¹. But they missed covering acetaminophen as an etiological cause of asthma in both adults and children. Several studies have shown a relationship between acetaminophen consumption and presence of asthma. For example, Cohet and colleagues² studied the association between infections in children aged 0 to 4 years and medications used (antibiotics and acetaminophen) and the subsequent presentation of asthma at age 6 to 7; the authors observed that the use of acetaminophen in the first year of life was weakly associated with wheezing, asthma, rhinitis, and eczema. In their prospective study, Barr and colleagues³ found that acetaminophen use was associated with the presence of newly diagnosed asthma among women. Several mechanisms have been postulated that

may explain the possible risk of asthma with acetaminophen use. The main mechanism involves glutathione, which is a potent antioxidant found in lung tissue. Acetaminophen has shown to lower serum glutathione levels in healthy volunteers.⁴ A second possible mechanism is thought to be acetaminophen's lack of inhibition of the enzyme cyclooxygenase, the key enzyme involved in the production of prostaglandins playing a major role in the inflammatory cascade in asthma.⁵ Finally, an emerging hypothesis involves the possible antigenic effect of acetaminophen and subsequent rise in IgE and histamine levels with exposure to acetaminophen.⁶

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3. Barr RG, Wentowski CC, Curhan GC, Somers SC, et al. Prospective study of acetaminophen use and newly diagnosed asthma among women. *Am J Respir Crit Care Med* 2004;169:836-41.
4. Nuttall SL, Khan JN, Thorpe GH, et al. The impact of therapeutic doses of acetaminophen on serum total antioxidant capacity. *J Clin Pharm Ther* 2003;28:289-94.
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6. De Paramo BJ, Gancedo SQ, Cuevas M, et al. Acetaminophen (acetaminophen) hypersensitivity. *Ann Allergy Asthma Immunol* 2000;85:508.

For the full letter, go to: www.cmaj.ca/cgi/eletters/cmaj.080612v1#201684

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The authors' response:

We would like to thank Dr. Singh for his comments and his in-depth review of the acetaminophen and asthma literature.¹ As in any review, it is difficult to address all possible risk factors and we attempted to link data that was causally linked in multiple studies with incident asthma. The meta-analysis by Etminan et al.² published earlier this year provides a comprehensive overview of the

studies associating acetaminophen and asthma risk. As per the overview, the evidence is mounting that acetaminophen use is linked to increased rates of asthma but to date little evidence is available to suggest that acetaminophen is actually causing asthma. Of particular note is the absence of a consistent data between prenatal acetaminophen use and asthma development. As mentioned in the Etminan article, at this point there are many potential confounders such as viral infection which may in part explain this finding. Careful further study may help to elucidate the role of acetaminophen in the development of incident asthma.

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1. Singh A. Acetaminophen and asthma. *CMAJ* 2009. DOI:10.1503/cmaj.109-2026
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For the full letter, go to: www.cmaj.ca/cgi/eletters/cmaj.080612v1#207256

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H1N1-related SIRS?

Much of the journalism concerning H1N1 influenza virus continues the simplistic infectious disease model that it is a virulent virus which can be managed with handwashing and vaccination.¹ The infectious disease model suggests that lower standards of living and medical care explain these disparities. A more plausible explanation is available. The response to H1N1 may be one of two types: severe inflammatory response syndrome (SIRS) versus mild influenza. It has been known for years that distinct populations behave differently after organ transplantation. One of the mechanisms proposed for this difference is the

type of immune response mustered. Is the development of SIRS with H1N1 a Th2 phenomenon and could it explain the susceptibility of pregnant women and Aboriginal or Mexican populations to this complication? The cytokines produced in the Th2 response have been implicated in the development of SIRS.² The type of immune response a person has on contact with H1N1 determines the outcome and it may be that a Th2 or similar response heralds severe complications. It is to be hoped that a reduction in incidence of H1N1 influenza with vaccination will compensate for any change in the rate of H1N1-related SIRS. Science would have been preferable to hoping-for-the best but it is too late for that now.

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For the full letter, go to: www.cmaj.ca/cgi/eletters/181/6-7/E102#191579

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Spain and swine flu

In Spain, physicians have joined a "common sense and self-control" policy concerning swine flu. The movement started Aug. 10 as an initiative of Dr. Juan Gérvas (www.equipocesca.org) and has been joined by the Spanish Medical Association (representing about 200 000 physicians) and blogs belonging to health care professionals. It is important to raise awareness of the common sense position and reach out to society, to counter a campaign of panic, hype and disease mongering. Even though it is a more contagious flu, swine flu is a milder disease than seasonal flu. This means that the enforcement of strict protocols (with its para-

phernalia of astronaut-like suits and isolation areas) and of measures such as closing down schools and universities are absurd and reveal a lack of common sense, self-control and scientific foundations. The diversion of financial resources toward a minor problem is potentially damaging, because it drains the energy of the health system and neglects all other important health problems that will continue to afflict society.

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Tiago Villanueva, family medicine
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1. Hébert PC, MacDonald N. The H1N1 vaccine race: Can we beat the pandemic? *CMAJ* 2009. DOI:10.1503/cmaj.091560

For the full letter, go to: www.cmaj.ca/cgi/eletters/cmaj.091560v1#186710

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Bedbugs and health

Re: Severe anemia from bedbugs, Practice Sept. 1.¹ As a pest controller in the poorest postal code with the highest drug abuse problem in Canada, I am often called in to deal with residences of alcohol and drug abusers. After seeing hundreds of these cases, I came to the theory that the bedbug could affect their physical health. I felt that this could be unfounded as I am not a medical professional. I know that one case does not prove the matter but this should lead to investigation into the situation. Bravo for the observational skills of the doctor and the fact that the home of the patient was actually visited, for clinic visits are generally prepared for and we do lie to our doctors.

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REFERENCE

1. Pritchard JM, Hwang SW. Severe anemia from bedbugs. *CMAJ* 2009; 181:287-288.

For the full letter, go to: www.cmaj.ca/cgi/eletters/181/5/287#183461

DOI:10.1503/cmaj.109-2018

Correction

In the appendix to a Sept. 15 research article on home births,¹ the headings for the two columns on planned home births had been reversed. The revised appendix is available at www.cmaj.ca/cgi/content/full/cmaj.081869/DC2.

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1. Janssen PA, Saxell L, Page LA, et al. Outcomes of planned home birth with registered midwife versus planned hospital birth with midwife or physician. *CMAJ* 2009;181(6-7):377-83.

DOI:10.1503/cmaj.109-2030

Correction

A News article "Ontario's law curbing the cost of generic drugs sparks changes," published online Aug. 4, incorrectly identified the executive director of the Canadian Pharmacists Association as being Jess Poston. The executive director is Jeff Poston. The same story also identifies the association's Blueprint for Pharmacy as a "draft" document when, in fact, it is the association's final version, not a draft.

REFERENCE

1. Silversides A. Ontario's law curbing the cost of generic drugs sparks changes for pharmacies and other Canadian buyers. *CMAJ* 2009; 181:E43-45.

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Letters to the editor

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