

because of elevated mercury levels thought to be due to environmental or workplace exposure, those levels were instead due to dietary intake.<sup>5</sup> Health Canada, in May 2001, recommended that such fish be consumed not more than once per week.<sup>6</sup>

Environmentally acceptable levels of mercury are based on what would be unlikely to cause health effects even in high-risk situations such as pregnancy. Nonetheless, in this era of cholesterol anxiety, many health professionals encourage seafood consumption. Physicians need be aware that toxic mercury levels can result when exposure occurs at higher than recommended levels.

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## Cesarean trends

In commenting on the study by Eason and colleagues<sup>1</sup> Scott Farrell appears to have inferred from their findings that there is support for elective cesarean birth as a way of reducing the risk of anal incontinence after vaginal delivery.<sup>2</sup> We disagree with his interpretation. Furthermore, from a public-health perspective this line of argument is alarming.

Eason and coworkers showed a cumulative incidence of fecal (3.1%) and flatal (25.5%) incontinence. However, these figures include the category "less than once weekly" — a category of du-

bious clinical significance and, likely, one associated with little disruption to quality of life.

Nonetheless, we agree with Farrell that obstetricians and mothers should take an explicit risk-benefit approach when discussing the option of cesarean delivery. We recently studied 8327 consecutive births by women resident in Hong Kong. We found that cesarean section compared to normal vaginal delivery was a risk factor for not initiating breast-feeding (adjusted odds ratio [OR] 1.52, 95% confidence interval [CI] 1.34-1.73) and for breast-feeding less than 1 month (OR 1.25, 95% CI 1.00-1.56), and remained a significant hazard against total breast-feeding duration (hazards ratio [HR] 1.16, 95% CI 1.04-1.30).<sup>3</sup> Although it is generally recognized that most mothers recover from birth-related pelvic injury within months of giving birth, the adverse health and developmental effects for infants due to low breast-feeding rates persist well into childhood and adolescence.<sup>4</sup>

The global epidemic of cesarean section is a matter deserving international attention. For instance, Hong Kong's caesarean section rate rose rapidly from 22% in 1993 to 27.4% in 1999, benchmarked against the WHO's recommended upper limit of 15%.<sup>5</sup> We must not allow the upward trend to continue, certainly not based on inappropriate extrapolation and interpretation of data collected for another purpose.

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#### [The author responds:]

Leung and colleagues raise 3 issues: 1) that my conclusions concerning the protective effect of cesarean section for anal incontinence were based upon the article by Eason and colleagues,<sup>1</sup> 2) that concerns about the detrimental effect of cesarean birth on breast-feeding rates should carry greater weight with women than concerns about pelvic floor injury associated with vaginal birth, particularly assisted vaginal birth, and 3) a global epidemic of cesarean delivery currently exists and must be curbed.

In fact, Eason and colleagues' study did *not* find that cesarean section afforded any protective effect from anal incontinence. I took issue with this conclusion based on evidence from our own prospective study as well as from the work of other authors.<sup>2</sup> In a study involving 690 women, we found that forceps delivery was associated with a higher incidence of both flatal (RR 2.6) and fecal (RR 3.6) incontinence when compared to cesarean delivery. On the other hand, elective cesarean delivery appears to protect the anal continence mechanism by preserving muscle strength as well as anal sphincter size.<sup>3</sup> Although occasional flatal incontinence is unlikely to have a significant impact on quality of life, fecal incontinence has serious sequella.<sup>4</sup>

Faced with a choice between a trial of forceps and cesarean delivery, women must weigh the risks and benefits of these alternatives. Modern cesarean delivery in controlled circumstances is a very safe procedure for both the mother and the fetus. Forceps delivery, on the other hand, while associated with a low risk of fetal trauma, has a significant maternal risk of both short- and long-term sequelae from pelvic trauma. Faced with the choice between cesarean and forceps delivery, would a woman consider a 16% in-