

## Drug use in pregnancy: resources and recommendations

An article in the March 2010 issue of *Canadian Family Physician*<sup>1</sup> correctly identifies the *Compendium of Pharmaceuticals and Specialties (CPS)* as “the most frequently used reference for evaluating safety when prescribing medication to pregnant women in Canada.” The article, written by Law et al of the Motherisk team, might mislead readers about the content of the *CPS*. Indeed “[the *CPS*’s] contents are legal product monographs provided by the manufacturers.”<sup>1</sup> The product monographs include the Food and Drug Administration’s pregnancy risk categories because Health Canada requires that information; it is not a requirement of the *CPS*.

The Canadian Pharmacists Association (CPhA) recognized the need for better information regarding the management of pregnant and breastfeeding women many years ago and has taken steps in the *CPS* and in our other publications to address this void. In addition to the manufacturer-supplied monographs, the *CPS* includes 140 nonproprietary monographs compiled by editorial staff at the CPhA. These CPhA monographs provide the best available evidence on many widely used drugs, and are peer reviewed by Canadian experts. Each CPhA monograph contains a section on pregnancy and breastfeeding; all monographs are indexed and easily identified throughout the *CPS*. The Clin-Info section includes a document authored by Motherisk physicians, which provides the principles of prescribing during pregnancy and drugs of choice during pregnancy.

Further, the CPhA publishes *Therapeutic Choices*, a peer-reviewed Canadian reference manual based on the best available evidence on treatment options for common medical conditions. The sixth print edition—tentatively set for release in the spring of 2011—will include information on pregnancy and breastfeeding in most chapters. A new section will discuss the effects of the condition on pregnancy, the effects of pregnancy on the condition, and the management of the condition during pregnancy.

*Patient Self-Care*, another CPhA publication for health care professionals, addresses the treatment of minor ailments and includes an appendix about the treatment of many self-care conditions in pregnancy. These articles are authored by a Motherisk specialist. The second edition of *Patient Self-Care* is due for release in August 2010.

Publications by the CPhA are also available to subscribers online at [www.e-therapeutics.ca](http://www.e-therapeutics.ca), where content is regularly updated. For example, the new pregnancy and lactation information from *Therapeutic Choices* has already been added to several topics. Other regular updates include revisions to drug monographs, new products, and Health Canada advisories.

The CPhA provides more than Health Canada-approved product monographs. Our comprehensive print and online resources represent the CPhA’s commitment to providing the most complete, accessible, and relevant drug and therapeutic information for Canadian health care professionals. We encourage our readers to look further within *CPS*, *e-CPS*, and *e-Therapeutics* when seeking relevant information regarding drug use during pregnancy.

—Carol A. Repchinsky

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### Reference

1. Law R, Bozzo P, Koren G, Einarsen A. FDA pregnancy risk categories and the *CPS*. Do they help or are they a hindrance? *Can Fam Physician* 2010;56:239-41.

## Industry-sponsored egg supplement

I am very disappointed that a previous issue of *Canadian Family Physician (CFP)* was coupled with a supplement of the *International Journal of Clinical Practice*.<sup>1</sup> The supplement was supported by an “educational grant” from the Egg Farmers of Canada, the Canadian marketing agency for eggs (many of us are familiar with their “get cracking” advertising campaign), which represents a billion dollar Canadian industry.<sup>2</sup>

With this type of endorsement, *CFP* has become an advertising tool, using the sophisticated marketing technique of a medical journal as a vehicle for industry promotion. As a result, it is Canadians who will suffer confusion and ill health as they are misled into thinking that eggs are a harmless food.

The supplement was called “A Review of the Harvard Egg Study.”<sup>1</sup> It reviewed the egg consumption of a subpopulation in the Nurses’ Health Study from the 1980s and 1990s, which was published under the title “A Prospective Study of Egg Consumption and Risk of Cardiovascular Disease in Men and Women” in the *Journal of the American Medical Association (JAMA)* in 1999.<sup>3</sup> The study’s authors were affiliated with the Harvard School of Public Health; hence, it has been dubbed the “Harvard Egg Study,” a savvy title from this industry-supported publication.

The review states that “consumption of up to seven eggs per week is congruent with a healthy diet.”<sup>1</sup> It further espouses that cholesterol intake is not likely a significant cause of cardiovascular disease, and questions the strength of data regarding cholesterol from the Framingham Heart Study.<sup>1</sup>

Buried in the back of this thick supplemental issue is an article entitled “Dietary Cholesterol and Other Nutritional Considerations in People with Diabetes,”<sup>4</sup> which reports that subgroup analysis of the “Harvard Egg Study” population showed egg consumption as indeed harmful to patients with diabetes, even at the low levels described in the study. Somehow, the

word egg was left out of the title of an article demonstrating eggs' deleterious effects in those with diabetes—another interesting choice by the editors of this supplement supported by the egg marketing agency.

This is not the first advertisement by the Egg Farmers of Canada. The April 2009 issue of *CFP* had a full-page ad referring to the same study. This ad quoted negative findings in people without diabetes but made no mention of the harm in people with diabetes.

The *JAMA* study evaluated egg consumption at very low levels—only 1 to 7 eggs per week—and still managed to discover negative effects in people with diabetes. It would also be relevant to know the effects of higher egg consumption. Owing to lack of power, higher doses of egg consumption were excluded from the final results. Further, it might be unlikely that eggs alone are a contributor to heart disease and cancers. The more interesting question would be about animal-based foods in combination, compared with a healthy plant-based diet. Here is a quote from the final *JAMA* study, which refers to the null results among the non-diabetic study group:

One potential alternative explanation for the null finding is that background dietary cholesterol may be so high in the usual Western diet that adding somewhat

more has little further effect on blood cholesterol. In a randomized trial, Sacks et al found that adding 1 egg per day to the usual diet of 17 lactovegetarians whose habitual cholesterol intake was very low (97 mg/d) significantly increased [low-density lipoprotein] cholesterol level by 12%. In our analyses, differences in non-egg cholesterol intake did not appear to be an explanation for the null association between egg consumption and risk of [coronary artery disease]. However, we cannot exclude the possibility that egg consumption may increase the risk among participants with very low background cholesterol intake. Also, we have limited power to examine the effect of high egg consumption (eg, 2 eggs per day).<sup>3</sup>

There are other medical and nutritional studies published about eggs. Why would *CFP* promote only this particular industry-sponsored review, which quotes the original article but does not express its limitations? A more lucid presentation of the original article would be better. I have listed some other articles and studies on eggs and nutrition in the reference list below.<sup>5-10</sup> These include the famous study by Ornish et al published in *JAMA* 1998,<sup>9</sup> and a publication of the Food and Agricultural Organization of the United Nations<sup>10</sup> regarding the effects of terrestrial animal agriculture

(the document is massive, but the executive summary is worth a read). I believe that the Ornish et al<sup>9</sup> study is the first human study that shows coronary artery plaques can be reversed, and a plant-based diet is a cornerstone of this clinical trial. It is time that nutrition, health, and issues such as the environment are considered in concert.

In the future, I hope that *CFP* will take such factors into consideration regarding industry-sponsored publications and nutritional information. I hope that an equal emphasis will be given to the many studies from reputable journals that discuss the benefits of plant-based diets.

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### References

1. Constance C, editor. A review of the Harvard Egg Study. *Int J Clin Pract* 2009;63(Suppl 163):1-57.
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10. Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, de Haan C. *Livestock's long shadow. Environmental issues and options*. Rome, Italy: Food and Agriculture Organization of the United Nations; 2006. Available from: <ftp://ftp.fao.org/docrep/fao/010/a0701e/a0701e00.pdf>. Accessed 2010 Jun 10.

## Correction

In Dr Leiva's letter "Death, suffering, and euthanasia," which appeared in the June 2010 issue,<sup>1</sup> reference number 17 was incorrect. The reference should have appeared as follows:

17. Sheldon T. Dutch politicians are under pressure to hold "time to die" debate. *BMJ* 2010;340:c1045. DOI: 10.1136/bmj.c1045.

### Reference

1. Leiva RA. Death, suffering, and euthanasia [letter]. *Can Fam Physician* 2010;56:528-30.

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