



## STAFF REPORT INFORMATION ONLY

### A Guide to Eating Fish for Women, Children and Families

<b>Date:</b>	April 7, 2008
<b>To:</b>	Board of Health
<b>From:</b>	Medical Officer of Health
<b>Wards:</b>	All
<b>Reference Number:</b>	

#### **SUMMARY**

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A September 2006 Toronto Public Health (TPH) report, *Fish Consumption: Benefits and Risks for Populations Vulnerable to Methylmercury*, discussed the need to provide fish consumption information for women of childbearing age (especially pregnant and breastfeeding women) and young children (1 to 4 years of age). The current report introduces *A Guide to Eating Fish for Women, Children and Families*, the new fish consumption resource developed as a follow up to the 2006 report. The information is presented in both a brochure and wallet card which will be available in print and on the TPH website (see <http://www.toronto.ca/health>).

The new resource refines the fish consumption advice to women, children and families. It carefully balances messages about the nutritional benefits of fish while letting people know about risks from contaminants and how to minimize these. It also highlights very low mercury fish species which may be eaten frequently. This is important information for everyone while also meeting the needs of Toronto's diverse ethno-racial communities with a strong cultural preference for eating fish. This resource also incorporates new information including: 1) the new Canada's Food Guide fish consumption recommendations and serving size; and 2) new Health Canada data on mercury levels in fish.

TPH staff worked collaboratively with other interested health units through the Ontario Public Health Association and consulted with Health Canada. The main purpose of these consultations was to ensure more consistent messages across public health agencies on the risks and benefits of fish consumption.

## **Financial Impact**

There are no financial implications resulting from the adoption of this report beyond what has already been submitted in the 2008 Operating Budget.

## **DECISION HISTORY**

At its meeting of September 14, 2006, the Board of Health considered a staff report titled, *Fish Consumption: Benefits and Risks for Populations Vulnerable to Methylmercury* ([http://www.toronto.ca/health/hphe/fish\\_mercury.htm](http://www.toronto.ca/health/hphe/fish_mercury.htm)). Through that report, Toronto Public Health committed to expanding and refining its guidance on fish consumption based on existing as well as new and emerging evidence. This commitment is important in light of the need to better inform vulnerable populations on how to minimize mercury intake from fish, particularly for those populations that eat fish frequently.

The Medical Officer of Health recommended that TPH report back to the Board of Health to introduce the new public resource on fish consumption and describe its important features.

## **ISSUE BACKGROUND**

Fish consumption is an integral component of individual and community culture and preferences. Consuming fish brings health benefits and risks that vary according to the fish species, size and cultivation method as well as the amount and frequency with which it is eaten. While there are a number of contaminants of concern in fish, the main focus of most risk reduction messages is on limiting methylmercury.

Some population groups are more vulnerable to the risks from contaminants from consuming fish than others. The negative health effects from methylmercury are documented largely in studies that have looked at the effects in children whose mothers ate fish frequently during pregnancy. For that reason, the fish consumption advice from most public health agencies focuses on women of childbearing age, pregnant women or women who are planning a pregnancy, breastfeeding women and young children ages 1 to 4 years. TPH also recognizes that individuals and communities that consume fish more frequently than is typical for the general population of Canadians may also be at increased risk.

Local public health units continue to explore ways to best inform people about the contaminants, mainly methylmercury, which may be found in fish. In Ontario, the provincial Ministry of Environment monitors and raises public awareness of the contaminants in fish caught in Ontario lakes and rivers. There has been a gap however, in terms of the public's awareness of methylmercury levels found in many store-bought fish. In Ontario, work by the Region of Waterloo Public Health and a subsequent resolution by the Ontario Public Health Association (OPHA), both in 2004, provided the basis for fish consumption recommendations to women of childbearing years and young children. At the time, these recommendations differed from those of Health Canada (dated 2002) and 2004 advice from the United States Environmental Protection Agency. In 2006, Toronto Public Health reported on its assessment of benefits and risks of fish consumption among these vulnerable subpopulations.

## COMMENTS

Since the release of the September 2006 report *Fish Consumption: Benefits and Risks for Populations Vulnerable to Methylmercury*, information from the report was provided to all TPH Registered Dietitians, Community Nutrition Assistants, frontline public health nursing staff and Family Home Visitors. Staff comments concerning the challenges of delivering messages on the risks and benefits of fish consumption for clients from diverse communities were captured. Finally, staff refined the fish consumption messages and developed *A Guide to Eating Fish for Women, Children and Families*. The fish consumption advice is presented in both a brochure and a wallet card. The information is aimed specifically at the most vulnerable, but provides broader information about fish choices for families. The new brochure and wallet card are available on the Toronto Public Health website (see: <http://www.toronto.ca/health>).

## TPH Fish Advice Incorporates New Information

The new TPH resources and revised advice incorporate the following new information:

- New advice from the 2007 *Eating Well with Canada's Food Guide* (Canada's Food Guide) that encourages Canadians to eat at least two servings of fish each week
- The new Canada's Food Guide Serving size (or suggested portion size) of 75 grams for the Meat and Alternatives food group
- Extensive data on mercury levels in a wide range of fish species purchased at stores in Canadian cities released by Health Canada in 2007

The key messages and approach were developed by Toronto Public Health in collaboration with other Ontario health units including York Region Health Services Department, Peel Region Public Health and others, convened through the OPHA's Environmental Health Workgroup. Consultations with Health Canada were also helpful in developing the resource.

## New Advice Supports the Needs of Toronto's Fish Consumers

TPH fish consumption advice now provides information for over 80 fish species. The consumption advice is organized into three categories of consumption frequency including "eat often", "eat sometimes" or "avoid or eat rarely". The "eat often" category was specifically developed to highlight the safe choices of fish to support the new Canada's Food Guide advice of eating at least two servings of fish a week.

One important and unique feature of the TPH resources is that good fish species choices for people who eat fish every day are highlighted in the "eat often" category. TPH and other Ontario public health units must provide advice helpful to many groups in the community who eat a great variety of fish species and who enjoy fish in their diet much more frequently than the average Canadian. Frontline staff have specifically identified that fish messages geared to support those who eat fish frequently will serve Toronto's diverse ethno-racial communities better and will best protect their health.

The new TPH fish consumption advice also integrates information on levels of polychlorinated biphenyls (PCBs), the content of omega-3fats, as well as ecological or sustainability concerns, allowing consumers to make fully informed choices about their fish consumption. Few, if any, fish consumption resources that aim at reducing risk include all of this information in one place.

### **Consumption Advice on Canned Tuna Acknowledges its Importance**

Canned tuna was identified in the 2006 report as requiring special attention since it is the most commonly consumed fish. White canned tuna (made from the Albacore tuna species) is generally much higher in mercury than light canned tuna which is usually made from the Skipjack tuna species. TPH staff indicated that they frequently counsel pregnant women whose only source of fish is canned tuna. Taste and preference are strong determinants of willingness to eat fish. Giving women the tools to continue to enjoy the fish that they prefer in the appropriate amount and frequency of consumption is important to ensure they gain the nutritional benefits from fish, particularly during pregnancy.

The messages on eating canned tuna are simplified in the new TPH public resource. Light canned tuna is included in the “eat often” category for all vulnerable groups. This means young children can eat two Canada’s Food Guide Servings (75 grams) per week and women in their childbearing years can eat four servings or about 2.5 cans per week of light tuna<sup>1</sup>. In contrast, white canned tuna is listed in the “eat sometimes” category which means young children can eat 1 to 2 servings per month and women in their childbearing years can eat 2 to 4 servings (or up to 2.5 cans) per month.

### **Key Messages and Next Steps**

In conclusion, the new fish consumption advice focuses on the following key messages or objectives:

- Encouraging fish consumption and supporting the new Canada’s Food Guide message of consuming at least two fish servings per week
- Guiding the public, especially the vulnerable subgroups in the population, towards fish species with lower levels of mercury
- Encouraging consumption of a variety of fish species
- Providing useful advice to frequent fish eaters, including specific advice for people who eat fish daily
- Identifying safe consumption patterns for a diversity of fish species to better promote the health assets of Toronto’s varied ethno-racial communities
- Maintaining consistency of messages among a number of health units in Ontario

The new fish consumption resource greatly improves the information available to TPH staff and to the public. A Question and Answer (Q and A) resource for the public is also available from the TPH website along with an expanded list of fish species and how often they can be eaten. The public is encouraged to contact TPH to speak to a Registered Dietician if they have more questions.

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<sup>1</sup> A typical can of tuna is 120 grams (drained weight) which equals 1.6 Canada’s Food Guide servings.

Through the OPHA, TPH is working with its health unit partners to document the scientific rationale for the common fish consumption messages. This will allow other Ontario health units interested in adopting this fish advice to better understand the interpretation of evidence and the consensus process. In addition, a journal publication, directed at other health professionals who work with pregnant women, such as physicians and midwives, is being proposed in collaboration with external colleagues.

TPH will share this information with the Toronto Nutrition Network, the Nutrition Resources Centre of the Ontario Public Health Association, EatRight Ontario, Ontario Society of Nutrition Professionals in Public Health (OSNPPH), Dietitians of Canada (DC), Canadian Prenatal Nutrition Coordinators and the Ontario Early Years Centres. Through the Canadian Partnership for Children's Health and Environment, TPH will share its resources with the Ontario College of Family Physicians, the Canadian Child Care Federation and environmental non-governmental partners. TPH will also continue to work with other Ontario public health units and will provide input to Health Canada as they further develop their risk communication messages on fish for Canadians.

## **CONTACT**

Josephine Archbold  
Research Consultant, Environmental  
Protection Office  
Toronto Public Health  
Phone: 416-338-8082  
Fax: 416-392-7418  
Email: [jarchbo@toronto.ca](mailto:jarchbo@toronto.ca)

Loren Vanderlinden  
Supervisor, Environmental Protection  
Office  
Toronto Public Health  
Phone: 416-338-8094  
Fax: 416-392-7418  
Email: [lvander@toronto.ca](mailto:lvander@toronto.ca)

Dr. Rosana Pellizzari  
Director, Planning and Policy  
Toronto Public Health  
Phone: 416-392-7463  
Fax: 416-392-0713  
Email: [rpelliz@toronto.ca](mailto:rpelliz@toronto.ca)

## **SIGNATURE**

Dr. David McKeown  
Medical Officer of Health