INFORMATION REPORT

TO:	Mayor and Members Board of Health
COMMITTEE DATE:	June 13, 2016
SUBJECT/REPORT NO:	Feasibility of Peanut Restrictions in City Facilities (BOH16024) (City Wide)
WARD(S) AFFECTED:	City Wide
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Council Direction:

On November 25, 2015, Council directed staff to:

a) Report to the Board of Health respecting a study of the impact of food allergies on publicly owned facilities in the City of Hamilton; and

b) That staff consult with Dr. Doug Mack, Anaphylaxis Section Head, Canadian Society of Allergy and Clinical Immunology, respecting peanut-free City owned facilities and to report back to the Board of Health.

Information:

Impact of Food Allergies on Publicly Owned Facilities in the City of Hamilton

In terms of the number of people who have food allergies in City of Hamilton facilities, there is only data specific to participants in registered programs at its recreational centres. In 2015, of the 29,505 registered participants, 76 (0.258%) had self-identified nut allergies. All 76 were less than 19 years of age. Other self-reported food allergies included dairy (22), eggs (15), shellfish (11), fish (9), berries (7) and other (45). There is no data for those in drop-in programs or in rental facilities.

At a population level, an estimated 6.7% of Canadians report to having a food allergy (7.12% of children and 6.58% of adults) (Soller L et al. 2012). The top five reported allergies in this survey for children were: milk, peanuts, tree nuts, eggs and shellfish.

For adults they were: milk, shellfish, tree nut, wheat and peanuts. Overall (adults and children), 1% reported to have an allergy to peanuts and 1.2% reported to have an allergy to tree nuts.

Over the past five years, there has only been one reported case of severe allergic reaction requiring a 911 call at City-owned facilities recreational centres and arenas. The cause of this reaction was unknown. There have been no reported cases of anaphylaxis at Tim Horton's stadium.

Consultation

Public Health Services (PHS) consulted with Ian Thompson, the spouse of Melissa Thompson who provided the public delegation to better understand the request for a peanut-free City facility.

PHS consulted with Dr. Susan Waserman (McMaster University), Laurie Harada (Food Allergy Canada) and Dr. Doug Mack to better understand the risk of anaphylaxis due to accidental exposure of peanut and nut-containing products, the evidence that does and does not exist regarding peanut restrictions.

PHS consulted with the City of Hamilton's Recreational Department, Public Works manager of Tim Horton's field and representatives of the Hamilton Tiger-Cats regarding the feasibility of not selling products containing peanuts/nuts.

PHS consulted with the City of Hamilton's Legal Department regarding the legal feasibility of peanut-free City of Hamilton facilities.

Definition and Scope

Mr. Ian Thompson indicated that his family's request for peanut and nut-free City-owned facilities was for the City of Hamilton to not sell products that knowingly contain peanuts or tree nuts. This meant products where peanuts or tree nuts were contained in the ingredient list. This did not include products that "might" or "may contain peanuts". Furthermore, Mr. Thompson acknowledged that it was not possible to have "zero-risk" and also acknowledged that the City would not be realistically expected to enforce other members of the public from bringing in such products.

Given that the motion at Board of Health and at Council was initiated due to the family's delegation, this report will focus on the feasibility of eliminating sales of products that have peanuts or tree nuts in its ingredient list, in City-owned facilities.

Feasibility of Eliminating Sales of Products with Peanuts or Tree Nuts in its Ingredient List:

1) Tim Hortons field: As food is sold through a third-party provider through a lease agreement with the Hamilton Tiger-Cats, the City of Hamilton cannot restrict sale of peanuts and nut containing products at Tim Hortons field, as it does not have jurisdictional authority.

   The Hamilton Tiger-Cats state that they are committed to providing an accessible environment for everyone, including Guests with specific health conditions such as peanut allergies. They have taken steps in reducing the risk of peanut exposure such as eliminating the sale of both shelled peanuts and peanut inclusive chocolate bars. However, they feel that completely eliminating the sale of all peanut products limits the available choices for all fans and can have a negative impact on their game day experience.

   Guests with specific allergies, such as peanut allergies, are encouraged to contact their Guest Services prior to attending and advise them of the seat location. Their Housekeeping and First Aid staff will be informed of the guest's seat location and will do their best to minimize the impact of other guests who may be eating peanuts in that area.

   While the Tiger-Cats are happy to apply their efforts to try and accommodate guests with allergies, they encourage all guests with severe allergies to take the necessary precautions and come prepared with personal medications.

2) City of Hamilton recreational centres and arenas sell peanut and nut-containing products through both their vending machines and arena concession stands. There is an estimated annual loss in revenue of $26K if products known to contain peanuts and nuts were no longer sold. This does not include restricting products that "may contain peanuts" and does not account for revenue from any product substitution.

   If the City of Hamilton chooses to eliminate food products containing peanuts or tree nuts, the most feasible option would be to start with a one-year pilot with four facilities. This would allow evaluation of the revenue impacts and acceptability/contractual obligations to its current and future vendors.

Lack of Evidence Regarding Restricting Peanut/Nuts

No professional allergy association recommend public food restrictions as a necessary measure. Some suggest that they are an option in a class-room setting. However, there is an overall lack of evidence regarding the effectiveness of restricting peanut/nuts.

The overall risk of anaphylaxis due to accidental exposure to peanuts/nuts is very low and primarily due to oral ingestion. No severe nor fatal cases of allergic reactions due to accidental airborne exposure to peanuts or nuts have been reported. In general, potential self-reported cases of airborne reactions to peanuts/nuts are typically mild.

Two studies have looked at the different type of exposures of peanuts and either level/type of reactions or measured levels of peanuts.

In one study (Simonte et al. 2003), a group of children with significant peanut allergy underwent double-blind, placebo-controlled, randomized exposure to peanut butter by either touch (0.2mL pressed to intact skin for one minute) or inhalation (for 10 minutes). The only reaction was a mild local reaction from those who touched the peanut butter. Inhalation did not produce any reactions. There were no systemic reactions for either group.

In another study (Wainstein et al. 2007), participants were asked to consume different types of peanuts (shelled, non-shelled, peanut butter) and then measured levels of airborne peanut protein. The measured levels were below detection, even after participants walked on the discarded peanut shells.

Even in settings where a complete ban exists, products containing the allergens are still present. For example, in an audit of school lunches where peanuts was banned, 0.6% of lunches were still found to contain peanuts (Banerjee et al. 2007). Thus, zero risk is not feasible.

Other Contextual Considerations

Though it is feasible to restrict/eliminate the sale of products that are known to contain peanuts or tree-nuts in recreational centres, this would only theoretically reduce, but not eliminate the risk of anaphylaxis due to accidental exposure of peanuts or tree nuts due to contamination.

Finally, if sales of products containing peanuts or tree nuts were eliminated to try to reduce the risk of anaphylaxis, this could lead to additional requests to eliminate other products containing milk, eggs, shellfish, etc. for similar reasons.

For these reasons, PHS does not recommend eliminating the sale of products known to contain peanuts or tree-nuts.

References

L. Soller et al. Overall Prevalence of Self-reported Food Allergy in Canada. Journal of Allergy and Clinical Immunology (2012).

Simonte SJ, Ma S et al. Relevance of casual contact with peanut butter in children with peanut allergy. J Allergy Clinical Immunology; 112:1 (2003).

Wainstein BK, Kashef S et al. Frequency and significance of immediate contact reactions to peanut in peanut-sensitive children. Clinical and Experimental Allergy; 37. (2007).

DK Banerjee et al. Peanut-free guidelines reduce school peanut contents. Arch Dis Child; 92 (2007).