



Undeclared Peanuts in Hummus - April 1, 2014 to March 31, 2015

Food allergen - Targeted surveys



Summary

Targeted surveys provide information on potential food hazards and enhance the Canadian Food Inspection Agency's (CFIA's) routine monitoring programs. These surveys provide evidence regarding the safety of the food supply, identify potential emerging hazards, and contribute new information and data to food categories where it may be limited or non-existent. They are often used by the CFIA to focus surveillance on potential areas of higher risk. Surveys can also help to identify trends and provide information about how industry complies with Canadian regulations.

Food allergies can affect people of all ages but are particularly common in children. Food allergens can represent a serious or life threatening health risk for allergic individuals. Allergens can be found in food due to their presence in the raw ingredients or they can be accidentally introduced along the food production chain due to cross contamination. Regardless of the source of the allergens, industry must ensure that the food produced is safe for human consumption, either by complying with specific Canadian regulations where applicable or by keeping the levels as low as reasonably possible.

The main objective of this survey was to obtain baseline information regarding the presence and levels of undeclared peanut in hummus products. 200 samples were tested, and none were found to contain undeclared peanuts.

Any positive results found with these surveys are forwarded to the CFIA's Office of Food Safety and Recall (OFSR) to determine if the levels found would pose a health concern to allergic individuals. The extent of the follow-up actions taken by CFIA is based on the seriousness of the contamination and the resulting health concern as determined by a health risk assessment.

What are targeted surveys

Targeted surveys are used by the CFIA to focus its surveillance activities on areas of higher health risk. The information gained from these surveys provides support for the allocation and prioritization of the Agency's activities to areas of greater concern. Targeted surveys are a valuable tool for generating information on certain hazards in foods, identifying and characterizing new and emerging hazards, informing trend analysis, prompting and refining health risk assessments, highlighting potential contamination issues, as well as assessing and promoting compliance with Canadian regulations.

Food safety is a shared responsibility. The CFIA works with federal, provincial, territorial and municipal governments and provides regulatory oversight of the food industry to promote safe handling of foods throughout the food production chain. The food industry and retail sectors in Canada are responsible for the food they produce and sell, while individual consumers are responsible for the safe handling of the food they have in their possession.

Why did we conduct this survey

Food allergens are food proteins that can cause a reaction of the body's immune system, and can represent a serious or life threatening health risk for allergic individuals. Reactions to food allergens depend on the individual's sensitivity and can range from mild to severe or life threatening. Interestingly, the degree of reaction in an individual can vary from day to day. This makes proper identification and labeling of allergens in food by the manufacturer essential.

Approximately 7% of Canadians have self-reported as having at least 1 food allergy, but the actual number of medically confirmed food allergies is expected to be slightly lower¹. It is believed that the rate of food allergies is increasing, particularly among children. Food allergies are currently estimated to affect up to 5% of adults and up to 8% of children in developed countries².

The priority food allergens are the ten most common food components associated with severe allergic or allergy-like reactions in Canada. These allergens consist of peanuts, tree nuts, sesame, seafood (fish, shellfish and crustaceans), eggs, milk, soy, mustard, sulphites, and wheat³.

Undeclared allergens can be found in foods due to their presence in the raw ingredients, or can be accidentally introduced along the food production chain through cross contamination. Regardless of the source of the allergens, industry must ensure that the food they produce is safe for human consumption. This can be achieved by complying with specific Canadian regulations where applicable, or by keeping the levels as low as reasonably possible.

This was the first survey conducted by the CFIA for undeclared peanuts in hummus products. The main objective of this survey was to obtain baseline information regarding the presence and levels of peanuts in chickpea-based dips and spreads. A wide variety of types and flavours of hummus were sampled for this survey. All products were tested "as sold," meaning that they were not prepared as per manufacturer's instructions or as they would typically be consumed.

What did we sample

Hummus products were sampled between May 2015 and March 2016. Samples were collected from local/regional grocery stores located in 6 major cities across Canada. These cities encompassed 4 geographical areas: Atlantic (Halifax), Quebec (Montreal), Ontario (Toronto, Ottawa) and the West (Vancouver, Calgary). The number of samples collected from these cities was in proportion to the relative population of the respective areas.

A total of 200 chickpea-based products were sampled. Of these samples, 25 were domestic in origin and 83 were imported. The remaining 92 samples were of unspecified origin, meaning that a country of origin could not be determined from the product label or available sample information.

The following products were not included in the survey:

- products with peanuts in the list of ingredients
- products with a precautionary statement for peanuts
- products with no list of ingredients if required
- products very close to or past the best before date

How were samples analyzed and assessed

Samples were analyzed by an ISO 17025 accredited food testing laboratory under contract with the Government of Canada. The samples were tested as sold, meaning that the product was tested as-is and not as prepared according to package instructions. All positive samples are assessed against [Section B.01.010](#) of the *Food and Drug Regulations*.

What were the survey results

None of the products sampled in this survey contained detectable levels of undeclared peanut.

What do the survey results mean

The total occurrence of undeclared peanut in the variety of hummus products was 0%. Of the 200 samples tested, all products were found to be free from any detectable levels of undeclared peanut.

Any positive results obtained in these surveys are forwarded to the CFIA's OFSR to determine if the levels found would pose a health concern to allergic individuals. The extents of the follow-up actions taken by CFIA were based on the seriousness of the contamination and the resulting health concern as determined by a health risk assessment. Appropriate follow-up actions can include additional sample testing, facility inspection and product recall. The health risk assessment is based on exposure to the allergens through consumption. The exposure is calculated by using the typical serving sizes for each food. Assessment based on serving size means not all detectable levels of undeclared allergens in food will cause a reaction in an allergic individual.

This survey generated new information on the background level of undeclared peanut in hummus products collected from 6 cities across Canada. Information gathered in this survey, in conjunction with other data including the Canadian Total Diet Study, and Statistics Canada's

Canadian Health Measures Survey food consumption data, are critical in assessing the health risk that our food supply poses to Canadian consumers. The results of CFIA's surveillance activities are also used to inform the Canadian public and stakeholders by raising consumer awareness and help build public confidence in their food supply by removing non-compliant products.



References

1. Soller, L., Ben-Shoshan, M., Harrington, D. W., Fragapane, J., Joseph, L., Pierre, Y. S., Clarke, A. E. (2012). Overall prevalence of self-reported food allergy in Canada. *Journal of Allergy and Clinical Immunology*, 130(4), 986-988.
2. Sicherer, S. H., & Sampson, H. A. (2014). Food allergy: Epidemiology, pathogenesis, diagnosis, and treatment. *Journal of Allergy and Clinical Immunology*, 133(2), 291-307.e5.
3. [Health Canada](#). (2018, May 14). Common food allergens.