

## Scientific Interpretive Summary

### **Case studies for validation of the VITAL decision-making framework for labelling because of unintended cross-contact of food allergens in food processing operations**

Food processing operations within one site are often carried out on the same processing line using the same equipment. This creates potential for ingredients from one product or process to be unintentionally carried over into the next product. This is called cross-contact or cross-contamination and is a particular safety issue for consumers with a known food allergy. These unintentionally carried over ingredients are not required to be on the food label which poses a risk to food allergic consumers.

VITAL (Voluntary Incidental Trace Allergen Labelling) is an industry initiative developed to provide guidance on appropriate labelling of foods that have potential to contain allergenic ingredients from cross-contact during the manufacturing process. To explore the use of VITAL and determine labelling decisions made in the context of VITAL action levels, three industry processes were evaluated for the potential for cross-contact during the changeover process and the impact of this cross-contact on the allergen status of the final product.

The first process was a changeover process from liquid milk to fruit juice packaging to assess whether any milk (tested as casein) was carried over into the fruit juice. There was only one positive test result for casein and one finished fruit juice product sample contained casein at the lowest limit of detection of the analytical method (2ppm). No casein was detected in any other finished fruit juice product samples taken over nine processing days. Applying these results to the VITAL action levels, no specific allergen labelling would be required for the finished fruit juice product..

The second process was a changeover process from packaging a soy-based drink product to liquid milk to check for any soy carry over into liquid milk. No soy was detected in the soy to milk changeover process or the finished milk product. Applying these results to the VITAL action level,s no specific allergen labelling would be required for the finished milk product.

The third process evaluated the changeover from sesame containing bread to non-sesame containing bread. There was a high proportion of positive results for sesame during the changeover process, indicating a potential risk of sesame carry over in successive batches. However no sesame was detected in doughs following a low (0.5%) sesame bread batch and was rarely detected (2/29 samples) in doughs following a high (6%) sesame bread batch. Under the VITAL framework the doughs would not require specific allergen labelling. Testing of bread samples following both low and high sesame bread batches detected very low levels of sesame. Application of the VITAL action levels to results from the bread analyses are equivocal. However, results from bread should be viewed with caution due to the known influence of heating on the performance of the sesame analytical method.