# **VULNERABILITY ASSESSMENT**

Consumers are not the only victims of food fraud. Food fraud can impact businesses that purchase products, ingredients and supplies to manufacture their end products.

Food fraud, an intentional act of deception for economic gain, whether by substituting products and/or ingredients or mislabelling foods with regard to quality or origin can have a significant impact on your business.

- Is the Product of Canada meat you're buying really from Canada?
- Are your organic ingredients truly organic?

Willful ignorance is not a defence! In order to understand your risk, you need to conduct a vulnerability assessment - a risk-assessment-style evaluation of a food's susceptibility to food fraud.

# The aim of a vulnerability assessment is to:

- Understand the likelihood of food fraud affecting a food product.
- Understand the impact of food fraud on consumers and the food brand.
- Provide a framework to prioritize strategies to prevent food fraud occurring and mitigate the risks if fraud does occur.

# Why do a vulnerability assessment?

- 1. To protect consumers: food that is vulnerable to food fraud presents significant risks to consumers.
- 2. To protect your brand: any problem with your food products can cause loss of consumer trust which can be catastrophic for your brand.
- 3. To meet regulatory requirements: adulteration, substitution or dilution of an ingredient indicates a flaw in the traceability of your product, which means non-compliance with the requirements of food safety regulations.
- 4. To prevent financial losses: product withdrawals, recalls, prosecutions and civil lawsuits commonly arise from fraudulent adulteration.

## How to conduct a vulnerability assessment:

First you will need to investigate the susceptibility of your product or raw material to food fraud. Some foods are more at risk than others to economically motivated adulteration, substitution and dilution. Understanding the susceptibility of an ingredient or raw material type is an important part of every vulnerability assessment process and is investigated in two parts:

## **General Susceptibility**

The first part is the general susceptibility of the food itself no matter where it is purchased or sold. Is it commonly affected by food fraud? Are there any emerging issues that may increase the risk of food fraud for this material in future? This can be determined using publicly available information about incidences of fraud that have occurred in the past and that might occur in the future.

## Specific Susceptibility

The second part is specific susceptibility to an individual food business. The specific susceptibility of a food or ingredient is dependent on the characteristics of the supply chain, management of the supply chain and testing and auditing activities. Each should be considered with regards to how it could affect the degree to which a person may be motivated to fraudulently adulterate the material and how it could allow a person to:

- · gain access to the material,
- commit fraud by adulterating, substituting or diluting the material or
- · avoid detection.

To ensure that all relevant characteristics are considered it is best to use a checklist and record observations against each item in the checklist. Create your own checklist or use a checklist prepared by experts. There are a number of fraud assessment tools available on-line.

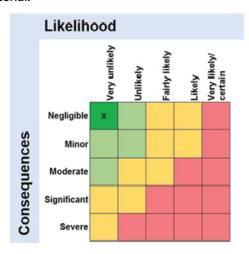
As you investigate susceptibility for a material create a table with columns for the elements you have considered and the results of your consideration of each element. In the bottom row of the table note how likely the material is to be affected; very unlikely, unlikely, fairly likely, likely, very likely/certain.

## **Estimate the Severity of Consequences**

Once you have determined the susceptibility, both general and specific, you must consider the impact on the food product, its consumers and brand if food fraud was to occur. To document your assessment of severity, create another table similar to the one described above. It should have columns for the elements you have considered, the results of your consideration and your conclusion about how those results affect the impact on the product and its consumers.

## **Plot Results on a Risk Matrix**

Create a risk matrix and plot the results (likelihood and consequences). If the product or material falls into a red square, it should be considered very vulnerable and actions must be taken to prevent, detect and mitigate food fraud for the material.



Key
Red areas = high risk; urgent action is required and regular monitoring may be needed
Yellow areas = medium risk: action is needed with occasional monitoring to mitigate the risk
Green areas = low risk

#### **Outcomes**

For each material that you have assessed you should have a document that includes:

- the name of the material, food product or ingredient,
- · the date of the assessment,
- the name of the person who prepared the assessment,
- the estimate of the likelihood that food fraud will affect the material.
- the estimate of the consequences of food fraud on the material,
- · a risk matrix with results marked in the relevant box,
- a conclusion about the overall vulnerability of the material, and
- information showing how the estimates of likelihood and consequences were reached.

# Now you have a vulnerability assessment, what comes next?

Make a plan. If food fraud vulnerabilities have been identified in ingredients and raw materials, the business will need to make a plan to:

- Prevent the purchase of fraudulent materials.
- Deter fraudsters from adulterating materials that your business is going to purchase.
- Detect fraudulent materials before they are used to make food.

This is a job for the whole business, not just food safety or food quality personnel. Ensure all personnel understand their role in the food fraud prevention and detection plan. Once you have made your food fraud prevention and detection plan (control plan) – action it!

For more information, resources, or help with your program please contact:

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