

Food Fraud

Raw Material Risk Assessment Guidelines

The following procedure will assess a raw material for vulnerability for food fraud, and ultimately will enable all raw materials to be ranked. The ranking will then enable companies to allocate resources to the ingredients most at risk. This assessment method uses 3 variables: Likelihood, Detectability & Profitability.

The Food Fraud Scorecard will calculate the three variable (Likelihood, Detectability & Profitability) ratings to obtain a final Food Fraud Score. The output of the calculation is therefore a score for each raw material, with a value of 1 (overall very low risk) to 125 (overall extremely high risk).

How do we use the Food Fraud Scorecard results?

- After all raw materials have been ranked between 1 – 125, the Food Fraud team members will have to decide the benchmark score that will require additional control measures to be allocated. This number will indicate the level of risk significance.
- Implement additional control measures as required, based on your documented risk assessments of both suppliers & the raw materials.
- Document procedures & keep records for each assessment and references.
- Horizon scanning for emerging issues (trigger points for action) & review regularly.
- Keep records of the review.

What should the trigger points for action be, to put a product on hold?

- Drop in price of an existing raw material without a corresponding change of supply.
- The raw material at receipt inspection does not look/smell/feel right.
- Shortage of a raw material.
- Glut of a raw material.
- New supplier of a raw material, especially if they are supplying goods at lower than the market price.
- A raw material with a new/different country of origin.

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Raw Material Risk Assessment Procedure

STEP 1

Gather raw material information, specifications and supplier & manufacturer quality certificates.

STEP 2

Start Raw Material Risk Assessment in Food Fraud Score. Answer truthfully and accurately.

STEP 3

Determine the **LIKELIHOOD** of Fraud occurring for the Raw Material.

STEP 4

Determine the **DETECTABILITY** of Fraud occurring for the Raw Material.

STEP 5

Determine the **PROFITABILITY** of Fraud occurring for the Raw Material.

STEP 6

Review the answers & documented information, then submit to receive a Food Fraud Score PDF report. Download and save the final report. Repeat steps 1-6 for additional raw materials.

STEP 7

Once final reports have been generated for all raw materials, rank the scores from highest to lowest using the RANK function in the Dashboard. These scores are your Overall Fraud Risk.

STEP 8

Identify and implement fraud control measures for materials with high scores, i.e., significant vulnerabilities. The final report can help identify areas to improve.

STEP 9

Recreate report in Food Fraud Score and update it with the fraud control measures to see if the score is reduced to a suitable level. Repeat steps 8-9 if required to further reduce the fraud score.

Regularly review the supply chain for each raw material, or as market conditions change. Update the Food Fraud Score to determine if your fraud control measures are still effective.

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Raw Material Risk Assessment Factors

Likelihood Factors: <i>Probability of fraud occurring currently</i>	Detectability Factors: <i>Detection of fraud within the current process</i>	Profitability Factors: <i>How profitable the fraud would be to execute</i>
Historic incidences	Existing controls: Audits that assess adulteration, mass balance, traceability.	Economic factors/price changes.
Emerging issues	Routine product testing: how likely are they to detect adulterated materials and frequency.	Availability of cheaper substitutes.
Economic factors/price changes.		
Geographic origin/length and complexity of supply chain i.e. more entry points.	Geographic origin/length and complexity of supply chain i.e. more entry points.	Complexity and cost of committing the fraud.
Ease of access to raw materials & availability	Ease of access to raw materials i.e. broken tamper proof seals?	Ease of access to raw materials.
Value of raw material		Nature of the raw material i.e. value and size of the market.
Physical form: whole, minced, dried, liquid.	Physical form: whole, minced, dried, liquid.	

Raw Material Risk Assessment Scores

Likelihood Score: <i>Probability of fraud occurring currently</i>	Detectability Score: <i>Detection of fraud within the current process</i>	Profitability Score: <i>How profitable the fraud would be to execute</i>
1 = Improbable event: Once every five years	1 = Will be detected, i.e. detection procedure is applied frequently and is reliable.	1 = Very low profit %
2 = Remote possibility: Once per year	2 = Detection procedure is applied.	2 = Low profit %
3 = Occasional event: Once per month	3 = Fairly unlikely to be detected.	3 = Moderate to significant profit %
4 = Probable even: Once per week	4 = Unlikely or remote chance of detection.	4 = High profit %
5 = Frequent event: Once per day.	5 = No detection controls are applied.	5 = Very high profit %

Food Fraud Raw Material Risk Assessment Report

Company
LOGO

Company Name
Employee Name

Food Fraud Scorecard
foodfraudscore.com
info@integritycompliance.com.au
 07 3390 5729

EXTRA VIRGIN TUSCAN OLIVE OIL from ITALY - 31/1/2024

Overall Fraud Risk Score: 12 / 125

Likelihood: 3	Detectability: 2	Profitability: 2
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Supplier certificates

Supplier: Sager	Certificate: BRCGS, expires 2026-04-05
<ul style="list-style-type: none"> This is a GFSI approved food safety system eg: IFS, BRCGS, SQF or Freshcare The name and address on the certificate are an exact match for the company being bought from The expiry date is still current Extra Virgin Tuscan Olive Oil is within the scope of the certificate 	

Manufacturer certificates

Manufacturer: Tuscan olive crushing company	Certificate: BRCGS, expires 2024-11-08
<ul style="list-style-type: none"> This is a GFSI approved food safety system eg: IFS, BRCGS, SQF or Freshcare The name and address on the certificate are an exact match for the company being bought from The expiry date is still current Extra Virgin Tuscan Olive Oil is within the scope of the certificate 	

This report provides information and rankings on the likelihood, detectability and profitability of a food fraud event for this particular raw material. It is intended for internal company use only, to be provided as evidence for auditors, and to be used as guidance for actions to be taken to reduce the severity of fraud rankings.

Example of final output: raw material report with a final score against the risk of food fraud occurring in that product from that supplier today.