SAMPLE REPORT · FICTIONAL ORGANISATION

INSPECTION, TESTING & ASSURANCE

BRCGS 5.4 · FSSC 22000 V7 2.5.4 · ISO 22002-100

Food Fraud Vulnerability Assessment

VACCP

Example Dairy and Bakery Co.

Dairy and bakery plant, main site

ITEMS ASSESSED	9
SIGNIFICANT	6
ASSESSMENT TEAM	Food safety team (QA, purchasing, production, engineering)
ASSESSMENT DATE	2026-11-10
REPORT DATE	16 November 2026

CONTENTS

1 Assessment at a glance
2 Assessment of each material
3 Food fraud mitigation plan
4 Programme check against the requirements
5 Method and references

Generated with the free ITA VACCP tool. Review the assessment at least annually and whenever risks change.

1 · SUMMARY

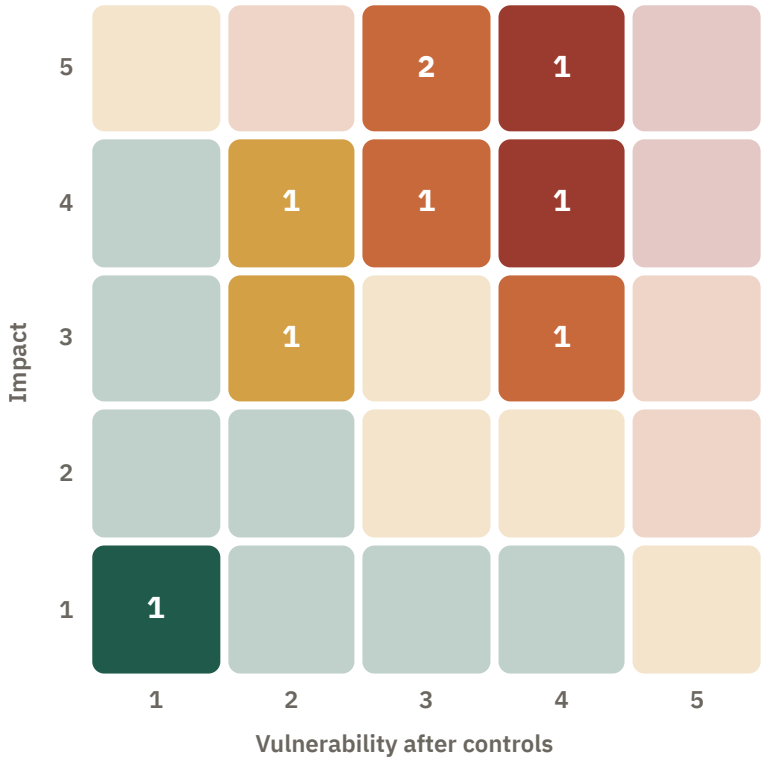
Assessment at a glance

MATERIALS	CRITICAL	HIGH	PROGRAMME CHECK
9	1	5	58%

KEY FINDINGS

- 9 materials were assessed; 6 are significant (score 10 or more) and need mitigation.
- Highest risk: Ground nuts (almond, pistachio) (19.2 of 25, critical).
- Programme check: 58% of the requirements are in place (12 of 12 answered).

HEAT MAP



RANKED REGISTER

#	MATERIAL	VULNERABILITY	IMPACT	SCORE	LEVEL
1	**Ground nuts (almond, pistachio)**	3.8	5	19.2	Critical
2	**Honey**	4.2 → 3.7	4	14.7	High
3	**Milk powder**	3.5 → 2.5	5	12.5	High
4	**Halal certificates and claims**	3.0 → 2.5	5	12.5	High
5	**Ghee and butter**	3.5 → 3.0	4	12.0	High
6	**Vanilla extract and flavours**	4.0 → 3.5	3	10.5	High
7	**Vegetable oils**	3.2 → 2.2	4	8.7	Medium

1 · SUMMARY

#	MATERIAL	VULNERABILITY	IMPACT	SCORE	LEVEL
8	**Food-contact packaging**	2.5 → 1.5	3	4.5	Low
9	**Sugar and starches**	1.7 → 1.0	1	1.0	Low

Assessment of each material

Scores 1 (low) to 5 (high). Vulnerability is reduced by the controls already in place.

Ground nuts (almond, pistachio)

19.2 **Critical**

Known fraud types: Substitution with cheaper nuts or kernels (for example peanut, apricot kernel), dyed peas in pistachio.

Economic incentive	History of fraud	Supply chain complexity	Ease of adulteration and detection	Supplier assurance (weakness)	Market and geopolitical pressure	**Consumer health impact**	**Legal, religious and brand impact**
4	**4**	**4**	**5**	**3**	**3**	**5**	**4**

Controls in place: Specification with authenticity criteria

Recommended actions

- Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples.
- Add authenticity and adulterant limits to the specification and treat failures as a food safety incident.
- Track market prices for this material and set a trigger to increase testing when the price rises sharply.
- Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material.
- Shorten the chain: buy from the manufacturer or an approved packer, and require full traceability to origin.
- Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file.

Ground pistachio used in one premium product.

Honey

14.7 **High**

Known fraud types: Dilution with sugar syrups; false botanical or geographic origin.

Economic incentive	History of fraud	Supply chain complexity	Ease of adulteration and detection	Supplier assurance (weakness)	Market and geopolitical pressure	**Consumer health impact**	**Legal, religious and brand impact**
5	**5**	**4**	**5**	**3**	**3**	**2**	**4**

Controls in place: Specification with authenticity criteria; Certificate of analysis checked against specification for each lot

Recommended actions

- Track market prices for this material and set a trigger to increase testing when the price rises sharply.
- Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material.
- Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples.
- Shorten the chain: buy from the manufacturer or an approved packer, and require full traceability to origin.
- Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file.

Current supplier provides a CoA without independent testing.

Milk powder

12.5 High

Known fraud types: Non-protein nitrogen (for example melamine); whey or vegetable protein substitution.

Economic incentive	History of fraud	Supply chain complexity	Ease of adulteration and detection	Supplier assurance (weakness)	Market and geopolitical pressure	**Consumer health impact**	**Legal, religious and brand impact**
4	**4**	**3**	**4**	**3**	**3**	**5**	**5**

Controls in place: Supplier approved and GFSI-certified; Specification with authenticity criteria; Certificate of analysis checked against specification for each lot; Supplier audit including fraud controls

Recommended actions

- Add authenticity and adulterant limits to the specification and treat failures as a food safety incident.
- Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file.
- Track market prices for this material and set a trigger to increase testing when the price rises sharply.
- Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material.
- Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples.

Halal certificates and claims

12.5 High

Known fraud types: Forged or expired certificates; non-halal ingredients in halal-claimed supplies.

Economic incentive	History of fraud	Supply chain complexity	Ease of adulteration and detection	Supplier assurance (weakness)	Market and geopolitical pressure	**Consumer health impact**	**Legal, religious and brand impact**
3	**3**	**4**	**3**	**3**	**2**	**1**	**5**

Controls in place: Supplier approved and GFSI-certified; Specification with authenticity criteria; Traceability to origin and mass balance

Recommended actions

- Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file.
- Shorten the chain: buy from the manufacturer or an approved packer, and require full traceability to origin.

Ghee and butter

12.0 High

Known fraud types: Adulteration with vegetable oils or animal fats.

Economic incentive	History of fraud	Supply chain complexity	Ease of adulteration and detection	Supplier assurance (weakness)	Market and geopolitical pressure	**Consumer health impact**	**Legal, religious and brand impact**
4	**4**	**3**	**4**	**3**	**3**	**2**	**4**

Controls in place: Specification with authenticity criteria; Certificate of analysis checked against specification for each lot

Recommended actions

- Track market prices for this material and set a trigger to increase testing when the price rises sharply.
- Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material.
- Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples.
- Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file.

Vanilla extract and flavours

10.5 High

Known fraud types: Synthetic vanillin sold as natural.

Economic incentive	History of fraud	Supply chain complexity	Ease of adulteration and detection	Supplier assurance (weakness)	Market and geopolitical pressure	**Consumer health impact**	**Legal, religious and brand impact**
5	**4**	**4**	**5**	**3**	**3**	**1**	**3**

Controls in place: Supplier approved and GFSI-certified; Specification with authenticity criteria; Certificate of analysis checked against specification for each lot

Recommended actions

- Track market prices for this material and set a trigger to increase testing when the price rises sharply.
- Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples.
- Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material.
- Shorten the chain: buy from the manufacturer or an approved packer, and require full traceability to origin.

Vegetable oils

8.7 Medium

Known fraud types: Blending with cheaper oils; recycled or non-food-grade oil.

Economic incentive	History of fraud	Supply chain complexity	Ease of adulteration and detection	Supplier assurance (weakness)	Market and geopolitical pressure	**Consumer health impact**	**Legal, religious and brand impact**
3	**3**	**3**	**4**	**3**	**3**	**4**	**3**

Controls in place: Supplier approved and GFSI-certified; Specification with authenticity criteria; Certificate of analysis checked against specification for each lot; Traceability to origin and mass balance; Supplier audit including fraud controls

Recommended actions

- Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples.
- Add authenticity and adulterant limits to the specification and treat failures as a food safety incident.

Food-contact packaging

4.5 Low

Known fraud types: Non-compliant or counterfeit materials; false declarations of compliance.

Economic incentive	History of fraud	Supply chain complexity	Ease of adulteration and detection	Supplier assurance (weakness)	Market and geopolitical pressure	**Consumer health impact**	**Legal, religious and brand impact**
2	**2**	**3**	**3**	**3**	**2**	**3**	**3**

Controls in place: Supplier approved and GFSI-certified; Specification with authenticity criteria; Certificate of analysis checked against specification for each lot; Supplier audit including fraud controls

Sugar and starches

1.0 **Low**

Known fraud types: Rarely targeted; possible substitution of grades.

Economic incentive	History of fraud	Supply chain complexity	Ease of adulteration and detection	Supplier assurance (weakness)	Market and geopolitical pressure	**Consumer health impact**	**Legal, religious and brand impact**
1	**1**	**2**	**2**	**2**	**2**	**1**	**1**

Controls in place: Supplier approved and GFSI-certified; Specification with authenticity criteria; Certificate of analysis checked against specification for each lot; Bought from the manufacturer, not a trader

Food fraud mitigation plan

MATERIAL	LEVEL	ACTIONS	OWNER	DUE
Ground nuts (almond, pistachio)	Critical	• Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples. • Add authenticity and adulterant limits to the specification and treat failures as a food safety incident. • Track market prices for this material and set a trigger to increase testing when the price rises sharply. • Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material. • Shorten the chain: buy from the manufacturer or an approved packer, and require full traceability to origin. • Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file.	Purchasing manager	2027-01-15
Honey	High	• Track market prices for this material and set a trigger to increase testing when the price rises sharply. • Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material. • Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples. • Shorten the chain: buy from the manufacturer or an approved packer, and require full traceability to origin. • Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file.	Purchasing manager	2027-01-31
Milk powder	High	• Add authenticity and adulterant limits to the specification and treat failures as a food safety incident. • Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file. • Track market prices for this material and set a trigger to increase testing when the price rises sharply. • Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material. • Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples.	QA manager	2027-02-28
Halal certificates and claims	High	• Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file. • Shorten the chain: buy from the manufacturer or an approved packer, and require full traceability to origin.	QA manager	2027-03-15
Ghee and butter	High	• Track market prices for this material and set a trigger to increase testing when the price rises sharply. • Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material. • Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples. • Verify claims (halal, organic, origin, species) with the issuing body and keep the evidence on file.	Purchasing manager	2027-02-15

MATERIAL	LEVEL	ACTIONS	OWNER	DUE
Vanilla extract and flavours	High	• Track market prices for this material and set a trigger to increase testing when the price rises sharply. • Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples. • Subscribe to fraud alerts (RASFF, FDA import alerts, national regulator) and review them monthly for this material. • Shorten the chain: buy from the manufacturer or an approved packer, and require full traceability to origin.	QA manager	2027-03-31
Vegetable oils	Medium	• Set up a risk-based authenticity testing plan with an accredited laboratory, and keep retained samples. • Add authenticity and adulterant limits to the specification and treat failures as a food safety incident.	QA manager	2027-04-30

Programme check against the requirements

REQUIREMENT	REFERENCE	STATUS
The vulnerability assessment is carried out by a team with the knowledge and competence required.	FSSC V7 2.5.4(a)	In place
It covers all raw materials, ingredients, packaging and product claims (halal, organic, origin).	BRCGS 5.4 · ISO 22002-100 16.3	In place
The assessment is documented, with the method, scores and rationale.	BRCGS 5.4 · ISO 22002-100 16.3	Partly
A food fraud mitigation plan defines controls for significant vulnerabilities and is supported by the FSMS.	FSSC V7 2.5.4(b)	Partly
Information on emerging fraud risks (alerts, prices, incidents) is collected and reviewed.	BRCGS 5.4	Not in place
The assessment is reviewed at least annually and whenever risks change (price spike, alert, new supplier).	BRCGS 5.4 · FSSC V7 2.5.4(b)	In place
Supplier approval considers fraud risk and requires supplier fraud controls.	ISO 22002-100 · FSSC V7	Partly
A risk-based authenticity testing programme is in place, with results reviewed.	BRCGS 5.4	Not in place
Traceability and mass balance can verify claimed quantities and origins.	BRCGS 3.9 · ISO 22000 8.3	In place
Legal requirements on fraud and labelling are identified (for example national food and anti-fraud laws).	FSSC V7 2.5.4(b)	Partly
For US exports: economically motivated adulteration is considered in the hazard analysis.	21 CFR 117.130	In place
Staff in purchasing, QA and receiving are trained to recognise fraud indicators.	FSSC V7 2.5.4(a)	Not in place

Method and references

How the score is calculated

Vulnerability is the average of six factors (economic incentive, fraud history, supply chain complexity, ease of adulteration and detection, supplier assurance weakness, market pressure), each 1 to 5. Existing controls reduce it by up to 1.5. Impact is the higher of consumer health and legal, religious or brand impact. Score = vulnerability × impact (1 to 25): below 5 low, 5 to 9.9 medium, 10 to 15.9 high, 16 and above critical. Items scoring 10 or more are significant.

REFERENCES

- BRCGS Global Standard Food Safety Issue 9, clause 5.4 (product authenticity, claims and chain of custody)
- FSSC 22000 Version 7 (May 2026), additional requirement 2.5.4 food fraud mitigation
- ISO 22002-100:2025, clause 16.3 (food fraud vulnerability assessment)
- US FDA 21 CFR 117.130: hazards intentionally introduced for economic gain
- Codex guidelines on the prevention and control of food fraud (completed by CCFICS in October 2026, pending final adoption)
- National law, for example Saudi Anti-Commercial Fraud Law (Royal Decree M/19) and Egypt's Law 1/2017 and Law 48/1941 as amended

About this report

Prepared with the free ITA VACCP tool from the user's own ratings and not verified by ITA. It supports, and does not replace, the documented assessment by a competent team that BRCGS and FSSC 22000 require. Questions and factors are written in ITA's own words; clause numbers are references only. localhost:8080