

# Raw Material Priority Risk Number Worksheet

Raw Material	Historic evidence of substitution or adulteration	Emerging issues	Economic factors which may encourage substitution or adulteration (i.e. price fluctuation)	Geographic location and complexity of supply chain ie more entry points.	Access to raw materials through the supply chain	Nature of raw material Physical form: whole, minced, dried, liquid.	Existing controls in place currently: how likely are they to detect adulterated materials and frequency.	Sophistication of routine testing to identify adulteration: how likely are they to detect adulterated materials and frequency.	Availability of adulterants	Complexity and cost of committing the fraud.	Nature of the raw material ie value and size of the market
Fruit juice frozen concentrate	25 cases of food fraud could be found in fruit juice general-which included numerous cases of lemon juice: failure to meet stated claims, failure to meet listed nutritional profile/ingredients & undeclared allergens & some cases for orange juice: not meeting stated Vitamin C content & undeclared allergens.	Fruit juices are at high risk of food fraud, with fruit concentrates thought to be commonly affected by fraudulent adulteration, substitution & dilution. Citrus crops in key growing areas worldwide are feeling the effects of climate change, with drought, heavy rains, cold weather & the citrus greening disease all threatening crops in various parts of the world.	In 2017 the USDA has announced the end of a 16 year ban on imports of Argentine lemons. This is likely to have a significant impact on global lemon trade. Concentrates, purees & citrus by-products are at increasing risk of fraud as supplies & prices become more volatile.	The products are imported into Australia from Cuba, Italy, Israel (using Argentinian fruit) & Mexico.	Sophisticated global supply chain with many process steps and locations	Orange liquid, free flowing transparent viscous liquid & clear low viscosity liquid with a characteristic yellow colour.	All of the Australian importers hold current SQF/FSSC 22 000/HACCP certificates. The Israeli processor holds current BRC certification & the Mexican processor holds current SQF certification. <b>None of the other international processors have supplied any type of certification.</b>	The raw materials are tested retrospectively, via the finished product clearance testing.	Many products are available throughout the supply chain that can be used.	To match the products visually would be easy with numerous substitutions but unless they matched the chemical & sensory properties of the product the final product would not meet requirements.	Pending exact fruit juice required and any associated product claims, the market is large and can be very valuable.